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Evaluation of a Native Youth Leadership Program Grounded in Cherokee Culture: The Remember the Removal Program

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# EVALUATION OF A NATIVE YOUTH LEADERSHIP PROGRAM GROUNDED IN CHEROKEE CULTURE: THE REMEMBER THE REMOVAL PROGRAM

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*Abstract: Indigenous youth suffer from high rates of comorbid mental and physical health disease. The purpose of this research was to evaluate an existing intervention aimed at empowering Indigenous youth, using a qualitative, community-based participatory research method. We completed focus groups with 23 program participants, and analysis revealed positive improvements in physical, emotional, social, and cultural domains. Participants noted that key social, familial, and cultural aspects of the intervention were most impactful for them. Informed by the participants' experiences, these findings offer guidance for developing interventions to reduce and/or prevent mental and physical health disparities for Indigenous youth and young adults.*

## INTRODUCTION

Among the more than 5.2 million Indigenous peoples living in the United States, youth (children under 18 years old) represent the largest section of this population (Norris, Vines, & Hoeffel, 2012). Indigenous youth often experience greater mental and physical health disparities compared to their peers of different cultural backgrounds, and there are limited resources available to these youth to meet their health care needs (Nash & Nagel, 2005; Wexler, DiFluvio, & Burke, 2009; Whitbeck, Yu, Johnson, Hoyt, & Walls, 2008). Many Indigenous youth intervention programs target at-risk behaviors such as substance use, school dropout, and suicidality. However, another type of intervention focuses on the use of positive socialization and cultural relevancy in order to build on youths' strengths and improve overall health and well-being (Kenyon & Hanson, 2012). Through activities geared at skill development and increasing familial and community support for Indigenous youth, the goal becomes to create a safe environment with positive relationships and activities, rather than "fixing" the youth's problems (Benson et al., 2006). Among

Indigenous youth, programs focusing on increasing resilience may actually be more effective than programs focusing on decreasing risk factors (Borowsky, Resnick, Ireland, & Blum, 1999).

Health interventions with Indigenous people require cultural centering and should utilize tribally specific health beliefs that go beyond simply cultural tailoring. The incorporation of culturally relevant teachings provides Indigenous youth with a greater connection to their tribes and communities (Garrett et al., 2014). The connection and immersion of Indigenous populations within their own culture has previously shown to be associated with positive mental and physical health outcomes and a decrease in health-related risk factors when considering suicidality, diabetes, smoking, and obesity (Carlson et al., 2017; Coe et al., 2004; Garrouette et al., 2003). For these studies, cultural connection included speaking their Native language, belief and participation in tribal ceremonies, and spending time within their tribal community. This tribal connection also fosters a positive relationship among citizens, decreasing negative behaviors, while increasing a positive bond to their family, community, and tribe. Youth indicating a strong bond among family, community members (e.g., teachers), and elders have shown greater resilience and increased protective factors compared to youth with less cultural identity (Garrett et al., 2014). Networks of social support have been associated with reduced health problems, emotional support of healthy habits, and improved health behaviors and decisions (Berkman, Glass, Brissette, & Seeman, 2000; Gottlieb, 1985).

Indigenous people that strongly and positively identify with their cultural identity and take part in traditional cultural activities are more likely to have improved academic performance (Whitbeck, Hoyt, Stubben, & LaFromboise, 2001), positive mental health in youth (MacDonald, Ford, Willox, & Ross, 2013) and adulthood (Garrouette et al., 2003), reduced substance use in youth (Yu & Stiffman, 2007) and adulthood (Stone, Whitbeck, Chen, Johnson, & Olson, 2006), and improved physical health (Garrouette et al., 2003). These results have influenced the direction of treatment for Indigenous youth, namely culture as treatment/intervention (Gone & Calf Looking, 2015). Several programs have been developed using this principle that have incorporated traditional Indigenous values into positive youth development programs (Kenyon & Hanson, 2012), as well as culture and spirituality into prevention programs (Barney, 2001; Kenyon & Hanson, 2012; Middlebrook, LeMaster, Beals, Novins, & Manson, 2001) with positive results including reduced suicidality, hopelessness, depression, and other self-reported health statuses. These programs often incorporate traditional activities, spiritual development, and support from

tribal leaders and family members and have shown a negative correlation between connection with one's community and negative health consequences.

### **Cherokee Current and Historical Context**

The Cherokee Nation is the largest tribe in the United States, with approximately 320,000 citizens (Cherokee Nation Public Health, 2015). Cherokee Nation comprises 14 counties in Northeastern Oklahoma and is home to 63% of Cherokee citizens and to a combined 200,000 American Indian (AI) people of any affiliation. The original Cherokee homelands encompass the Southern Appalachian Mountains. Cherokees call themselves “Anigaduwagi” which translates into English as “people of Kituwah,” a place of high spiritual importance located near present-day Cherokee, North Carolina. The fundamental spiritual, ecological, social, medicinal, and food-based knowledge was born and developed in these mountains. The removal of Cherokees from their homelands to Indian Territory (known currently as Oklahoma) occurred between 1835 and 1839, resulting in at least 4,000 deaths on the journey of 1,000 miles and another 6,000 deaths that occurred in concentration camps and in preparation for removal (Perdue, 2007). A total of about 13,000 Cherokees arrived in Indian Territory post-removal. In the years following removal, many traditional practices were prohibited, including family customs, traditional community living, traditional Cherokee spirituality (until the Indian Religious Freedom Act in 1978), and use of the Cherokee language was prohibited in public schools and places.

### **Remember the Removal**

Each year, the Cherokee Nation sponsors a group of approximately 12 individuals aged 16-24 to participate in Remember the Removal (RTR), a leadership program for Cherokee youth and young adults that began in 1984. The RTR program started as a pilot program in the Cherokee Nation Service Leadership department through experiential outdoor education. The program was designed to provide Cherokee youth with Cherokee-specific leadership skills to become leaders in the Cherokee community.

Participants complete historical and cultural courses, receive a personalized family history and genealogical chart, and train for and participate in a bicycle ride commemorating the forced removal of the Cherokee Nation from its homelands during the winter of 1838-39. The approximately 950-mile, three-week ride starts in Cherokee, North Carolina and ends in

Tahlequah, Oklahoma, the capital of the Cherokee Nation (Baker, 2015). Throughout the ride, participants travel along the Trail of Tears, where their ancestors traveled, and meet with historical and cultural experts who link their personalized family history to places and events along the northern removal route.

#### **Remember the Removal Program Components**

The RTR program is a nation-building program that aims to create Cherokee leaders through training in Cherokee history, culture, and language. The training schedule (see Table A1) includes the following components:

- **Cherokee leadership.** Shared leadership (Wang, Waldman, & Zhang, 2014) along with emotional connections among team members (Mills, 2009) are key components of an Indigenous style of leadership and teamwork (Bryant, 1996, 1998) In fact, “transforming competition into cooperation, promoting group harmony, facilitating unity, understanding and working with group and individual talents to sustain community within a social, cultural, and spiritual framework of practices were the foundation of historic Indigenous community leadership” (Cajete, 2016, p. 365).
- **Nation Building.** Cherokee-specific nation building is a critical part of the RTR program that aims to educate tribal citizens on their unique political state, Cherokee history, and culture so that they may be informed and participatory citizens (Stephenson, 2006).
- **Cherokee Culture.** Cultural training and revitalization occurs through the increased use and awareness of cultural language, practices, ceremonies, traditions, and historical knowledge, which can increase a sense of cultural identity. Cultural connectedness has been cited as a vital protective factor in Native youth resiliency (Mohatt, Thompson, Thai, & Tebes, 2014; Wexler et al., 2009).
- **Cherokee History.** Although assimilation tactics have led to a deprivation in documenting some history, tribal citizens, orators, and storytellers have preserved many significant historical elements (Echo-Hawk, 2000; Heredia, 2000). Connecting youth to their history can lead to an increase in their cultural identity and connection within their community, which can then lead to increased health and overall well-being.
- **Memorial Journeys.** Tribal memorial journeys pay tribute to tragedies and/or events significant to the historical context of that culture, such as the forced removal of the Cherokees. Memorial journeys can provide pride in one’s culture, a strengthened

cultural identity, an opportunity to learn about and honor historical figures and events, and a reconnection to culturally important places. Currently, many Indigenous groups utilize memorial journeys to honor, recognize, and raise awareness about historical events, cultural figures, and traditional or spiritual beliefs. For example, the O'maka Tokatakiya (Future Generations) Ride ("O'maka Tokatakiya: Future generations ride," 2015), the Dakota 38 memorial ride (Şunġtáŋka Wiġayuhapi, 2018), Nihígaal béé Íina (Narindrankura, 2015), and the Nibi Water Walks ("About nibi walk," 2017).

- **Importance of Place.** Land-based education is of particular importance for Indigenous people: "If colonization is fundamentally about dispossessing Indigenous peoples from land, decolonization must involve forms of education that reconnect Indigenous peoples to land and the social relations, knowledges, and languages that arise from the land" (Wildcat, McDonald, Irlbacher-Fox, & Coulthard, 2014, p. 1). Not only is decolonization a critical part of place-based curriculum for learning history and culture for Indigenous peoples, it moves into re-inhabiting, which involves "learning to live well socially and ecologically in places that have been disrupted and injured" (Gruenewald, 2008). Historical education and place-based learning are tied together for Indigenous people as they re-occupy places and create new relationships with places that have been taken from them, are now changed, or were places of trauma and suffering.

Therefore, programs that facilitate cultural knowledge and pride through journeys of cultural importance may be able to redress the imbalance that many Indigenous communities currently feel and improve health and well-being outcomes. The RTR program provides an excellent model of tradition, promotion of health, and instills pride in Cherokee history, which has the ability to impact an array of positive outcomes for Cherokee people. While physical health was relevant to this program given it required quite a bit of exercise, it is not a health program and, therefore, did not have staff such as nutritionists or health goals. Identifying core aspects of the program and assessing program outcomes is critical so that it may be replicated in other areas of Cherokee life and be accessible to the greater Cherokee Nation and the larger Indigenous population. Despite its 34-year tenure, the impact of RTR has never been formally assessed.

## **Research Approach and Theory**

In order to evaluate the RTR program, we utilized methods and theory specific to the research population to address the research question: How does the RTR program affect the lives of participants in areas of physical, emotional, social, and cultural health and well-being (Engel, 1977, 1992; Hodgson, Lamson, & Reese, 2007)? Theories around youth-based research and tribal research, including decolonizing methodologies, and collaborative principles were applied (Duran, 2006; Straits et al., 2012). This project was situated in Indigenous research principles that argue that “knowledge is relational” and that the researcher themselves is “accountable to your relations” in completing this work (Wilson, 2008, p. 74; 77). Therefore, this project began with consultation and discussion with program administration for over one year to ensure that the project represented the needs of the community. Collaboration occurred between a tribal citizen/researcher, program staff, and community stakeholders to facilitate, evaluate, and highlight a successful community-created project partnering with community partners at every stage of research. Presentations and publications were co-presented and co-authored. Further, relationships were developed through this project between the researcher and participants, resulting in lasting friendships and reciprocal mentoring relationships as well.

## **METHODS**

This qualitative study used decolonizing theory and methodologies (Smith, 1999) to guide this research. In order to keep Indigenous knowledge at the forefront of this work, a tribally-driven participatory research approach was used (Straits et al., 2012), which relies on talking as a key method to gather data. Exploratory evaluation (Patton, 2002; Shields & Rangarajan, 2013) and focus group (Krueger, 2009) strategies were used to assess the outcomes of the RTR program. This preliminary program evaluation sought to gather initial trends and patterns around health and well-being outcomes related to the RTR program. This broad and flexible assessment was also intended to create a guide to improve and/or develop similar programs, depending on its effectiveness.

## **Sample and Procedure**

Participants who completed the first cohort of RTR (1984,  $n = 14$ ; 18 were invited—19 participated in the RTR program but one had passed away) and a recent cohort of RTR participants (2015,  $n = 9$ ; 12 were invited) were invited to participate in focus groups, which were conducted



at the Cherokee Nation in Tahlequah, Oklahoma. Participants were stratified by cohort so that people from the same cohorts remained together and then were assigned to groups of approximately five to seven, given evidence that groups with more than six members may be less effective in gathering rich data (Morgan, 1997). Two facilitators led the focus group sessions. Ethical permission for this project was granted by the Cherokee Nation and the University of Minnesota Duluth Institutional Review Boards. All participants provided informed consent. Part of the consent required participants to take an oath of confidentiality in regard to what was shared within each group. Focus group sessions were voice recorded, checked for quality, and then kept in a password-protected computer that was only accessible to the researchers. At the conclusion, participants received a meal, \$30 gift card, and a small gift of thanks for their participation.

The grand tour question (Colaizzi, 1978), or the main question, that was asked of participants was, “What was your experience as a participant of the Remember the Removal program and how has it affected your life?” Mini tour questions (sub-questions) are detailed in Table A2. These questions were meant to serve as a guide and not to be followed explicitly. A facilitator’s guide was created and distributed that contained a checklist, list of questions, and interview tips (Krueger & Casey, 2015).

A research assistant transcribed the four focus group discussions. Participants were then given an opportunity to view and edit their transcripts to verify their responses. Three participants added written comments to their verbal responses. No data was withdrawn.

### **Data Analysis**

The purpose of the study was to determine the impact and effectiveness of the RTR program on the participants across and by cohort. NVIVO (2016; 11.2.1) software was used for data management and analysis. NVIVO was used to code, organize, and analyze transcribed data by two researchers. Narrative analysis (Lieblich, Tuval-Mashiach, & Zilber, 1998) focused on the meaning ascribed to RTR or the question, “How did the RTR affect your life?” This thematic analysis led to identification of nodes that house relevant text across transcripts and groups, and more nodes were added throughout the process. Once identified, initial, open coding was performed resulting in 48 discrete themes (Charmaz, 2004; Lofland, 2006). Links connected emerging ideas or themes from multiple transcripts, and memos allowed for tracking of insights that emerged in the process. Color-coded stripes helped identify significant patterns by the density associated with the theme. Annotations were helpful to remind researchers of the meaning of

identified excerpts, themes, and distinctions. The first author created and maintained a codebook to organize the themes. A second researcher completed coding on 50% of the raw data using the codebook. NVIVO allowed for the researchers to access the data files from different locations. After comparison of thematic results, high fidelity was attained with consensus on all themes. Next, focused coding techniques were used to confirm the themes that described the effects of the program, and the following health categories emerged: physical, emotional, and socio-cultural health/health behavior change (Saldaña, 2009). Results are presented and organized using these three categories.

## FINDINGS

Participants indicated that their involvement in RTR had profound, long-term effects. Themes describing their perspectives on the biopsychosocial and cultural impact of RTR are in the domains of physical, emotional, and socio-cultural health/health behavior change (see Table A3 for domains, definitions, and exemplar quotes). Each quote lists the participants' year of participation and quote number to indicate differing participants in no particular order. Reflections on the overall impact of the program include:

1 (2015): *I ride my bike a lot still and I have looked into triathlons. My emotional health has never been better and that's thanks to everybody on the team who was patient and helped me every time I needed it. My eating habits were awful before the ride but [program coordinator] took all the good food away and gave us the nasty healthy food (laughs), and it has left an imprint on me to eat healthier. Everybody has helped change all aspects of my health, and I couldn't thank them enough.*

2 (1984): *I look back at my life, and it was just one of the most important, significant things that I was able to observe and experience.*

### Physical Health

Regarding physical health, participants discussed changes in their diet, eating habits, exercise habits, and weight. After returning home, participants reported making healthier choices at the grocery store, continued to reduce their consumption of fried foods and soft drinks, and

drank more water. Many participants lost weight during the program, with some reporting 10- to 30-pound weight loss.

### **Dieting and Eating Habits**

Participants noted they had gained skills during the program that allowed them to navigate their food choices in a healthier way. In particular, participants described being exposed to new healthy foods and experiencing cravings for more fruit and vegetables.

1 (2015): *When I got back [from the program], I noticed the first time I had to go buy groceries; I started buying things that I never bought before. I would buy fresh fruit instead of the canned stuff. We kind of got used to this on the ride...and it's all healthier for me so, that's definitely changed my diet habits. [Other participants agree]*

2 (2015): *The eating habits was the biggest thing that changed for me because I never bought stuff like that before. But now I buy some spinach, and I'll just throw a wrap together.*

### **Physical Health Outcomes**

1 (2015): *I lost 20 pounds over the course of training and the ride itself. So I went from 235 to 215.*

2 (2015): *[During the training] I gained some muscle weight and then I chiseled the little bit on me, so I was pretty happy.*

### **Psychological/Emotional**

This category represents many aspects of emotional well-being. Participants were unanimous and exuberant when describing the changes to their personality, including increased confidence and pride. Major themes within this category describe improved patience, self-efficacy, leadership, and empathy. When asked how the ride has affected or changed them, participants said the following:

1 (2015): *I think I deal with stressful situations a little bit better.*

2 (2015): *I've just learned to deal with stuff better. I do have a lot more patience.*

### **Patience**

One participant described how they learned to be more patient by observing others in the group and were inspired to change based on the positive behaviors around them:

1 (2015): *Actually, I learned from these two, just watching them. Because there was one rider, she was just so difficult, and honestly most of the people had given up on her. But these two never gave up until the day she left. They were always there to motivate her and be patient with her and help her and that was honestly really inspiring, and it helped me want to better my patience and improve it...And that's when I really started working on mine (my patience).*

### **Self-Efficacy**

Participants described feeling more confident after the ride. They believed in themselves and their capabilities. Participants noted using their accomplishments during the program as inspiration and a source of strength during future experiences, such as when taking difficult classes, parenting children, during personal loss, and at work.

1 (1984): *Every time I hit a wall in my life I'd think, "Man, this is nothing." This is nothing because I did that trip, this is nothing, I can do this.*

2 (1984): *I'd say by 3 to 5 years after that experience I started realizing, I've got this strength that I can do whatever I want to do. I always say to my kids you can do whatever you want to do; you just got to do it.*

Not only did the effects have a delayed onset and prolonged effect for this participant, but it was also carried down as a lesson to their children. The next participant also articulates an increase in pride not just for self, but also for family and tribe. They further explain parts of the program they attribute to increasing their feelings of pride.

3 (1984): *I was just an Indian boy from a small town, but on this trip—I'm more proud to be Cherokee and more proud to know what my family and ancestors went through. It just makes me say that I'm from a really great tribe.*

This participant explained that his pride in himself grew due to the RTR program and that learning about the strength and accomplishments of his family members and ancestors fueled this pride.

### **Leadership**

Participants discussed leadership as a skill they learned through this program. They highlighted improved skills in talking to others more effectively, becoming leaders in the workplace, and the ability to complete tasks and achieve their goals. Participants also noted Cherokee-specific components of leadership including listening to others, taking care of others, and being a dependable person. One participant summed up the effects of the RTR program on their ability to become a leader in the following way:

1 (1984): *Every day since I got home from that trail, my life has changed. I am a leader, an overcomer, and a proud Cherokee of The Smokey Mountains. If I am faced with adversity, I don't back down, and I'm not afraid. I stop and work the problem. The Trail taught each of us lots of things. It made us strong, brave, proud, unstoppable, and I think before that ride a lot of us felt invisible. We found our voice, our strength, and we were seen. We were seen by the world, but more importantly, we saw one another, and we are bound for life.*

Participants reported becoming leaders in their workplace, families, and their communities and attributed these successes to the RTR program. They were surprised by the transformation that they made in their self-efficacy and their skillset that allowed them to hold leadership positions in their places of work, communities, and their own families.

2 (1984): *I think about the directions that we've all taken since then. About the key positions that we hold. I think that if we hadn't gone through this [RTR program] then some of us wouldn't have the ability to stay above and hold the positions that we have.*

3 (1984): *My whole life was changed for the better because, I mean, I been in administration most of my career, and I never would have done things like that. I was a backward kid. Every job I ever took as an [omitted], I always wound up being*

*in charge, And that's because of that trip. So I was a natural born leader, and I didn't know it.*

4 (1984): *I can remember when I got the job as director, I thought, "Oh my lord!" I got the director job. Now then, I supervise 70 employees; we maintain the buildings and grounds, just being able to take what I learned from organizing [during the RTR program]. We had the cooking crew, the cleanup crew, and the set up crew. Being able to work with everybody to get one task done. I think we all learned how to speak to each other, when I say speak to each other, I mean instead of saying, "You go do this!", you ask for their help, you ask for their input. And then you, you get the buy in, and then, I mean things happen, and I don't think any of us on that ride said, "Hey, you need to go." We would say, "We need to get this done."*

Participants learned to lead by having assigned roles, completing their own tasks, and trusting the other members of the group to complete their tasks. They frequently discussed leadership, teamwork, and taking care of one another. This critical component of relationships in the context of being a good leader is an important Cherokee value. The following examples are of participants discussing how they came to learn and use these Cherokee values of leadership and relationships.

5 (2015): *I learned how to be a leader by leading by example. I learned that keeping a constant good attitude would brighten everybody else up. I did have my days, but I put the team's emotions and feelings over my own. I learned to be patient and caring to others because some weren't as strong as others or as fast. I learned to be sensitive to other's needs and how to hold out a helping hand. I learned how to be a true leader the team needed. We all did. When somebody needed help, I would ride with them and just talk to them, and we would exchange a laugh or two. When we would get a flat we would all jump off and lend a helping hand, or in our case, a tube for the tire. This ride has created future [Cherokee] leaders.*

6 (1984): *It [RTR] taught me about leadership; it taught me about working together and taught me about being there for somebody. And everything I learned on that*

*trip basically [is] what I do today—I work with people, encourage, build them, give them a hug, tell them, “Come on, keep your head up, it’ll be all right.”*

Participants explained that the RTR program taught them to become leaders. They reported that leadership includes being positive around others, and when you face a difficult situation, motivating one another to meet the collective goals and taking care of one another when help/collaboration is needed. Participants report still using these lessons today at work, with their families, and in their everyday lives.

### **Empathy**

In the focus groups, participants discussed that they learned to be more aware of others’ needs because of this program. Participants detailed how they learned to take care of others, which was usually accomplished by observing how their facilitators and peers treated one another. This increased awareness of others’ needs coupled with observational learning, led to an increased involvement in helping others during and after the program.

1 (2015): *We have to support each other in all of our difficulties because we all had them on different days and your strong day might be someone’s best or someone’s weakest day.*

2 (2015): *I slowly started changing all the crooked faults in me, and my team helped me and reshaped me. I told them all about my rough childhood and how everything seemed to be falling apart. How I would spend nights in my car, literally fight my dad, steal for my family, and how I’ve been working since I was 5 trying to do anything to get a few bucks for the house. They didn’t understand because they all had never experienced it, yet they offered words of encouragement. A helping hand. They were all there for me. I then grew to be patient, understanding, sensitive to others, and even less a jerk. The constant support from everybody on the team definitely helped me be the man of the house my family needed. I can never repay the team for what they’ve done for me.*

It appears the support this participant received through this program gave them enough trust and confidence to share more with his new peers. As they felt more thankful towards their peers, they began to reciprocate the caring that they had received. An almost identical experience

of receiving kindness from peers resulting in a change of perspective, personality, and relationships was noted almost thirty years earlier during the same program:

3 (1984): *We busted the windows on the bus. We was angry about something. I don't know what we was angry about, but um we had a problem with drinking [Agreement] and uh, drugs, but, that trip really opened our eyes because we were used to just, turning to that anger. But when I got around all them—the heart, the care really built me up, made me look at things different. I thought, wow, I can do this. I can do this; this is bearable; I can do it. And got to the point where I'd start to smile a lot. [Agreement] During the trip I just started, just smiling...but it was a pretty rough time in those days.*

This participant references experiencing difficult events from their youth and responding by engaging in externalizing emotions and behaviors. They then discussed that through positive experiences with peers, “this” was now bearable. It seems “this” may be referencing both the challenges of the program and of his life, and they both became more bearable due to the “heart” and the “care” of his new friends.

## **Social and Cultural**

Participants noted changes in their lives through improved connectedness to their tribe, peers, and family.

### **Cherokeeness**

Participants learned about Cherokee cultural values through ancestors, elders, peers, and program coordinators. For instance, one participant discussed their experience listening to a Cherokee elder’s advice before they started their journey:

1 (1984): *He was talking to us about the trip and the journey that we were going to make. And his encouragement to us—here's a man that we didn't know from anyone, but he's there. He's trying to be positive; he's motivating us. And then, I can remember we started up that first mountain—I can still hear his words, “Be positive, stay positive. You know you can do this. Remember your Cherokee heritage. Your heritage is strong. Because your ancestors have already done this, you can do it too.”*



2 (2015): *I learned to respect elders more, to always accept food from others, and to never leave anybody behind. This ride was great for practicing our Cherokee values because I was able to do it with other Cherokees! It made it easy and pretty fun knowing that we were all trying. From time to time [program coordinator] introduced a new one [Cherokee cultural value] and then we would practice that one.*

3 (2015): *I didn't know just the importance of family, and I think it kind of just goes back to the root of what being Cherokee is all about. Being there for each other and how our people did it [during the removal]. That was one thing that I will honestly say that before that I came on the ride I was nervous. I'm not much Cherokee, and I-I thought I was going to be a problem because I'm not as much as a lot of the other people. But I didn't feel that at all, everyone made me (feel ok).*

This participant describes feelings of shame around their mixed Cherokee heritage but found acceptance of his identity through this program. They also mention Cherokee values and history knowledge pointing to the possibility that their cultural connection is no longer solely identified through his blood quantum but on his competence in Cherokee culture. Another participant discussed their struggle to decide to continue living within their Cherokee community:

4 (2015): *After I've been on this ride, if I'm going to preserve my culture, I have to stay here. Because if I move out, I'm helping deplete it and diminish it. It [RTR] made me want to stay in [the Cherokee community]... I want to be a doctor for my nation and help people who need financial help. I want to change people's lives, like mine has been changed. I want to touch people's hearts and help everybody I come to contact with, because I'll pull everybody up with me, because, like my elders say, "We are one people; we are one fire."*

This is a powerful demonstration on how this participant changed their plans to leave their Cherokee community before the RTR program and decided to stay and become a leader and embody the lessons that he learned from elders about the Cherokee teachings. Another participant felt that the cultural component was so important that it should be a part of the learning of all Cherokee children:

5 (2015): *I personally feel like if we can put our money in something that has that much of an impact on the next generation and teaches people the core values of what we want them to learn, I mean, about being Cherokee and what it's about, then I don't think you can really put a price on that.*

### **Social Support/Peers**

Participants indicated that they developed strong and lasting friendships through this program. Over thirty years later, they still remained close.

1 (2015): *I think just, the camaraderie between everyone—it's just been great. But I think that also speaks with being on the trail too, and what our ancestors had to be. So, it was fitting. It [has] been real impactful.*

2 (1984): *To this day, we still have each other. No matter how long it's been, and it's over 30 years now, we can still contact each other or run into each other, and it's like no time has passed. We will always be close like a family. Like [name] said, "We are brothers and sisters for life." That is the most important and powerful thing to gain in this world is a family. This world is tough place to live and we are never alone thanks to that Trail. Family is a Cherokee value that was instilled in me before and since The Trail.*

Participants shared stories about how they were helped or helped others on the trip and developed intimate friendships. These experiences left lasting impressions that they still think about today.

3 (1984): *Everybody had those days where they just wanted to stop and throw that bike down [Laughter] and sit in the shade for a while, and that's what I went through. I just remember just wanting to quit, and we just, we all stopped and talked and talked. All four of us, [name], me, and [name] just all sit there and uh, talked about it, and I always remember that. That was [clears throat] that was pretty powerful.*

One participant discussed the process of developing friendships and trust in others that they were not used to doing:

4 (2015): *(I learned that) I'm not alone, that asking for help doesn't show weakness, that it's ok to let your walls down and let people in. I completely dropped all my defenses and told people on the ride everything, and it was scary at first, but now I'm such a happier and better person knowing that there are people I can actually trust.*

5 (2015): *I never felt this need and want to just want to protect him [peer] and want to like, make sure that he was going to be ok, and take care of him. I've never had this feeling of loving somebody else outside of my family and wanting to protect them like my family, and whenever we were coming up a hill and he was struggling and he was falling back, I caught him with my hand while we were still going up the hill, and I helped him get up the hill. And there were days where I felt like he did that with me, because I was getting in arguments with the staff, and I would fall back and he would just catch me.*

Participants developed lifelong friendships and lessons on being vulnerable, trusting others, and caring for others. Participants learned to recognize the needs of others, be empathic, develop feelings of love and care for their tribal peers, and learned to take care of someone outside of their direct family or extend their definition of family to their tribe.

### **Family**

Learning about our ancestors connects us to who we are as people and families today. Participants became more acquainted with their ancestors and family members through a series of program components, including 1) receiving genealogy charts and encouragement to discuss genealogy with living family members, 2) visiting family lands in the homelands and seeing graves in the homelands and across the removal route, and 3) historical document reading. In addition to looking to the past for direction from ancestors, participants also reflected on what this program means to them with their current families and future children and grandchildren.

1 (2015): *My favorite was probably the genealogy part, where they did our genealogy because, I mean, we had family members right there in the same room when we first met; we didn't have a clue.*

2 (2015): *It's important to learn about the past so that we can keep it from repeating. I never really knew the Cherokee side of my family, so to find I had cousins on the ride with me was amazing, and now I have extended family that I still see and talk to all the time.*

Several participants noticed that things were different for them in their relationships with their family members after this program.

3 (2015): *I know just being back home, it's like I, I notice I help out more like when I go back and visit family and stuff and, like if they need help with things, I'll go out and just help them however I can.*

These participants linked their experience with peers on the ride and the lessons that they learned there with changes they made within their own family relationships when they returned.

4 (2015): *I didn't really spend a whole lot of time with them before, but I cherish family time now. I think it's one thing that I learned from this ride... Just caring for people that I didn't know, for so long, and then I slowly got to know them. That made me realize that I need to care more for my family.*

5 (2015): *There was a few days where my chain would fall off, but it was like everybody that would pass me in the line, would ask "Are you ok, are you ok, are you ok?" And then there would always be one person that would stop, so whenever I see someone actually struggling, I actually kind of think about that as when my chain fell off and everybody would stop and ask me. I use that and I just compare it to the situation. But there will be some days where my ma or my brothers aren't feeling good, and I'll think about my chain falling off, and I'll just ask them, like, "Hey, are you ok?" Because me and my brother used to fist fight all the time and argue, and so when I got back [from the RTR program], he was telling me that he missed me a whole lot, and he said he's been struggling with school and everything*

*a lot, so me and him sat down, and we actually talked for, I think, 4 or 5 hours just straight, and it helped me a lot. Just to be able to help my brother get through the situation he was in.*

The 1984 cohort spoke to how the ride has affected how they parent their children now:

6 (1984): *I would tell them you got to remember where you came from, and it's not just your parents, your grandparents; it goes further back than that. I said, it's just something you got to be proudful of.*

7 (1984): *I didn't want them to turn out the way I was raised. I wanted them to have, more, so that's how it [RTR] helped me. I learned to focus on life, and what was more important for my kids. I wanted to give them every chance. I teach my kids, "Don't ever underestimate yourself, because there's always someone out there's going to tear you down." I said, "You know what you're capable of doing." And that's what I taught my kids. And that's what I learned from this program.*

### **Critical Feedback**

While participants' feedback was overwhelmingly positive in regards to the program, they did report areas of improvement as well. Many areas were around technical and planning needs. Other needs included more training around bike maintenance, more mandatory gym time before the ride, more Cherokee language lessons, and more program coordinators to address a variety of needs from diet, to health, to emotional well-being.

### **DISCUSSION**

This project aimed to use qualitative methods to evaluate a 34-year-old, Cherokee-created program to empower tribal youth. We discovered that positive improvements were noted in the areas of physical, emotional, social, and cultural health and well-being. Participants noted that these results remained significant to them up to thirty years after the intervention was completed. While we did not set out to compare groups, the effect of the program and subsequent quotes and themes between the groups were very similar in regards to the strength of the peer groups (3 weeks vs. 34 years later), the increased pride in self and tribe, and the hopes and aspirations to

become/remain a Cherokee community leader. Some differences in content appeared to be developmental; the 1984 group spoke more about their children and passing down what they had learned while the 2015 group spoke about their family in terms of parents, siblings, and peers primarily and their future plans to become Cherokee community leaders.

### **Limitations**

We employed focus group methodology to answer our research questions. Critics of focus groups may question the ability of researchers to generalize the results of such focus groups to larger populations (Patton, 2002); however, we did not set out to generalize but to understand this small groups' experience, to identify outcomes of this program, and to identify some driving factors of any improvements. Specifically, these results can assist researchers in the creation and evaluation of similar programs that aim to strengthen language, history, and nationhood by pointing out impactful areas for program development. Also, focus groups may be susceptible to interpretation bias by the researcher, thus paraphrasing or summarizing what has been discussed is vital to ensure the appropriate reception of information. To reduce the possibility of researcher bias, a second researcher unaffiliated with this project or community completed analysis of the data, and member/fidelity checks via feedback directly from participants were completed during several key time points of the study—both strategies that have been found effective in reducing bias (Daley, 2013).

Given the challenges that Indigenous youth face, these results present a promising direction for youth and young adult interventions to address disparities in the current health disparity target areas such as metabolic disease, depression and suicide, substance use, and high school completion. Furthermore, combining culture and health through an integrative approach cultivated a variety of positive emotions, which is valuable in both the prevention and treatment of anxiety, stress, and other behavioral health problems (Fredrickson, 2000). Although the RTR program encompasses many types of intervention, participants noted that some were more salient for them, including genealogy, Cherokee culture and language, and place-based historical learning. It is important to note the RTR programs' unique combination of cultural and historical components were selected by and for community members.

By honoring historical events, Indigenous people are able to acknowledge their history, establish a greater connection with their cultural and historical background, revitalize cultural and language practices, and address current issues facing Indigenous people through heightened

awareness, discussion, prayer, and ceremony. This project is one of the first to address the impact of these journeys on its participants following the event. The potential of these journeys to increase a sense of community and tribal pride among its members has an important significance in the ability of these events to increase the health status and overall well-being among Indigenous youth.

Another central component of this program is learning the Cherokee culture and language. Themes matched and described traditional Cherokee ways of interacting, indicating that this program taught or encouraged these value systems. Consequently, this study's participants noted that they experienced a link between learning more about Cherokee culture and history and improved physical, emotional, social, and cultural health, suggesting that cultural revitalization may be the key to reduce health disparities for Indigenous populations. Recent studies have demonstrated that the loss of a tribal culture and language is related to worsened mental and physical health (Whalen, Moss, & Baldwin, 2016). However, there remains a great need for the assessment of such practices in measuring the effects of cultural revitalization programs (Yazzie-Mintz, 2011).

### CONCLUSION

The results of this study identified specific examples of improved physical, emotional, social, and cultural health and well-being in relation to the RTR program that can provide a foundation for the development, implementation, and evaluation of other programs. Specifically, the findings from this study demonstrate the importance of traditional revitalization of culture, language, and history for addressing the health of individuals, particularly Indigenous people. Key findings from this study emphasize the vitality and value in holistic approaches in addressing and preventing adverse health conditions, as well as promoting healthy habits. Sustained program evaluation of the RTR program will provide additional information on the long-term impact this type of intervention provides and provide the key ingredients necessary for Indigenous health promotion programs.

### REFERENCES

- About Nibi Walk. (2017). Retrieved from <http://www.nibiwalk.org/about/>
- Barney, D. D. (2001). Risk and protective factors for depression and health outcomes in American Indian and Alaska Native adolescents. *Wicazo Sa Review*, *16*(1), 135-150. Retrieved from <https://www.jstor.org/stable/1409451>



- Benson, P., Scales, P., Hamilton, S., Sesma Jr, A., Hong, K., & Roehlkepartain, E. (2006). Positive youth development so far: Core hypotheses and their implications for policy and practice. *Search Institute Insights & Evidence*, 3(1), 1-13. Retrieved from <https://www.search-institute.org/search-institute-insights-evidence/>
- Berkman, L. F., Glass, T., Brissette, I., & Seeman, T. E. (2000). From social integration to health: Durkheim in the new millennium. *Social Science and Medicine*, 51(6), 843-857. [http://dx.doi.org/10.1016/S0277-9536\(00\)00065-4](http://dx.doi.org/10.1016/S0277-9536(00)00065-4)
- 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 and Adolescent Medicine*, 153(6), 573-580. <http://dx.doi.org/10.1001/archpedi.153.6.573>
- Bryant, M. T. (1996). *Contrasting American and Native American views of leadership*. Paper presented at the 10th Annual Meeting of the University Council for Educational Administration; October 25-27, 1996, Louisville, KY.
- Bryant, M. T. (1998). Cross-cultural understandings of leadership: Themes from Native American interviews. *Educational Management Administration and Leadership*, 26(1), 7-20. <http://dx.doi.org/10.1177/0263211X98261002>
- Cajete, G. A. (2016). Indigenous education and the development of Indigenous community leaders. *Leadership*, 12(3), 364-376. <http://dx.doi.org/10.1177/1742715015610412>
- Carlson, A. E., Aronson, B. D., Unzen, M., Lewis, M., Benjamin, G. J., & Walls, M. L. (2017). Apathy and Type 2 Diabetes among American Indians: Exploring the protective effects of traditional cultural involvement. *Journal of Health Care for the Poor and Underserved*, 28(2), 770. <http://dx.doi.org/10.1353/hpu.2017.0073>
- Charmaz, K. (2004). Premises, principles, and practices in qualitative research: Revisiting the foundations. *Qualitative Health Research*, 14(7), 976-993. <http://dx.doi.org/10.1177/1049732304266795>
- Cherokee Nation. (2018). *Remember the Removal*. Retrieved at <https://remembertheremoval.cherokee.org/>
- Cherokee Nation Public Health. (2015). *State of the Cherokee Nation Health Report and Plan 2014*. Retrieved from <http://cherokeepublichealth.org/wp-content/uploads/2015/08/State-of-The-Cherokee-Nation-Health-Report-and-Plan-2014-Lo-Res.pdf>
- Coe, K., Attakai, A., Papenfuss, M., Giuliano, A., Martin, L., & Nuvayestewa, L. (2004). Traditionalism and its relationship to disease risk and protective behaviors of women living on the Hopi reservation. *Health Care for Women International*, 25(5), 391-410. <http://dx.doi.org/10.1080/07399330490438314>



- Colaizzi, P. F. (1978). Psychological research as the phenomenologist views it. In R. Vaile & M. King (Eds.), *Existential phenomenological alternatives for psychology* (pp. 48). New York, NY: Oxford University Press.
- Daley, A. M. (2013). Adolescent-friendly remedies for the challenges of focus group research. *Western Journal of Nursing Research*, 35(8), 1043-1059. <http://dx.doi.org/10.1177/0193945913483881>
- Duran, E. (2006). *Healing the soul wound: Counseling with American Indians and other native peoples*. New York, NY: Teachers College Press.
- Echo-Hawk, R. C. (2000). Ancient history in the New World: Integrating oral traditions and the archaeological record in deep time. *American Antiquity*, 65(2), 267-290. <http://dx.doi.org/10.2307/2694059>
- Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science*, 196(4286), 129-136. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/847460>
- Engel, G. L. (1992). The need for a new medical model: A challenge for biomedicine. *Family Systems Medicine*, 10(3), 317-331. <http://dx.doi.org/10.1037/h0089260>
- Fredrickson, B. L. (2000). Cultivating positive emotions to optimize health and well-being. *Prevention & Treatment*, 3(1). <http://dx.doi.org/10.1037/1522-3736.3.1.31a>
- Garrett, M. T., Parrish, M., Williams, C., Grayshield, L., Portman, T. A. A., Rivera, E. T., & Maynard, E. (2014). Invited commentary: Fostering resilience among Native American youth through therapeutic intervention. *Journal of Youth and Adolescence*, 43(3), 470-490. <http://dx.doi.org/10.1007/s10964-013-0020-8>
- Garrouette, E. M., Goldberg, J., Beals, J., Herrell, R., Manson, S. M., & the AI-SUPERPFP Team. (2003). Spirituality and attempted suicide among American Indians. *Social Science and Medicine*, 56(7), 1571-1579. [http://dx.doi.org/10.1016/S0277-9536\(02\)00157-0](http://dx.doi.org/10.1016/S0277-9536(02)00157-0)
- Gone, J. P., & Calf Looking, P. E. (2015). The Blackfeet Indian culture camp: Auditioning an alternative indigenous treatment for substance use disorders. *Psychological Services*, 12(2), 83-91. <http://dx.doi.org/10.1037/ser0000013>
- Gottlieb, B. H. (1985). Social support and community mental health. In S. Cohen & S. L. Syme (Eds.), *Social support and health* (pp. 303-326). New York, NY: Academic Press.
- Gruenewald, D. A. (2008). The best of both worlds: A critical pedagogy of place. *Environmental Education Research*, 14(3), 308-324. <http://dx.doi.org/10.1080/13504620802193572>
- Heredia, R. C. (2000). Tribal history: Living word or dead letter? *Economic and Political Weekly*, 35(18), 1522-1525. Retrieved from <https://www.epw.in/>

- Hodgson, J., Lamson, A. L., & Reese, L. (2007). The Biopsychosocial-Spiritual Interview method. In D. Linville & K. M. Hertlein (Eds.), *The therapist's notebook for family health care: Homework, handouts, and activities for individuals, couples, and families coping with illness, loss, and disability*. (pp. 3-12). New York, NY: Haworth Press.
- Kenyon, D., & Hanson, J. D. (2012). Incorporating traditional culture into positive youth development programs with American Indian/Alaska Native youth. *Child Development Perspectives*, 6(3), 272-279. <http://dx.doi.org/10.1111/j.1750-8606.2011.00227.x>
- Krueger, R. A. (2009). *Focus groups: A practical guide for applied research* (4th ed.). Los Angeles, CA: SAGE Publications, Inc.
- Krueger, R. A., & Casey, M. A. (2015). *Focus groups: A practical guide for applied research* (5th ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Lieblich, A., Tuval-Mashiach, R., & Zilber, T. B. (1998). *Narrative research: Reading, analysis and interpretation*. Thousand Oaks, CA: SAGE Publications, Inc.
- Lofland, J. (2006). *Analyzing social settings: A guide to qualitative observation and analysis* (4th ed.). Belmont, CA: Wadsworth/Thomson Learning.
- MacDonald, J. P., Ford, J. D., Willox, A. C., & Ross, N. A. (2013). A review of protective factors and causal mechanisms that enhance the mental health of Indigenous Circumpolar youth. *International Journal of Circumpolar Health*, 72(1), 1-18. <http://dx.doi.org/10.3402/ijch.v72i0.21775>
- Middlebrook, D. L., LeMaster, P. L., Beals, J., Novins, D. K., & Manson, S. M. (2001). Suicide prevention in American Indian and Alaska Native communities: A critical review of programs. *Suicide and Life-Threatening Behavior*, 31(Suppl), 132-149. <http://dx.doi.org/10.1521/suli.31.1.5.132.24225>
- Mills, L. B. (2009). A meta-analysis of the relationship between emotional intelligence and effective leadership. *Journal of Curriculum & Instruction*, 3(2), 22. <http://dx.doi.org/10.3776/joci.2009.v3n2p22-38>
- Mohatt, N. V., Thompson, A. B., Thai, N. D., & Tebes, J. K. (2014). Review: Historical trauma as public narrative: A conceptual review of how history impacts present-day health. *Social Science and Medicine*, 106, 128-136. <http://dx.doi.org/10.1016/j.socscimed.2014.01.043>
- Morgan, D. L. (1997). *Focus groups as qualitative research* (2nd ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Narindrakura, N. (2015). Nihígaal béé fina: Our journey for existence. Retrieved from <https://www.indiegogo.com/projects/nihigaal-bee-iina-our-journey-for-existence#/>

- Nash, D. A., & Nagel, R. J. (2005). Confronting oral health disparities among American Indian/Alaska Native children: The pediatric oral health therapist. *American Journal of Public Health*, 95(8), 1325-1329. <http://dx.doi.org/10.2105/AJPH.2005.061796>
- Norris, T., Vines, P. L., & Hoeffel, E. M. (2012). *The American Indian and Alaska Native population: 2010*. U.S. Census Bureau. Retrieved from <http://www.census.gov/prod/cen2010/briefs/c2010br-10.pdf>
- O'maka Tokatakiya: Future generations ride. (2015). Retrieved from <https://omakatokatakiya.wordpress.com>
- Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3rd ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Perdue, T. (2007). *The Cherokee Nation and the Trail of Tears*. New York, NY: Viking.
- Saldaña, J. (2009). *The coding manual for qualitative researchers*. Thousand Oaks, CA: SAGE Publications, Inc.
- Shields, P. M., & Rangarajan, N. (2013). *A playbook for research methods: Integrating conceptual frameworks and project management*. Stillwater, OK: New Forum Press.
- Smith, L. T. (1999). *Decolonizing methodologies: Research and indigenous peoples*. London: Zed Books Ltd.
- Stephenson, C. (2006). *Nation Building*. The Beyond Intractability Project, The Conflict Information Consortium, University of Colorado. Retrieved from <http://www.beyondintractability.org/essay/nation-building>
- Stone, R. A. T., Whitbeck, L. B., Chen, X., Johnson, K., & Olson, D. M. (2006). Traditional practices, traditional spirituality, and alcohol cessation among American Indians. *Journal of Studies on Alcohol*, 67(2), 236-244. <http://dx.doi.org/10.15288/jsa.2006.67.236>
- Straits, K. J. E., Bird, D. M., Tsinajinnie, E., Espinoza, J., Goodkind, J., Spencer, O., . . . The Guiding Principles Workgroup. (2012). *Guiding principles for engaging in research with Native American communities, version 1*. UNM Center for Rural and Community Behavioral Health & Albuquerque Area Southwest Tribal Epidemiology Center. Retrieved from [https://hsc.unm.edu/vision2020/common/docs/Guiding\\_Principles\\_Research\\_Native\\_Communities2012.pdf](https://hsc.unm.edu/vision2020/common/docs/Guiding_Principles_Research_Native_Communities2012.pdf)
- Šunġtānġka Wiċayuhapi. (2018). *Dakota 38 + 2 memorial ride*. Retrieved from <http://sunktanka.weebly.com/dakota-38-plus-2-memorial-ride.html>
- Wang, D., Waldman, D., & Zhang, Z. (2014). A meta-analysis of shared leadership and team effectiveness. *Journal of Applied Psychology*, 99(2), 181-198. <http://dx.doi.org/10.1037/a0034531>

- Wexler, L. M., DiFluvio, G., & Burke, T. K. (2009). Resilience and marginalized youth: Making a case for personal and collective meaning-making as part of resilience research in public health. *Social Science and Medicine*, 69(4), 565-570. <http://dx.doi.org/10.1016/j.socscimed.2009.06.022>
- Whalen, D., Moss, M., & Baldwin, D. (2016). Healing through language: Positive physical health effects of Indigenous language use. *F1000Research*, 5. <http://dx.doi.org/10.12688/f1000research.8656.1>
- Whitbeck, L. B., Hoyt, D. R., Stubben, J. D., & LaFromboise, T. (2001). Traditional culture and academic success among American Indian children in the Upper Midwest. *Journal of American Indian Education*, 40(2), 48-60. Retrieved from <https://www.jstor.org/stable/24398333>
- 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 and Adolescent Psychiatry*, 47, 890-900. <http://dx.doi.org/10.1097/CHI.0b013e3181799609>
- Wildcat, M., McDonald, M., Irlbacher-Fox, S., & Coulthard, G. (2014). Learning from the land: Indigenous land based pedagogy and decolonization. *Decolonization: Indigeneity, Education & Society*, 3(3), 1. Retrieved from <https://jps.library.utoronto.ca/index.php/des/article/view/22248>
- Wilson, S. (2008). *Research is ceremony: Indigenous research methods*. Black Point, N.S.: Fernwood Publishing.
- Yazzie-Mintz, T. (2011). Native teachers' beliefs and practices: Choosing language and cultural revitalization over uniformity and standardization. *Contemporary Issues in Early Childhood*, 12(4), 315-326. <http://dx.doi.org/10.2304/ciec.2011.12.4.315>
- Yu, M., & Stiffman, A. R. (2007). Culture and environment as predictors of alcohol abuse/dependence symptoms in American Indian youths. *Addictive Behaviors*, 32(10), 2253-2259. <http://dx.doi.org/10.1016/j.addbeh.2007.01.008>

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## APPENDIX

**Table A1**  
**Remember the Removal Training Schedule**

<b>Instructor</b>	<b>Location</b>	<b>Description</b>	<b>Purpose</b>	<b>Interval</b>	<b>Pre-Ride/ During Ride</b>
<b>Cherokee Culture</b>					
<b>CN Instructor</b>	In class	Lecturer provides historical and current cultural knowledge to participants in a lecture form	To engage participants in Cherokee cultural ways and beliefs	Jan 17 - May 31: 23 Lectures; 1 x week for 30 min	Pre-Ride
<b>Cherokee Language</b>					
<b>CN Instructor</b>	In class	Lecturer teaches participants Cherokee words, sayings, and to write and read Cherokee syllabary	To increase participants knowledge and use of the Cherokee language	Jan 17 - May 31: 23 Lectures; 1 x week for 30 min	Pre-Ride
<b>Cherokee History</b>					
<b>CN Instructor</b>	In class	Lecturer teaches participants Cherokee history in a lecture and discussion format, focusing on the Removal period	To improve Cherokee historical knowledge and increase pride in the Cherokee Nation and build nationhood	Jan 17 - May 31: 23 Lectures; 1 x week for 30 min	Pre-Ride
	Homework and in-class discussions	1 Book ( <i>The Cherokee Nation and the Trail of Tears</i> , Theda Purdue & Michael Green) 1 Journal (Rev. Daniel S. Butrick's)	To learn the history of the forced removal and the Cherokee language, history, and culture prior to, during, and post removal	Jan 17 - May 31	Both
<b>On-site Historian</b>	On-site	Approximately 100 sites in total	To connect the events of the removal in a tangible way for the participants and to help preserve these site for future generations	Jun 1 - Jun 27	During Ride
	Journals/ Graves	80	To experience first-hand accounts of historical events and visit real people who were affected by these events	Jun 1 - Jun 27: Daily	During Ride

continued on next page

**Table A1 Continued**  
**Remember the Removal Training Schedule**

<b>Instructor</b>	<b>Location</b>	<b>Description</b>	<b>Purpose</b>	<b>Interval</b>	<b>Pre-Ride/ During Ride</b>
<b>Cherokee History</b>					
<b>Local Cherokee Experts</b>	On-site	10	To experience first-hand accounts of historical events and visit real people who were affected by these events	Jun 1 - Jun 27: Regularly	During Ride
<b>State/ National Park Experts</b>	On-site	10	To gain local/regional historical knowledge about these events	Jun 1 - Jun 27: Regularly	During Ride
<b>Genealogy</b>					
<b>CN Genealogist</b>		Individual genealogy of each participant, including the support staff	To connect each participant to the removal, their family members, and to each other  To expand on Cherokee family past and historical events	May	During Ride
<b>Exercise</b>					
	Gym/Pool/ Outside	Various workouts outdoors and in the Cherokee Nation gym on the weekend  Self-led during the week	To increase endurance/stamina/strength	Jan 21 - Mar 1: 2 x week as group; 2 x week on their own  Mar 1 - May 27: 2-3 x during the week on their own	Pre-Ride
	Cycling	Riding bikes together as a team	To experience removal route intimately and timely and to optimize exercise and health	Jan 21 - Mar 1: None  Mar 1 - May 27: 2 x week as group; 3-4 x during the week on their own  May 30 - Jun 22: 50-70 miles/day; 2 rest days	Both

continued on next page

**Table A1 Continued**  
**Remember the Removal Training Schedule**

<b>Instructor</b>	<b>Location</b>	<b>Description</b>	<b>Purpose</b>	<b>Interval</b>	<b>Pre-Ride/ During Ride</b>
<b>Diet</b>					
<b>Trainers/ Facilitators</b>		Participants are encouraged to eat well-balanced meals and to not drink soft drinks or eat fried foods during training	To provide positive, healthy diet instructions, especially as participants transition to intense work outside	2 x week reminders	Both
<b>Bicycle Maintenance &amp; Training</b>					
<b>CN Trainer</b>		Participants learn how to ride a road bicycle; use hand signals for safety and care for and repair the bicycles.	To build confidence and knowledge around bicycling  To learn to assist other riders with bicycle safety and maintenance and to learn to work together as a team	Mar 1 - Jun 22	Both
		Alumni riders assist with training (one main trainer and several volunteer Alumni riders from various years)	To help support new riders and set expectations for them of what the ride will be like and what they will gain from the experience	Jan 31 - May 27	Both



**Table A2**  
**Focus Group Questions**

<b>Grand Tour Question</b>	1. What was your experience participating in the Remember the Removal program and how has it affected your life?
<b>Sub-Questions</b>	<ol style="list-style-type: none"> <li>2. What were your favorite parts of the program?</li> <li>3. What positive outcomes did you experience after the program was completed?             <ul style="list-style-type: none"> <li>→ If not discussed ask about the following areas:</li> <li>3a. Cherokee cultural knowledge (culture, language, etc.)</li> <li>3b. Cherokee identity</li> <li>3c. Involvement in Cherokee leadership activities</li> <li>3d. Social connections (Peers, family, etc.)</li> <li>3e. Emotional health (stress, difficult situations, etc.)</li> <li>3f. Physical health (eating habits, exercise, etc.)</li> </ul> </li> <li>4. What was the hardest part of the program? Follow-up: How did you get through it?</li> <li>5. What parts of the program did you not enjoy/would you change?</li> <li>6. Have you experienced any negative outcomes as a result of participation in RTR?</li> <li>7. What are events that occurred during RTR that stand out as the most powerful for you?</li> </ol>
<b>Wrap-up Questions</b>	<ol style="list-style-type: none"> <li>8. Is there anything that we should have talked about but didn't in regards to your experience of RTR?</li> <li>9. Of all the topics that we discussed or things that came up for you, what is the most important experience that came up for you?</li> </ol>

**Table A3**  
**Domains, Definitions, and Exemplar Quotes**

Domain	Definition	Exemplar Quotes
Physical	The changes in diet, eating habits, exercise habits, and weight	<p>"When I got back [from the program], I noticed the first time I had to go buy groceries; I started buying things that I never bought before. I would buy fresh fruit instead of the canned stuff. We kind of got used to this on the ride...and it's all healthier for me so, that's definitely changed my diet habits."</p> <p>"I lost 20 pounds over the course of training and the ride itself. So I went from 235 to 215."</p>
Emotional	Improved patience, self-efficacy, leadership, and empathy	<p>"Every day since I got home from that trail, my life has changed. I am a leader, an overcomer, and a proud Cherokee of The Smokey Mountains. If I am faced with adversity, I don't back down, and I'm not afraid. I stop and work the problem. The Trail taught each of us lots of things. It made us strong, brave, proud, unstoppable, and I think before that ride a lot of us felt invisible. We found our voice, our strength, and we were seen. We were seen by the world, but more importantly, we saw one another, and we are bound for life."</p> <p>"It [RTR] taught me about leadership, it taught me about working together, and taught me about being there for somebody. And I didn't realize that one day I'd be using it for the future. I look back and I'm like "wow." And everything I learned on that trip basically [is] what I do today—I work with people, encourage, build them, ya know, either, give them a hug, tell them, 'Come on, ya know, keep your head up, it'll be all right.'"</p>
Socio-cultural	Changes in the domains of improved connectedness to their tribe, improved social connections (peers and family), and increased connection to their family	<p>"After I've been on this ride, if I'm going to preserve my culture, I have to stay here. Because if I move out, I'm helping deplete it and diminish it. It [RTR] made me want to stay in [the Cherokee community]. ...I want to be a doctor for my nation and help people who need financial help. I want to change people's hearts and help everybody I come to contact with, because...I know what it's like to be in the basement and now I know what it's like being on the top floor. I'll pull everybody up with me, because, like my elders say, 'We are one people, we are one fire.'"</p> <p>"To this day, we still have each other. No matter how long it's been, and it's over 30 years now. We can still contact each other or run into each other, and it's like no time has passed. We will always be close like a family. Like [name] said, 'We are brothers and sister for life.' That is the most important and powerful thing to gain in this world is a family. This world is tough place to live and we are never alone thanks to that Trail. Family is a Cherokee value that was instilled in me before and since The Trail."</p>

# SOURCES OF STRESS AMONG MIDWEST AMERICAN INDIAN ADULTS WITH TYPE 2 DIABETES

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*Abstract: Despite alarming health disparities among American Indians (AIs) and acknowledgement that stressors negatively influence health, conceptualization of the full spectrum of stressors that impact Indigenous communities is underdeveloped. To address this gap, we analyze focus group transcripts of AI adults with type 2 diabetes from five tribal communities and classify stressors using an inductive/deductive analytical approach. A Continuum of American Indian Stressor Model was constructed from categorization of nineteen stressor categories within four domains. We further identified poverty, genocide, and colonization as fundamental causes of contemporary stress and health outcomes for AIs and conclude that stressors are generally experienced as chronic, regardless of the duration of the stressor. This work on AI-specific stressors informs future health research on the stress burden in AI communities and identifies target points for intervention and health promotion.*

## INTRODUCTION

Stress process models of health (Pearlin, 1989; Pearlin, Menaghan, Lieberman, & Mullan, 1981) describe the relationship between stressor exposures and health consequences (Cohen, Kessler, & Gordon, 1997; Turner, Wheaton, & Lloyd, 1995; Wheaton, 1994; Wheaton et al., 2013). While linkages between stress and health are widely documented, conceptualization of the “universe of stress” (i.e., the full spectrum of stressors a population might experience; Wheaton, 1994) for people of color, and Indigenous people in particular, remain understudied (Turner & Avison, 2003; Walls & Whitbeck, 2011). Proper conceptualization of stressor exposure is a critical component for further research on estimating the contribution of stressor exposure on health outcomes (Turner, 2013). This qualitative exploratory study builds upon the strong foundation of theoretical and empirical evidence from Indigenous and sociological scholars to systematically map a vast array of social stressors identified by a sample of American Indians (AIs) living with a chronic disease: type 2 diabetes (T2D). Our efforts are one important step toward identifying the AI stress universe and, more distally, addressing longstanding health challenges in Indian Country.

**Background**

AIs experience higher rates of health challenges compared to other racial and ethnic populations in the United States (Centers for Disease Control and Prevention, 2012; Shiels et al., 2017). Examples include obesity (Ness, Barradas, Irving, & Manning, 2012), asthma, smoking, psychological distress (Blackwell, Lucas, & Clarke, 2014), suicide (Curtin, Warner, & Hedegaard, 2016; Shiels et al., 2017), and T2D, a disease that AIs are three times more likely to die from than are whites (Indian Health Service, 2015). Stress has enduring effects that contribute to these health outcomes (Anda et al., 1999; Jiang, Beals, Whitesell, Roubideaux, & Manson, 2008; Klinnert, Mrazek, & Mrazek, 1994; McFarlane, 2010; Mullany et al., 2009; Remigio-Baker, Hayes, & Reyes-Salvail, 2015; Tobin et al., 2016; Walls, Hautala, & Hurley, 2014). In fact, stress has been implicated in the onset of T2D for hundreds of years (Surwit, Schneider, & Feinglos, 1992; Willis, 1679) and is associated with depressive symptoms (Walls et al., 2017), reduced self-care behaviors (Walders-Abramson et al., 2014; Walls et al., 2017), and quality of life indicators (Hilliard et al., 2016; Walls et al., 2017) for those living with T2D.

Stress process scholars recognize that people of color and those from lower socioeconomic backgrounds, including Indigenous people, are differentially exposed to stressors that increase risk for poor health status and mortality (Phelan, Link, Diez-Roux, Kawachi, & Levin, 2004; Turner, 2010; Turner et al., 1995; Wheaton et al., 2013; Williams, Neighbors, & Jackson, 2003). For example, studies demonstrate that perceived racial discrimination is associated with elevated blood pressure (Davis, Liu, Quarells, & Din-Dzietham, 2005; Williams & Neighbors, 2001), psychological distress and depressive symptoms (Kessler, Mickelson, & Williams, 1999; Ong, Fuller-Rowell, & Burrow, 2009), and anxiety symptoms (Hwang & Goto, 2008; Ong et al., 2009). For marginalized populations, discrimination and other stressors tends to occur in a contemporaneous and cumulative manner, compounding the effects of stress process activation, and leading to negative health consequences not experienced by those with economic and social advantage (Pearlin, 1989; Pearlin et al., 1981; Turner et al., 1995; Walls & Whitbeck, 2012).

Indigenous scholars and allies also highlight the key role stress plays in the etiology and perpetuation of AI health disparities and provide a substantial theoretical basis for continuing to study the impact of stressors on AI health (Walls & Whitbeck, 2012; Walters & Simoni, 2002). The cornerstone of these approaches is the concept of historical trauma. Successive sociopolitical and genocidal acts disrupted the cohesion of AI families, communities, and government systems (Brave Heart, 1998; Duran & Duran, 1995; Evans-Campbell, 2008; Gone, 2009; Gracey & King,

2009; Gonzales et al., 2018; Graham, 2008; Sarche, Tafoya, Croy, & Hill, 2017; Whitbeck, Hoyt, McMorris, Chen, & Stubben, 2001; Whitbeck, Adams, Hoyt, & Chen, 2004; Wilkins & Stark, 2011). Cumulative effects related to colonial terrorism went unresolved and traversed generations, resulting in complex, unresolved grief and loss, survivor guilt, psychic numbing, fear, anger, and other symptoms (Balestrery, 2016; Gonzales et al., 2018; Kading et al., 2015; Whitbeck, Chen, Hoyt, & Adams, 2004; Brave Heart, 1999), also summarized as a “soul wound” (Duran & Duran, 1995). These outcomes continue to amalgamate with direct, contemporary stressors (e.g., microaggressions, lateral oppression), resulting in behavioral and physical health sequelae (Balestrery, 2016; Brave Heart, 2000; Brave Heart, Chase, Elkins, & Altschul, 2011; Brockie, Heinzelmann, & Gill, 2013; Burnette & Figley, 2017; Gonzales et al., 2018; Brave Heart, 1999). Indigenous scholars and allies uphold that a historical trauma and oppression perspective is an essential aspect in forming the methodological framework for the empirical study of AI health challenges and well-being (Burnette & Figley, 2017; Kading et al., 2015; LaFromboise, Medoff, Lee, & Harris, 2007; Walters & Simoni, 2002).

Empirical research has reported on historical and contemporary stressor exposures as critical contributors to AI health outcomes, disparities, and access to care. A set of historical trauma research about boarding schools illustrates that an era of historically traumatic events paved risk pathways toward poor behavioral health outcomes for Indigenous people of the Americas (McQuaid et al., 2017; Walls & Whitbeck, 2012). Another distinctive set of studies demonstrated that thoughts of historical cultural losses are linked to distress (Whitbeck, Adams, Hoyt, & Chen, 2004; Whitbeck, Walls, Johnson, Morrisseau, & McDougall, 2009). Other health outcomes stem from historical trauma by way of contemporary stressors. Assessment of the literature on contemporary stressor exposures and health outcomes includes perceived discrimination, interpersonal and other traumas, and childhood stressors. Substance abuse (Whitbeck, Hoyt, McMorris, Chen, & Stubben, 2001), depressive symptoms (Walls, Gonzalez, Gladney, & Onello, 2015; Whitbeck, McMorris, Hoyt, Stubben, & LaFromboise, 2002), diabetes-related distress (Sittner, Greenfield, & Walls, 2018), uncontrolled blood glucose (Gonzales, Lambert, Fu, Jacob, & Harding, 2014), and physical pain and impairment (Chae & Walters, 2009) are associated with perceived discrimination. In regard to access to care, perceived discrimination and lateral oppression have been identified as barriers to health care for Indigenous people (Balestrery, 2016; Gonzales et al., 2017; Willie, 2017). Research on interpersonal and other traumas among AIs, help explain disproportionate rates of post-traumatic stress disorder (Beals et al., 2013), cardiovascular

disease, chronic pain, depressive symptoms (Tehee et al., 2017), as well as differences in blood glucose levels (Goins, Noonan, Gonzales, Winchester, & Bradley, 2017) and treatment modality among AIs with T2D (Jacob et al., 2013). Studies also conclude that stressor exposures during childhood and adolescence increase risk for T2D (Jiang et al., 2008), problematic substance use (Boyd-Ball, Dishion, Myers, & Light, 2011; Brockie et al., 2015; Koss et al., 2003; Whitesell et al., 2009), and impact additional aspects of AI health (Baldwin, Brown, Wayment, Nez, & Brelsford, 2011; Brockie, Elm, & Walls, 2018; Kenney & Singh, 2016; Warne et al., 2017). This important body of work sheds light on historical, discriminatory, traumatic, and early life stressors as determinants of poor health and health care access.

Although scholars from multiple disciplines acknowledge the relationship between stress and health, we are unaware of any empirically-derived conceptualizations of an AI stress universe. Engaging in an expansive conceptualization process of possible stressors that AIs experience can help researchers operationalize a full range of stressors for studies on stress and health. This can lead to more valid conclusions about the impact of stress on AI health. Therefore, we propose that the identification of the AI stress universe is critical for demonstrating the collective impact of stress on AI health and for delineating whether certain types of stressors or combinations of stressors differentially impact health. In this study, we comprehensively and systematically map a range of AI-identified stressors using an organizational framework informed by Indigenous knowledge and sociological theory.

## **METHODOLOGICAL APPROACH AND METHODS**

Our methodological approach considered concepts and theories related to stress processes, the stress universe, and historical trauma in conjunction with the need to capture and arrange a landscape of stressors from five focus group transcripts. This steered us toward Wheaton's (1994) stress continuum framework, a tool developed based on definitions and phenomenologies of *stressors* which systematically classifies a range of stressors into domains that range from chronic to discrete (Wheaton 1994, 1999; Wheaton et al., 2013).

### **Study Design**

This study utilized focus group data from a community-based participatory research project, Maawaji' idi-oog mino-ayaawin (Gathering for Health). A central aim of Gathering for

Health is to advance measurement of stress processes among AI adults. Five tribal communities in Minnesota and Wisconsin collaborated with researchers at the University of Minnesota to plan and implement the sequential exploratory mixed methods study that began in 2013. The first phase of data collection involved focus groups to inform selection and development of the quantitative survey phase (Creswell, 2010; Creswell, Klassen, Plano, & Smith, 2011). Focus groups were chosen to generate maximum data resulting from interactions between participants (Krueger & Casey, 2009). Two individuals from each community were trained as focus group moderators and followed a questioning route about sources of stress, T2D management, and coping strategies. All focus groups were audio-recorded and transcribed verbatim. Sessions were 99-130 minutes in length with 7-10 participants (24 women, 18 men,  $N = 42$ ). Purposive sampling was used to recruit self-identified AIs over age 18 with T2D. Attendees provided written consent and received \$30 with a meal for participation. The institutional review board at University of Minnesota and the Indian Health Service National Institutional Review Board approved the study protocol.

### **Analytic Strategy**

We created an *a priori*, theory-informed coding template (Crabtree & Miller, 1999; Miles & Huberman, 1994) that included broad domains of stressors (e.g., discrete events, chronic challenges), similar to Wheaton's stress continuum model (Wheaton, 1994), and historically traumatic events (Brave Heart, 1998). After constructing the coding guide, transcripts were uploaded to Dedoose software (version 6.2.7) for data management and analysis. Next, an initial reading of all transcripts helped authors understand the broad landscape of stressors represented in the data. We then folded in an inductive/deductive approach to coding (Fereday & Muir-Cochrane, 2006) that allowed us to conduct several waves of "semi-open" coding in conjunction with deductive coding to document general themes. Keeping sociologic typologies of stress and Indigenous frameworks of historical trauma in mind, we focus-coded the identified themes. This included continuous comparison of codes with iterative collapsing and expanding themes (Charmaz, 2014). To facilitate our reaching of a categorization end point, we chose to highlight focal stressors that participants emphasized in their response.

## RESULTS

We present thematic findings along a stressor continuum from chronic to discrete while acknowledging that stressor categories are not mutually exclusive and themes and sub-themes can be classified across domains and categories (e.g., lateral oppression, health management). Displayed in Table 1 are four broad domains of stressors (i.e., chronic stressors, non-events, daily hassles and battles, and life events) and nineteen corresponding themes extrapolated from the data. Additionally, two fundamental causes of stressors are shown: 1) genocide and colonization and 2) poverty. Because our sample focuses on AI adults living with a chronic disease, we denote themes (\*) in which participants explicitly refer to health-management stress as their focal stressor or when participants shared that the focal stressor occurred in the context of managing chronic illness (including T2D and other chronic conditions).

**Table 1**  
**Continuum of AI Stressors Model: Fundamental Causes and Typology of Stressors**

<b>Chronic</b>	<b>Non-Events</b> (absence or anticipation of)	<b>Daily Hassles/ Battles</b>	<b>Life Events</b>
Financial*	Retirement	Built Environment	Discrimination*
Health Management*	Social Support*	Health Management*	Medical*
Social Roles	Cultural Engagement	Discrimination	Work*
Job Features	Family Struggles		Death
Lateral Oppression	Health Status/Events*		
	Police		
	Crime		
----- <b>Poverty</b> -----			
----- <b>Genocide and Colonization</b> -----			

\* denotes themes in which participants explicitly refer to health-management stress as their focal stressor or when participants shared that the focal stressor occurred in the context of managing a chronic illness

### Chronic Stressors

Chronic stressors represent an array of enduring challenges and conditions (Pearlin, 1989; Wheaton, 1999) that are characterized by gradual onset, lack of clarity about how or when the problem developed, and lengthy course from start to resolution (Wheaton, 1999). Five chronic stressor themes were abstracted from the data. First, *financial* stressors are those related to ongoing economic hardship. The experience of financial strain varies tremendously by way of context (e.g., number of dependents, access to in-kind goods and services; Kahn & Pearlin, 2006). In relation to



financial stress, participant narratives contained sub-themes about *housing overcrowding* and struggles related to *accessing material goods and basic needs* like food and heating. One participant revealed the magnitude of some living situations as, “A lot of people [live in one house] . . . like 2-3 families . . . 11 people.” Another explained that “I’m always late on my electric bill . . . that stresses me ‘cause they come knocking on my door [telling me] what I owe, plus one hundred dollars.” Overlapping with the next category of chronic stressors, financial stressors related to participants managing health. One female noted, “It’s actually more expensive to eat healthy than it is to eat bad.”

Second, participants cited *health management* as an ongoing challenge. One man shared, “So I had to deal with this diabetes, this damn diabetes that I hate every day.” Another person poignantly illustrated the ramifications of managing their chronic disease: “I had to quit my job because of my health . . . and now I just hang out going to doctor appointment after doctor appointment, trying to stay alive.”

A third theme among chronic stressors was related to *social roles* (e.g., parent, spouse). Role-related stressors have salience because they are often tied to longstanding connections to identity and demand transitions into and between roles (Pearlin et al., 1981; Pearlin, 1983; Thoits, 1991; Wheaton, 1990). We heard narratives of *child- and elder-caretaking* activities as significant stressors for many, especially women. A grandmother stated, “I’m taking care of my grandchildren while their dad is incarcerated.” In this case, caretaking stress was layered with stress related to *lack of transformation into a later life normative role* (Wheaton & Gotlib, 1997). Another woman expressed pressure she felt from *community demands*: “People always need you. . . So many people that want you to be there and you’re trying to be there and here and do this and [that].” Chronic internal conflict about one’s social role was evident in the data. In the following excerpt, a *family member’s ongoing excessive alcohol use* resulted in a participant’s conflict about if they should care for their relative or not: “[Seeing] somebody get up in the middle of the night, at three o’clock in the morning and start [drinking], and then at one o’clock in the afternoon, [they are] passed out.”

The fourth chronic stressor theme was related to *job features*, a variation of a social role-related stressor. Participants shared a range of stress inducing experiences related to employment and workplace. High stakes *responsibility* in context of a supervisory role is one example:

I had terrible stress when I was working. I had a lot of personnel that worked with me, and I was a supervisor . . . If they were hurt in any way, it was my fault. If they were killed, it was my fault . . . I never slept very much.

Finally, *lateral oppression* was another chronic situation that participants discussed. Lateral oppression is a specific form of discrimination that occurs within social groups (Mays, 1985). For AIs, lateral oppression is a projection of one's internalized oppression brought on by imposed colonial attitudes and behaviors which leads to harmful acts toward someone from within one's own tribal community or other Native people (Balestrery, 2016; Burnette & Figley, 2017; Duran, Duran, Woodis, & Woodis, 2008; Harris, Tijerina, & Harris, 2017). One man spoke of lateral oppression in this way: "Our own people are keeping ourselves down. How are we supposed get anywhere or do anything when our own [tribal government] council. . . is keeping us down?"

## Non-Events

Non-events are the second major domain of stressors which encompasses two large categories: *absence of normative life course events* or time periods (e.g., when a woman is unable to conceive) and *anticipatory stressors* (e.g., when one believes a major life or traumatic event is unavoidable; Wheaton, 1999) and seven sub-categories. Non-events are chronic in the sense that they generally produce ongoing worry or disappointment that unfolds and persists over a prolonged time. However, there is a tone of discreteness with non-events, as is the case when an anticipated event occurs (Wheaton, 1994).

### Absence of Normative Life Course Events

We noticed that absence of normative events tended to generate a sense of despair or loss, and anticipation of an event yet to come typically resulted in a sense of uneasiness, anxiety, or hopelessness. Focus group participants discussed doubt that they would reach *retirement* from work and expected that post-retirement life will be short. One man asked, "Who the hell lives to 65 to get their retirement?" and another male responded, "Exactly." A female chimed in, "[Yeah,] who? And if you do [retire], you're dead within like two years of it."

Lack of *social support* was a common phenomenon discussed by participants; sometimes in context of *diabetes management*. One woman explained how lack of family understanding about her disease brought on disappointment and frustration:

I get a lot of guilt trips thrown on me by my family and friends. Like a lot. And I'm like, "Well I . . . need to take care of myself." . . . They don't understand diabetes and the mental health of everything . . . I even sat down with all my friends to show them the insulin. . . They still don't get it. . . . They're just like, "Oh, whatever," like "just throwing another pity party." And it's like, "No, this is real shit I'm trying to tell you."

The absence of Indigenous *cultural engagement* was another non-event stressor in the data. One grandparent shared that her granddaughter was not embracing traditional ways:

[I'm] trying to teach my granddaughter what I know that my grandma taught me. And she wanted me to make a [pouch] for her little boy's belly button, and she said, "Can you make it for me?" I told her, "You have to learn to make it yourself, so you can show your kids and your grandkids. I'm not going to live forever. . . . You have to learn . . . so you can pass it down." . . . She gets upset sometimes because she just wants me to do it for her . . . She is trying to battle with our ways.

### **Anticipatory Stressors**

Worry about *family struggles* was a common sub-theme within the category of anticipatory stressors. Uncertainties about loved ones' well-being, possibilities of encountering *gangs* and *drugs*, and general ambiguity about the future and *environment* were expressed by participants. A woman spoke of her concern for the welfare of her children and grandchildren: "I worry about their jobs – are they going to have enough money to support this baby? They're living in a house, everything's gotta be paid for. Things are harder now than when I was younger."

Anticipation about worsening *health status and medical events* were frequently brought up during focus groups sessions. One participant illustrated progressing kidney failure and anticipation of possible *dialysis*, "I always worry that if I don't take care of myself I'm going to be like [my sister] 'cause she suffers a lot going to dialysis." Others shared fear of *hereditary risk* of disease: "I hope to God that [my son] don't have the problems that I have. I have severe heart problems now . . . I just pray every night for my son and my family that he doesn't get that." *Perceptions of health care quality* also lead to anticipation of adverse health events. For instance, one person stated, "I'm gonna be having my jaw snapped because we have a shabby dentist, turning my teeth into Swiss cheese."

*Police* were not always seen as protectors and sometimes evoked irritation or anxiety among participants, thus serving as another anticipatory stressor. One man stated, “Cops are stressors. You can’t even drive around anywhere from ten o’clock to six in the morning without having to worry about them cops.” A woman shared her perception of *inequitable police power*: “Just knowing too that [the police] got the power, [and] they can pin anything on you.” Some might argue that policing-related stressors correspond with daily battles or ambient stressors (Aneshensel & Sucoff, 1996) because of regularity and a community-wide looming sense of a future police-related event. We did not disregard these alternatives, but placed police-related stressors within the anticipation category because participants more often spoke of what might happen because of police presence.

Tribal members shared fears of *crime*. Similar to policing, respondents sometimes mentioned anticipation of criminal activity in the context of telling a traumatic story (e.g., *victimization*), foreseeing *community-level substance abuse*, or *endemic economic problems*. The following correspondence took place between two focus group members.

Male: You almost know that the economy is gonna cause these kids to break and enter for money, for drugs.

Female: The breaking and entering.

Male: At all hours of the night, even when you’re in the house.

[two others agree with a mmmmm]

Male: . . . You could hear bullets going through the air all hours of the night, around the house. Even hittin’ the house sometimes.

### **Daily Hassles and Battles**

Daily hassles and battles are another domain of stressors that like non-events, have discrete and chronic stressor features. The sociology literature discusses daily hassles (e.g., daily or near daily activities such as those occurring during the workweek) as regular microevents or routine brief encounters with distinct starting and ending points (Wheaton, 1994). Daily hassles reflect social realities (Wheaton, 1994) and require minor behavioral adjustments (Thoits, 1995). We classified stressors into an adjusted domain, *daily hassles and battles*, rather than *daily hassles*. This contrast with the general health sociology literature represents our findings that some stressors are regular in frequency and duration, similar to daily hassles, yet they are substantial in their

enduring effects beyond being simply a “hassle.” Within the daily hassles and battles domain we identified three categories of stressors. The first is related to structural irritants emerging from the *built environment*. Ruts, potholes, and unplowed roads impeded safe driving and serve as a daily nuisance. One man spoke of his driving experiences:

I drive a [school] bus and the bus will hit those ruts in the road . . . that bus does not fit those ruts. . . Maybe if they widened the [roads] – cut some trees and get more sunlight [to hit the pavement]? ‘Cause whenever I leave the reservation, fifty or more percent of the time, the roads are better.

In addition, participants talked about regular microevents related to chronic disease or *health management*. *Diet, exercise, and health care utilization* were common sub-themes within this category. One participant lamented, “So yeah, it’s the whole food part is a stressor because you gotta count the calories and the sugars and all that. I don’t have time for it, but now I gotta make time for it. In another example, participants discussed family members accusing them of “eating like a bird.” Paradoxically, at other times, “the family tells you, ‘Well eat right!’”.

Participants also shared experiences and perceptions of regular, expected *discrimination* from non-Natives and other AI people. We highlight two types of discrimination in the form of daily battles. This quote by a woman about her physician is a distinct instance of lateral oppression that occurred in the health clinic setting. (See also the Chronic Stressors section for discussion about lateral oppression.)

I hear a lot about [my doctor]. She’s Native American. We all know that. . . . I swear she treats us different than she treats the non-Natives. Like, health-wise. . . I think the non-Natives get more help than we do, and it’s a stressor because I see it every day.

*Microaggressions* are a sub-category of discrimination and include non-verbal representations of inferiority on the basis of race or other social statuses, subtle, covert forms of discrimination, and unintentional insults, that can be rooted in unconscious bias (Pierce, 1974; Solórzano, Ceja, & Yosso, 2000; Sittner et al., 2018; Sue, 2010; Walls et al., 2015). Microaggressions are not micro in a sense that they cause little harm; in fact, microaggressions accumulate and may have greater health impact compared to more seemingly harmful acts of

discrimination (Lee & Turney, 2012; Pierce, 1995). We categorize microaggressions as daily battles because they represent “everyday” *brief* interactions (Sue, 2010). Presented are two microaggression stories.

They had a job opening for a teacher so [I went there] and I told that guy, I said, “Oh, what are you looking for, I want to fill out an application.” He said, “You can’t, the janitor’s jobs been taken,” he told me. My late husband just got mad and he says, “Tell him that you have five degrees and ‘why should I be mopping floors when I have five degrees in education?’” . . . Just because I’m brown doesn’t mean that’s all I know is how to clean. [group laughs]

I got stressed out the other night watchin’ the [base] ball game [on tv]. Atlanta Braves. I hate that . . . (mimics “Indian” chants). . . [I said,] “Oh my god. Turn that off.” It was the Milwaukee Braves [when] I was a kid. They used to [ask] me, they said, “Your dad is Chief Noc-a-homa?” That was [the mascot’s] name, Chief Noc-a-homa, he’s the one with the drum.

### Life Events

Perhaps the most widely used approach to stress process research focuses on stressful life events (Paradies, 2006; Wheaton, 1994). Life events may be sudden and unanticipated, or involve anticipation, but the duration is short compared to the other domains of stressors (Crowley, Hayslip, & Hobdy, 2003). Participants’ discussions surrounding these life events were frequently coupled with sense of loss. Typical life event themes included discriminatory life events, medical events, job events, and deaths of loved ones. Instances of life event *discrimination* were discussed as unexpected, and mostly traumatic. In this case, we heard about an event in the late 1970s when AIs were asserting their treaty rights and often encountered resistance.

I was law-enforcement back when treaties first started. You know, we upheld our gathering, hunting, and fishing rights. I was out on the lakes when they were shooting at us and throwing rocks at us and threatening my family. That was stressful. Especially when it comes to “I know where you live.” Even my wife got a couple threatening calls. I had to change our phone number. They said they were

coming after my kids. And then you go around the [lake area], you see the signs  
 “Shoot an Indian, Save a deer.” “Spear an Indian, Save a walleye.”

Next, *medical* events (e.g., *disease diagnosis*, *medical emergencies*) were commonly discussed. One woman described finding out she was diabetic when she went to the intensive care unit (ICU).

I found out I was diabetic . . . I had to go to the ICU for three weeks . . . [The doctors and nurses] were like, “Man, you’re knocking on heaven’s doorstep.” And everything was collapsing, all my organs and my veins and my nerves because I was so dehydrated. . . . And I was really depressed when I found out [I had diabetes]. I was crying ‘cause I know the outcomes that. [pause] Your kidneys and losing limbs and stuff.

A woman explained how her *T2D diagnosis* paired with *memories of family suffering* had triggered a depressive-like state. “The first two weeks were very hard it was almost like a depression for me . . . Two weeks it took me to finally get out of it and tell people, ‘I’m diabetic’ . . . I have an uncle that lost both of his legs. I don’t want that to be me.”

Multiple participants shared experiences related to *work* events including job loss or change. Participants found themselves needing to retire at an earlier age than expected due to chronic illness. “They wanted me to [manage] my own [factory] plant. . . I didn’t take the job. I was too stressed out then. My sugar was high. I know that was the cause of why I was getting sick all the time there. So I retired early.” Another man spoke of losing the ability to climb at his construction job: “I wanted to work longer, but I just couldn’t climb anymore like I used to.”

The theme of dying or *death* of loved ones is our final example of life events. Family member deaths are primarily spoken in conjunction with varied levels of distress. One woman shared simply that her nephew “got shot by the cop.” Another woman told the story of her children’s reaction to the death of their great grandfather and how she is reminded of her son’s death.

I went up to my grandpa, and I could just feel his skin. And when he died, he had [multiple sclerosis], and he was so thin, and his skin was wrinkled. . . . But my kids, they’re the ones, when I woke up, I could hear [my son] crying, “I don’t want my



grandpa to die!” He was just panicked you know, and they had to take him out of the room. . . The only stress I have is the kids. [Them] having to go through that. I know how I felt when my son died, and I still feel it.

## DISCUSSION

This study uniquely unpacks stress processes for Indigenous people, provides insight into targets for health promotion, and advances AI health research. We heeded the perspectives of AI adults who are managing a chronic illness and conclude that contemporary AI stressors generally function as chronic regardless of duration. We also categorized contemporary stressors to construct the Continuum of American Indian Stressors Model (Table 1) with four broad domains and nineteen stressor categories. This preliminary model reflects stressors that are generally scant in the literature, yet they are key to understanding the function of stressors on AI health and foundational to identifying the AI stress universe. In addition to addressing gaps in the AI stress-health literature specifically, this work moves the field of health equity research forward more generally by speaking to stressors that people of color face on a regular basis.

### **Adaptations of Stress Continuum Model**

We started our analysis with an *a priori* coding template that was informed by Wheaton’s stress continuum model (1994). Wheaton relied on duration of a stressor and descriptions of internal phenomenologies (i.e., an individual’s emotional processes and cognitions as informed by cultural and contextual underpinnings) of stress to determine appropriate domains of stressors. We encountered significant challenges with classification of Gathering for Health data using Wheaton’s unadjusted model. For example, “daily hassles” is a type of stressor known for resulting in irritation or annoyance, is short from start to finish, and regular in its occurrence. When we tried to classify microaggression exposures, we found that they most closely matched with the daily hassles domain in terms of duration and frequency but not the remainder of the definition. Because of malalignment between Wheaton’s model and Gathering for Health data, we modified our classification approach to focus on “duration of stressor” as a driving factor for categorization, along with distillation of stressors to the “focal stressor” as our interest for this study. We also adjusted Wheaton’s daily hassle domain to daily hassles and battles (see Methods for additional description).



### Experience of Chronic Stress

In contrast to most stress process literature, we found that participants perceived most stressors as ongoing chronic strains regardless of duration of primary stressor exposure. Stress proliferation, anticipation and rumination, frequent disruptive unresolved situations that cross-cut settings (e.g., workplace, home, community), and stressor domains contribute to this phenomenon. Stress proliferation is the tendency of stressors to multiply and cascade upon one another rather than emerge in isolation (Pearlin, Schieman, Fazio, & Meersman, 2005). Below is an excerpt demonstrating stress proliferation as well as rumination and anticipation.

I worked at the high school for 18 and a half years as a coach [for girls basketball programs]. Man, sometimes I would see some of the girls [and they would tell me], “I don’t want to go home,” or “I need to get out of there.” . . . [I wondered] am I going to have them, come Monday? Or then a few years back, . . . they had a suicide pact going on around here. I lost one of my players. . . . Some days you get that feeling, is this person going to show up Monday? [pause] They hear about a big party and all that . . . I say, “Oh geez. . . . Are my players going to be smart enough to say no?”

Although stressors might be conceptualized as discrete events on the surface, in the reality they are enveloped in contexts of prior and ongoing unresolved loss and grief as demonstrated in the above quote. Similarly, another participant stated, “Co-workers [don’t understand] what you’re going through and how it affects you. . . . And then when you try to explain yourself, they look at you like . . . they don’t believe you.” The following excerpt references unresolved conflict regarding Tribal Council actions and concerns about resource allocations.

With all the money they’re throwing around they should throw us in school and let us be the ones that run our own show here. But it’s not. It’s like that youth center stuff you know? Like, most of them jobs are gonna be for white people you know? Why don’t they send us to school? Or give us the chance to run it and do for our own people... Like, what can’t we do, but they can do . . . Why can’t our own tribe help us to run our own stuff?

Exposure to discrimination including microaggressions and lateral oppression, or “daily

battles,” often went unresolved contributing to the chronic stress experience. Inability or lack of opportunity to come to a resolution following a discriminatory event can result in a person’s diminished sense of self-worth and trigger thoughts of current and past oppression and subjugation, along with other residual effects. Another reason that participants generally interpret stressors as chronic is because there are unique forms of stressors that AIs experience, over and above those typically identified in the sociological literature. One example identified in the data is lack of Indigenous cultural engagement, another stressor that is difficult to resolve.

### **Fundamental Causes: Poverty, Genocide, Colonization**

As evidenced in these data, *colonization*, *genocide*, and *poverty* act as fundamental causes (Link & Phelan, 1995) of contemporary stress and illness for Indigenous people. Poverty is a byproduct of colonization and genocide and began with land encroachment, loss of traditional foods, and the federal government’s encouragement toward dependence (e.g., Washington, 1779; Jackson, 1830; *Cherokee Nation v. State of Georgia*, 1831). In our data, lack of financial resources, basic needs (e.g., food, heating), employment opportunities, services, and community economic development are cross-cutting issues affecting individuals, families, and communities. The next excerpt is resonant of rapid social change which resulted from cultural genocide and attempts to change Indigenous worldviews and cultural ways of living (Graham, 2008). This is one example of the multigenerational layers of traumas and distal stressors that led to community-wide destruction and sense of loss.

Times changed. A lot of our people took to drinking. A lot of families broke up. A lot of kids went to far-off foster homes. In fact, my family broke up. People that I know. We had a thriving community at one time. I think there’s two families left down there now. I bet we used to have over 100 strong down there. That’s when everybody was close.<sup>1</sup>

Fundamental causes were sometimes latent in the data; that is, the origins of stressors often were linked to poverty and its roots in colonization and genocide, even if not explicitly stated as such.

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<sup>1</sup> This quote references federally sponsored assimilation efforts when children were being removed from families and adults were being provided incentives to move away from their homelands and into urban areas (e.g., Indian Relocation Act of 1956).

## **Historical Trauma**

Conceptualization of colonization, genocide, and poverty as fundamental causes (Link & Phelan, 1995) is consistent in historical trauma scholarship. Historical trauma has been discussed as an etiological agent of behavioral and physical health challenges for current generations (Brave Heart, 1998; Elias et al., 2012; Evans-Campbell, 2008; Gone, 2009; Walls & Whitbeck, 2012; Walters et al., 2011; Whitesell, Beals, Crow, Mitchell, & Novins, 2012). Furthermore, the focus group participants' descriptions of stressors as generally chronic align with conceptualizations of historical trauma responses in the literature. For example, non-resolution, rapidly occurring traumas, and rumination have been described by Indigenous scholars (Brave Heart, 1999; Duran & Duran, 1995). In this work, we provide additional evidence that AI health research should consider historical and political occurrences as context and recognize that today's stressors are historically-anchored determinants of AI health (King, Smith, & Gracey, 2009).

## **Limitations and Future Work**

We acknowledge limitations to this study. Participants were all living with T2D; as such, we identified several stressors that may be unique to those with a chronic disease. Diabetes provided the context for many stressors, including managing a chronic disease, changing behaviors, lack of social support, fear of disease complications, and the stress of having a poor health-related quality of life. These findings are particularly important given overwhelming evidence that stress is associated with T2D onset, complications, morbidity, and mortality (Fisher et al., 2008; Hamer, Stamatakis, Kivimäki, Kengne, & Batty, 2010; Roberts et al., 2015). Themes of stressors among this group are particular to those with chronic disease, which may or may not be different than the general AI population at large. However, the unfortunate reality is that pervasive chronic health challenges touch far too many AI lives and stressor themes likely approach generalizability. Another limitation is that focus group members discussed stressors that were disproportionately recent and non-traumatic, and thus, there may be certain types of stressors not represented in our analysis. This may have been due to their collective experience in the focus group and the vulnerability involved in expressing traumatic events with others or recall bias. Our findings could be triangulated with research about other forms of AIs stressors (e.g. childhood adversities) to create a more robust universe of AI stress.

We identified a broad landscape of stressors among a sample of AIs with T2D while

focusing on stressor duration and the focal stressor as reported by participants. Investigation of additional dimensions of the stress process such as magnitude are important in future research. Although we did not set out to assess the magnitude or emotional effect resulting from stressor exposures, some references to impact were mentioned in the findings section. For example, despair, loss, hopelessness, fear, irritation, frustration, anger, and distress were demonstrated within the excerpts. Future research should also take into consideration stressor context, the life course, multiple units of analysis (e.g., family, community), and interactions and constellations of stressors – paying close attention to those associated with race/ethnicity and class/poverty (Kawachi, Daniels, & Robinson, 2005; Mohatt, Thompson, Thai, & Tebes, 2014; Pearlin & Skaff, 1996; Walls & Whitbeck, 2011; Wheaton, 1994). Native people’s experiences with battling stressors such as microaggressions and lateral oppression are especially deserving of further inquiry, given the dearth of literature on these topics and the likelihood that these sub-categories of discrimination are widespread and high in magnitude. In fact, one woman from this study identified lateral oppression as the most significant stressor across her reservation. Given that most stressors in this study were experienced as chronic, future research should examine how Indigenous people resolve their problematic situations and reduce stress burden. One suggestion is to inquire about how Indigenous people come to terms with or identify “*their endings*” to problematic situations. This type of investigation would likely uncover that pathways toward health and well-being involve building resilience and strengthening access to resources; both of which are abundant in tribal communities.

## **CONCLUSION**

Health disparities for AIs will be better understood and addressed when stress processes are thoroughly investigated. This qualitative study of AI adults with T2D bolsters prior historical trauma research by demonstrating how poverty, genocide, and colonization are fundamental causes of contemporary stressors and health outcomes. Our systematic categorization of stressors and launching of the preliminary AI stress universe concept contributes to understandings of stress process experiences for Indigenous people. We are hopeful that future scholarship builds upon these findings to further advance research on the role of stressors in Indigenous people’s health. Continued examination of AI-specific stressors as social determinants of health has the potential to substantively reduce health challenges within tribal communities and bring more attention to health disparities as health inequities.

REFERENCES

- Anda, R. F., Croft, J. B., Felitti, V. J., Nordenberg, D., Giles, W. H., Williamson, D. F., ... Page, P. (1999). Adverse childhood experiences and smoking during adolescence and adulthood. *JAMA*, 282(17), 1652–58. <https://doi.org/10.1001/jama.282.17.1652>
- Aneshensel, C. S., & Sucoff, C. A. (1996). The neighborhood context of adolescent mental health. *Journal of Health and Social Behavior*, 37(4), 293–310. <http://dx.doi.org/10.2307/2137258>
- Baldwin, J. A., Brown, B. G., Wayment, H. A., Nez, R. A., & Brelsford, K. M. (2011). Culture and context: Buffering the relationship between stressful life events and risky behaviors in American Indian youth. *Substance Use & Misuse*, 46(11), 1380–1394. <https://doi.org/10.3109/10826084.2011.592432>
- Balestrery, J. E. (2016). Indigenous elder insights about conventional care services in Alaska: Culturally charged spaces. *Journal of Gerontological Social Work*, 59(4), 296–315. <https://doi.org/10.1080/01634372.2016.1206649>
- Beals, J., Belcourt-Dittloff, A., Garrouette, E. M., Croy, C., Jervis, L. L., Whitesell, N. R., ... AI-SUPERPPF Team. (2013). Trauma and conditional risk of posttraumatic stress disorder in two American Indian reservation communities. *Social Psychiatry and Psychiatric Epidemiology*, 48(6), 895–905. <https://doi.org/10.1007/s00127-012-0615-5>
- Blackwell, D. L., Lucas, J. W., & Clarke, T. C. (2014). Summary health statistics for U.S. adults: National Health Interview Survey, 2012. *Vital and Health Statistics*, 10(260). Retrieved from [https://www.cdc.gov/nchs/data/series/sr\\_10/sr10\\_260.pdf](https://www.cdc.gov/nchs/data/series/sr_10/sr10_260.pdf)
- Boyd-Ball, A. J., Dishion, T. J., Myers, M. W., & Light, J. (2011). Predicting American Indian adolescent substance use trajectories following inpatient treatment. *Journal of Ethnicity in Substance Abuse*, 10(3), 181–201. <https://doi.org/10.1080/15332640.2011.600189>
- Brave Heart, M. Y. H. (1998). The return to the sacred path: Healing the historical trauma and historical unresolved grief response among the Lakota through a psychoeducational group intervention. *Smith College Studies in Social Work*, 68(3), 287–305. <https://doi.org/10.1080/00377319809517532>
- Brave Heart, M. Y. H. (1999). Gender differences in the historical trauma response among the Lakota. *Journal of Health & Social Policy*, 10(4), 1–21. [https://doi.org/10.1300/J045v10n04\\_01](https://doi.org/10.1300/J045v10n04_01)
- Brave Heart, M. Y. H. (2000). Wakiksuyapi: Carrying the historical trauma of the Lakota. *Tulane Studies in Social Welfare*, 21–22, 245–266. Retrieved from [http://discoveringourstory.wisdomoftheelders.org/ht\\_and\\_grief/Wakiksuyapi-HT.pdf](http://discoveringourstory.wisdomoftheelders.org/ht_and_grief/Wakiksuyapi-HT.pdf)
- Brave Heart, M. Y. H., 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(4), 282–290. <https://doi.org/10.1080/02791072.2011.628913>

- Brockie, T. N., Dana-sacco, G., Wallen, G. R., Wilcox, H. C., Campbell, J. C., Gwentyth, G. D., ... Campbell, J. C. (2015). The relationship of adverse childhood experiences to PTSD, depression, poly-drug use and suicide attempt in reservation-based Native American adolescents and young adults. *American Journal of Community Psychology*, 55(3-4), 411–421. <https://doi.org/10.1007/s10464-015-9721-3>
- Brockie, T. N., Elm, J. H. L., & Walls, M. L. (2018). Examining protective and buffering associations between sociocultural factors and adverse childhood experiences among American Indian adults with type 2 diabetes: a quantitative, community-based participatory research approach. *BMJ Open*, 8(9), e022265. <https://doi.org/10.1136/bmjopen-2018-022265>
- Brockie, T. N., Heinzelmann, M., & Gill, J. (2013). A framework to examine the role of epigenetics in health disparities among Native Americans. *Nursing Research and Practice*, 2013, 410395. <https://doi.org/10.1155/2013/410395>
- Burnette, C. E., & Figley, C. R. (2017). Historical oppression, resilience, and transcendence: Can a holistic framework help explain violence experienced by indigenous people? *Social Work*, 62(1), 37–44. <https://doi.org/10.1093/sw/sww065>
- Centers for Disease Control and Prevention, National Center for Health Statistics. (2012). *Health, United States, 2011: With special feature on socioeconomic status and health*. Hyattsville, MD: U.S. Department of Health and Human Services. Retrieved from [https://www.cdc.gov/nchs/data/11.pdf](https://www.cdc.gov/nchs/data/hus/11.pdf)
- Chae, D. H., & Walters, K. L. (2009). Racial discrimination and racial identity attitudes in relation to self-rated health and physical pain and impairment among two-spirit American Indians/Alaska Natives. *American Journal of Public Health*, 99(S1), S144-S151. <https://doi.org/10.2105/ajph.2007.126003>
- Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). Thousand Oaks, CA: SAGE Publications.
- Cherokee Nation v. State of Georgia*, 30 U.S. (1831).
- Cohen, S., Kessler, R. C., & Gordon, L. U. (1997). *Measuring stress: A guide for health and social scientists*. (L. U. G. Sheldon Cohen, R. C. Kessler, Ed.). New York, NY: Oxford University Press.
- Crabtree, B., & Miller, W. (1999). A template approach to text analysis: Developing and using codebooks. In: B. Crabtree, & W. Miller (Eds), *Doing qualitative research*. (pp. 163-177). Thousand Oaks, CA: SAGE Publications.
- Creswell, J. W. (2010). Mapping the developing landscape of mixed methods research. In: A. Tashakkori, & C. Teddlie (Eds), *SAGE Handbook of mixed methods in social & behavioral research* (pp. 3-42). Thousand Oaks, CA: SAGE Publications.



- Creswell, J. W., Klassen A. C., Plano Clark V. L., Smith K. C. (2011). *Best practices for mixed methods research in the health sciences*. Bethesda, MD: National Institutes of Health. Retrieved from <https://obsr.od.nih.gov/training/online-training-resources/mixed-methods-research/>
- Crowley, B. J., Hayslip, B., & Hobdy, J. (2003). Psychological hardiness and adjustment to life events in adulthood. *Journal of Adult Development, 10*(4), 237-248. <https://doi.org/10.1023/A:1026007510134>
- Curtin, S. C., Warner, M., & Hedegaard, H. (2016). Suicide rates for females and males by race and ethnicity: United States, 1999 and 2014. *National Center for Health Statistics Health E-Stat*. Retrieved from [https://www.cdc.gov/nchs/data/hestat/suicide/rates\\_1999\\_2014.pdf](https://www.cdc.gov/nchs/data/hestat/suicide/rates_1999_2014.pdf)
- Davis, S. K., Liu, Y., Quarells, R. C., & Din-Dzietham, R. (2005). Stress-related racial discrimination and hypertension likelihood in a population-based sample of African Americans: The Metro Atlanta Heart Disease Study. *Ethnicity and Disease, 15*(4), 585–593. Retrieved from <https://www.ethndis.org/edonline/index.php/ethndis>
- Duran, E., & Duran, B. (1995). *Native American postcolonial psychology. SUNY series in transpersonal and humanistic psychology*. Albany, NY: State University of New York Press.
- Duran, E., Duran, B., Woodis, W., & Woodis, P. (2008). A postcolonial perspective on domestic violence in Indian Country. In R. Carollo & J. Tello (Eds.), *Family Violence and men of color: Healing the wounded male spirit* (2<sup>nd</sup> ed., pp. 143-162). New York, NY: Springer Publishing Company.
- 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*(10), 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*(3), 316–338. <https://doi.org/10.1177/0886260507312290>
- Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods, 5*(1), 80-92. <https://doi.org/10.1177/160940690600500107>
- Fisher, L., Skaff, M. M., Mullan, J. T., Areal, P., Glasgow, R., & Masharani, U. (2008). A longitudinal study of affective and anxiety disorders, depressive affect and diabetes distress in adults with type 2 diabetes. *Diabetic Medicine, 25*(9), 1096-1101. <http://dx.doi.org/10.1111/j.1464-5491.2008.02533.x>

- Goins, R. T., Noonan, C., Gonzales, K., Winchester, B., & Bradley, V. L. (2017). Association of depressive symptomology and psychological trauma with diabetes control among older American Indian women: Does social support matter? *Journal of Diabetes and Its Complications*, 31(4), 669–674. <https://doi.org/10.1016/j.jdiacomp.2017.01.004>
- Gone, J. P. (2009). A community-based treatment for Native American historical trauma: Prospects for evidence-based practice. *Journal of Consulting and Clinical Psychology*, 77(4), 751–762. <https://doi.org/10.1037/a0015390>
- Gonzales, K. L., Garcia, G. E., Jacob, M. M., Muller, C., Nelson, L., & Manson, S. M. (2017). Patient-provider relationship and perceived provider weight bias among American Indians and Alaska Natives. *Obesity Science & Practice*, 4(1), 76–84. <https://doi.org/10.1002/osp4.135>
- Gonzales, K. L., Jacob, M. M., Mercier, A., Heater, H., Nall Goes Behind, L., Joseph, J., & Kuerschner, S. (2018). An indigenous framework of the cycle of fetal alcohol spectrum disorder risk and prevention across the generations: Historical trauma, harm and healing. *Ethnicity and Health*, 0(0), 1–19. <https://doi.org/10.1080/13557858.2018.1495320>
- Gonzales, K. L., Lambert, W. E., Fu, R., Jacob, M., & Harding, A. K. (2014). Perceived racial discrimination in health care, completion of standard diabetes services, and diabetes control among a sample of American Indian women. *Diabetes Educator*, 40(6), 747–755. <https://doi.org/10.1177/0145721714551422>
- Gracey, M., & King, M. (2009). Indigenous health part 1: Determinants and disease patterns. *The Lancet*, 374(9683), 65–75. [https://doi.org/10.1016/S0140-6736\(09\)60914-4](https://doi.org/10.1016/S0140-6736(09)60914-4)
- Graham, L. M. (2008). Reparations, self-determination, and the Seventh Generation. *Harvard Human Rights Journal*, 21, 47–104. Retrieved from <http://harvardhrj.com/>
- Hamer, M., Stamatakis, E., Kivimäki, M., Kengne, A. P., & Batty, G. D. (2010). Psychological distress, glycated hemoglobin, and mortality in adults with and without diabetes. *Psychosomatic Medicine*, 72(9), 882–886. <http://dx.doi.org/10.1097/PSY.0b013e3181f6696e>
- Harris, L., Tijerina, K. H., & Harris, L. (2017). Applying Indigenous values to contemporary tribal citizenship: Challenge and opportunity. In N. Hill & K. Raintree. (Eds.), *The great vanishing act: Blood quantum and the Future of Native nations*. Golden, CO: Fulcrum Publishing.
- Hilliard, M. E., Yi-Frazier, J. P., Hessler, D., Butler, A. M., Anderson, B. J., & Jaser, S. (2016). Stress and A1c among people with diabetes across the lifespan. *Current Diabetes Reports*, 16(8). <https://doi.org/10.1007/s11892-016-0761-3>
- Hwang, W. C., & Goto, S. (2008). The impact of perceived racial discrimination on the mental health of Asian American and Latino college students. *Cultural Diversity and Ethnic Minority Psychology*, 14(4), 326–335. <https://doi.org/10.1037/1099-9809.14.4.326>
- Indian Health Service. (2015). *Trends in Indian health: 2014 edition*. Retrieved from <https://www.ihs.gov/dps/publications/trends2014/>



- Jackson, A. (1830). *President Jackson's message to congress "On Indian Removal."* Records of the United States Senate, Record Group 46, 1789-1990; National Archives, Washington, DC. Retrieved from <https://www.ourdocuments.gov/doc.php?flash=false&doc=25>
- Jacob, M. M., Gonzales, K. L., Calhoun, D., Beals, J., Muller, C. J., Goldberg, J., ... Howard, B. V. (2013). Psychological trauma symptoms and type 2 diabetes prevalence, glucose control, and treatment modality among American Indians in the Strong Heart Family Study. *Journal of Diabetes and Its Complications*, 27(6), 553–557. <https://doi.org/10.1016/j.jdiacomp.2013.07.008>
- Jiang, L., Beals, J., Whitesell, N. R., Roubideaux, Y., & Manson, S. M. (2008). Stress burden and diabetes in two American Indian reservation communities. *Diabetes Care*, 31(3), 427–429. <https://doi.org/10.2337/dc07-2044>
- Kading, M. L., Hautala, D. S., Palombi, L. C., Aronson, B. D., Smith, R. C., & Walls, M. L. (2015). Flourishing: American Indian positive mental health. *Society and Mental Health*, 5(3), 203–217. <https://doi.org/10.1177/2156869315570480>
- Kahn, J. R., & Pearlin, L. I. (2006). Financial strain over the life course and health among older adults. *Journal of Health and Social Behavior*, 47(1), 17–31. <https://doi.org/10.1177/002214650604700102>
- Kawachi, I., Daniels, N., & Robinson, D. E. (2005). Health disparities by race and class: Why both matter. *Health Affairs*, 24(2), 343–52. <http://dx.doi.org/10.1377/hlthaff.24.2.343>
- Kenney, M. K., & Singh, G. K. (2016). Adverse childhood experiences among American Indian/Alaska Native Children: The 2011-2012 National Survey of Children's Health. *Scientifica*, 2016, 1–14. <https://doi.org/10.1155/2016/7424239>
- Kessler, R., Mickelson, K., & Williams, D. (1999). The prevalence, distribution, and mental health correlates of perceived discrimination in the United States. *Journal of Health and Social Behavior*, 40(3), 208–230. <http://dx.doi.org/10.2307/2676349>
- King, M., Smith, A., & Gracey, M. (2009). Indigenous health part 2: The underlying causes of the health gap. *The Lancet*, 374, 76–85. [https://doi.org/10.1016/S0140-6736\(09\)60827-8](https://doi.org/10.1016/S0140-6736(09)60827-8)
- Klinnert, M. D., Mrazek, P. J., & Mrazek, D. A. (1994). Early asthma onset: The interaction between family stressors and adaptive parenting. *Psychiatry*, 57(1), 51–61. <https://doi.org/10.1080/00332747.1994.11024668>
- 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(3), 238–244. [https://doi.org/10.1016/S0749-3797\(03\)00195-8](https://doi.org/10.1016/S0749-3797(03)00195-8)
- Krueger, R., & Casey, M. (2009). *Focus groups: A practical guide for applied research* (4th ed.). Los Angeles, CA: SAGE Publications.

- LaFromboise, T. D., Medoff, L., Lee, C. 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. <https://doi.org/10.1080/15427600701481020>
- Lee, H., & Turney, K. (2012). Investigating the relationship between perceived discrimination, social status, and mental health. *Society and Mental Health, 2*(1), 1–20. <https://doi.org/10.1177/2156869311433067>
- Link, B. G., & Phelan, J. (1995). Social conditions as fundamental causes of disease. *Journal of Health and Social Behavior, 35*(1995), 80–94. <http://dx.doi.org/10.2307/2626958>
- Mays, V. M. (1985). Black women working together: Diversity in same sex relationships. *Women's Studies International Forum, 8*(1), 67–71. [https://doi.org/10.1016/02775395\(85\)90035-4](https://doi.org/10.1016/02775395(85)90035-4)
- McFarlane, A. C. (2010). The long-term costs of traumatic stress: Intertwined physical and psychological consequences. *World Psychiatry, 9*(1), 3–10. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2816923/>
- McQuaid, R. J., Bombay, A., McInnis, O. A., Humeny, C., Matheson, K., & Anisman, H. (2017). Suicide ideation and attempts among First Nations peoples living on-reserve in Canada: The intergenerational and cumulative effects of Indian residential schools. *Canadian Journal of Psychiatry, 62*(6), 422–430. <https://doi.org/10.1177/0706743717702075>
- Miles, M., & Huberman, A. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: SAGE Publications.
- Mohatt, N. V., Thompson, A. B., Thai, N. D., & Tebes, J. K. (2014). Historical trauma as public narrative: A conceptual review of how history impacts present-day health. *Social Science and Medicine, 106*, 128–36. <http://dx.doi.org/10.1016/j.socscimed.2014.01.043>
- 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*(10), 1840–1848. <https://doi.org/10.2105/AJPH.2008.154880>
- Ness, M., Barradas, D. T., Irving, J., & Manning, S. E. (2012). Correlates of overweight and obesity among American Indian/Alaska Native and Non-Hispanic White children and adolescents: National Survey of Children's Health, 2007. *Maternal and Child Health Journal, 16*(Suppl 2), 268–277. <https://doi.org/10.1007/s10995-012-1191-8>
- Ong, A. D., Fuller-Rowell, T., & Burrow, A. L. (2009). Racial discrimination and the stress process. *Journal of Personality and Social Psychology, 96*(6), 1259–1271. <https://doi.org/10.1037/a0015335>

- Paradies, Y. (2006). Review of psychosocial stress and chronic disease for 4th world indigenous peoples and African Americans. *Ethnicity & Disease, 16*(Winter), 295–308. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/16599387>
- Pearlin, L. I. (1983). Role strain and personal stress. In H. Kaplan (Ed.), *Psychosocial stress: Trends in theory and research* (pp. 3-32), New York, NY: Academic Press.
- Pearlin, L. I. (1989). The sociological study of stress. *Journal of Health and Social Behavior, 30*(3), 241–256. <http://psycnet.apa.org/doi/10.2307/2136956>
- Pearlin, L. I., Menaghan, E. G., Lieberman, M. A., & Mullan, J. T. (1981). The stress process. *Journal of Health and Social Behavior, 22*(4), 337–356. <https://doi.org/10.2307/2136676>
- Pearlin, L. I., Schieman, S., Fazio, E. M., & Meersman, S. C. (2005). Stress, health, and the life course: Some conceptual perspectives. *Journal of Health and Social Behavior, 46*(2), 205–219. <https://doi.org/10.1177/002214650504600206>
- Pearlin, L. I., & Skaff, M. M. (1996). Stress and the life course: A paradigmatic alliance. *The Gerontologist, 36*(2), 239–47. <http://dx.doi.org/10.1093/geront/36.2.239>
- Phelan, J. C., Link, B. G., Diez-Roux, A., Kawachi, I., & Levin, B. (2004). “Fundamental causes” of social inequalities in mortality: A test of the theory. *Journal of Health and Social Behavior, 45*(3), 265–285. <http://dx.doi.org/10.1177/002214650404500303>
- Pierce, C. M. (1974). Psychiatric problems of the Black minority. In G. Kaplan (Ed.). *American handbook of psychiatry* (pp. 512–523). New York, NY: Basic Books, Inc.
- Pierce, C. M. (1995). Stress analogs of racism and sexism: Terrorism, torture, and disaster. In C. Willie, P. Rieker, B. Kramer, & B. Brown (Eds.), *Mental health, racism, and sexism* (pp. 277–293). Pittsburgh, PA: University of Pittsburgh Press.
- Remigio-Baker, R. A., Hayes, D. K., & Reyes-Salvail, F. (2015). Adverse childhood events are related to the prevalence of asthma and chronic obstructive pulmonary disorder among adult women in Hawaii. *Lung, 193*(6), 885–891. <https://doi.org/10.1007/s00408-015-9777-8>
- Roberts, A. L., Agnew-Blais, J. C., Spiegelman, D., Kubzansky, L. D., Mason, S. M., Galea, S., ... Koenen, K. C. (2015). Posttraumatic stress disorder and incidence of type 2 diabetes mellitus in a sample of women: A 22-year longitudinal study. *JAMA Psychiatry, 72*(3), 203–210. <https://doi.org/10.1001/jamapsychiatry.2014.2632>
- Sarche, M., Tafoya, G., Croy, C. D., & Hill, K. (2017). American Indian and Alaska Native boys: Early childhood risk and resilience amidst context and culture. *Infant Mental Health Journal, 38*(1), 115–127. <https://doi.org/10.1002/imhj.21613>

- Shiels, M. S., Chernyavskiy, P., Anderson, W. F., Best, A. F., Haozous, E. A., Hartge, P., ... de Gonzalez, A. B. (2017). Trends in premature mortality in the USA by sex, race, and ethnicity from 1999 to 2014: An analysis of death certificate data. *The Lancet*, 389(10073), 1043–1054. [https://doi.org/10.1016/S0140-6736\(17\)30187-3](https://doi.org/10.1016/S0140-6736(17)30187-3)
- Sittner, K. J., Greenfield, B. L., & Walls, M. L. (2018). Microaggressions, diabetes distress, and self-care behaviors in a sample of American Indian adults with type 2 diabetes. *Journal of Behavioral Medicine*, 41(1), 122–129. <https://doi.org/10.1007/s10865-017-9898-z>
- Solórzano, D., Ceja, M., & Yosso, T. (2000). Critical race theory, racial microaggressions, and campus racial climate: The experiences of African American college students. *The Journal of Negro Education*, 69(1-2), 60–73. <http://psycnet.apa.org/record/2002-10183-005>
- Sue, D. W. (2010). *Microaggressions in everyday life: Race, gender, and sexual orientation*. Hoboken, NJ: John Wiley & Sons.
- Surwit, R. S., Schneider, M. S., & Feinglos, M. N. (1992). Stress and diabetes mellitus. *Diabetes Care*, 15(10), 1413–1422. <https://doi.org/10.2337/diacare.15.10.1413>
- Tehee, M., Buchwald, D., Booth-LaForce, C., Omidpanah, A., Manson, S. M., & Goins, R. T. (2017). Traumatic stress, social support, and health among older American Indians: The Native Elder Care Study. *The Journals of Gerontology: Series B*, gbx163, 1–10. <https://dx.doi.org/10.1093/geronb/gbx163>
- Thoits, P. A. (1991). On merging identity theory and stress research. *Social Psychology Quarterly*, 54(2), 101–112. <https://doi.org/10.2307/2786929>
- Thoits, P. A. (1995). Stress, coping, and social support processes: Where are we? What next? *Journal of Health and Social Behavior, Extra Issue*(1995), 53–79. <http://dx.doi.org/10.2307/2626957>
- Tobin, E. T., Zilioli, S., Imami, L., Saleh, D. J., Kane, H. S., & Slatcher, R. B. (2016). Neighborhood stress, depressive symptoms, and asthma morbidity in youth. *Journal of Pediatric Psychology*, 41(9), 952–960. <https://doi.org/10.1093/jpepsy/jsw012>
- Turner, R. J. (2010). Understanding health disparities: The promise of the stress process model. In W. R. Avison, C. S. Aneshensel, S. Schieman, & B. Wheaton (Eds.), *Advances in the conceptualization of the stress process* (pp. 3–21). New York, NY: Springer. <https://doi.org/10.1007/978-1-4419-1021-9>
- Turner, R. J. (2013). Understanding health disparities: The relevance of the stress process model. *Society and Mental Health*, 3(3), 170–186. <https://doi.org/10.1177/2156869313488121>
- Turner, R. J., & Avison, W. R. (2003). Status variations in stress exposure: Implications for the interpretation of research on race, socioeconomic status, and gender. *Journal of Health and Social Behavior*, 44(4), 488–505. <http://dx.doi.org/10.2307/1519795>

- Turner, R. J., Wheaton, B., & Lloyd, D. A. (1995). The epidemiology of social stress. *American Sociological Review*, *60*(1), 104–125. <https://doi.org/10.2307/2096348>
- Walders-Abramson, N., Venditti, E. M., Ievers-Landis, C. E., Anderson, B., El Ghormli, L., Geffner, M., ... Yasuda, P. (2014). Relationships among stressful life events and physiological markers, treatment adherence, and psychosocial functioning among youth with type 2 diabetes. *Journal of Pediatrics*, *165*(3), 504–508.e1. <https://doi.org/10.1016/j.jpeds.2014.05.020>
- Walls, M. L., Gonzalez, J., Gladney, T., & Onello, E. (2015). Unconscious biases: Racial microaggressions in American Indian health care. *The Journal of the American Board of Family Medicine*, *28*(2), 231–239. <https://doi.org/10.3122/jabfm.2015.02.140194>
- Walls, M. L., Hautala, D., & Hurley, J. (2014). “Rebuilding our community”: Hearing silenced voices on Aboriginal youth suicide. *Transcultural Psychiatry*, *51*(1), 47–72. <https://doi.org/10.1177/1363461513506458>
- Walls, M. L., Sittner, K., Aronson, B., Forsberg, A., Whitbeck, L., & al’Absi, M. (2017). Stress exposure and physical, mental, and behavioral health among American Indian adults with type 2 diabetes. *International Journal of Environmental Research and Public Health*, *14*(9), 1074. <https://doi.org/10.3390/ijerph14091074>
- Walls, M. L., & Whitbeck, L. B. (2011). Distress among Indigenous North Americans: Generalized and culturally relevant stressors. *Society and Mental Health*, *1*(2), 124–136. <https://doi.org/10.1177/2156869311414919>
- Walls, M. L., & Whitbeck, L. B. (2012). The intergenerational effects of relocation policies on Indigenous families. *Journal of Family Issues*, *33*(9), 1272–1293. <https://doi.org/10.1177/0192513X12447178>
- Walters, K. L., Mohammed, S. A., Evans-Campbell, T., Beltrán, R. E., Chae, D. H., & Duran, B. (2011). Bodies don’t just tell stories, they tell histories: Embodiment of historical trauma among American Indians and Alaska Natives. *Du Bois Review*, *8*(1), 179–189. <http://dx.doi.org/10.1017/S1742058X1100018X>
- Walters, K. L., & Simoni, J. M. (2002). Reconceptualizing Native women’s health: An “indigenist” stress-coping model. *American Journal of Public Health*, *92*(4), 520–524. <https://doi.org/10.2105/AJPH.92.4.520>
- Warne, D., Dulacki, K., Spurlock, M., Meath, T., Davis, M. M., Wright, B., & McConnell, K. J. (2017). Adverse childhood experiences (ace) among American Indians in South Dakota and associations with mental health conditions, alcohol use, and smoking. *Journal of Health Care for the Poor and Underserved*, *28*(4), 1559–1577. <https://doi.org/10.1353/hpu.2017.0133>
- Washington, G. (1779, May 31). [Letter to Major General John Sullivan]. Washington Papers. National Archives, Washington, DC. Retrieved from <https://founders.archives.gov/documents/Washington/03-20-02-0661>



- Wheaton, B. (1990). Life transitions, role histories, and mental health. *American Sociological Review*, 55(2), 209-223. <https://doi.org/10.2307/2095627>
- Wheaton, B. (1994). Sampling the stress universe. In W. R. Avison, & I. H. Gotlib (Eds.), *Stress and mental health* (pp. 77–114). Boston, MA: Springer. <https://doi.org/10.1007/978-1-4899-1106-3>
- Wheaton, B. (1999). Social stress. In C. S. Aneshensel, & J. C. Phelan (Eds.) *Handbook of the sociology of mental health* (pp. 277–300). New York, NY: Kluwer Academic/ Plenum.
- Wheaton, B., & Gotlib, I. H. (1997). Trajectories and turning points over the life course: Concepts and themes. In I. H. Gotlib, & B. Wheaton (Eds), *Stress and adversity over the life course: Trajectories and turning points* (pp. 1-25). Cambridge, UK: Cambridge University Press.
- Wheaton, B., Young, M., Montazer, S., Stuart-lahman, K., Scheid, T., Aneshensel, C. S., ... Phelan, J. C. (2013). Social stress in the Twenty-First Century. In C. S. Aneshensel, & J. C. Phelan (Eds.), *Handbook of the sociology of mental health*, (2nd ed., Vol. 53, pp. 299-323). Dordrecht, UK: Springer. <https://doi.org/10.1007/978-94-007-4276-5>
- Whitbeck, L. B., Adams, G. W., Hoyt, D. R., & Chen, X. (2004). Conceptualizing and measuring historical trauma among American Indian people. *American Journal of Community Psychology*, 33(3-4), 119–130. <https://doi.org/10.1023/B:AJCP.0000027000.77357.31>
- Whitbeck, L. B., Chen, X., Hoyt, D. R., & Adams, G. W. (2004). Discrimination, historical loss and enculturation: Culturally specific risk and resiliency factors for alcohol abuse among American Indians. *Journal of Studies on Alcohol*, 65(4), 409–418. <https://doi.org/10.15288/jsa.2004.65.409>
- Whitbeck, L. B., Hoyt, D. R., McMorris, B. J., Chen, X., & Stubben, J. D. (2001). Perceived discrimination and early substance abuse among American Indian children. *Journal of Health and Social Behavior*, 42(4), 405–424. <http://dx.doi.org/10.2307/3090187>
- Whitbeck, L. B., McMorris, B. J., Hoyt, D. R., Stubben, J. D., & LaFromboise, T. (2002). Perceived discrimination, traditional practices, and depressive symptoms among American Indians in the upper Midwest. *Journal of Health and Social Behavior*, 43(4), 400–418. <https://doi.org/10.2307/3090234>
- 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(3), 16–41. <http://dx.doi.org/10.5820/aian.1603.2009.16>
- Whitesell, N. R., Beals, J., Crow, C. B., Mitchell, C. M., & Novins, D. K. (2012). Epidemiology and etiology of substance use among American Indians and Alaska Natives: Risk, protection, and implications for prevention. *American Journal of Drug and Alcohol Abuse*, 38(5), 376–382. <https://doi.org/10.3109/00952990.2012.694527>

- Whitesell, N. R., Beals, J., Mitchell, C. M., Manson, S. M., Turner, R. J., & The AI-SUPERPFPP Team. (2009). Childhood exposure to adversity and risk of substance-use disorder in two American Indian populations: The meditational role of early substance-use initiation. *Journal of Studies on Alcohol and Drugs*, 70(6), 971–981. <https://doi.org/10.15288/jsad.2009.70.971>
- Wilkins, D., & Stark, H. (2011). *American Indian politics and the American political system* (3rd ed.). Lanham, MD: Rowman & Littlefield.
- Williams, D. R., & Neighbors, H. W. (2001). Racism, discrimination and hypertension: Evidence and needed research. *Ethnicity and Disease*, 11(4), 800–816. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/11763305>
- Williams, D. R., Neighbors, H. W., & Jackson, J. S. (2003). Racial/ethnic discrimination and health: findings from community studies. *American Journal of Public Health*, 93(2), 200–208. <http://dx.doi.org/10.2105/AJPH.93.2.200>
- Willie, S. M., Kemp, K. A., Greenfield, B. L., & Walls, M. L. (2017). Barriers to healthcare for American Indians experiencing homelessness. *Journal of Social Distress and the Homeless*, 26(1), 1–13. <https://doi.org/10.1080/10530789.2016.1265211>
- Willis, T. (1679). *Pharmaceutice rationalis; or, An exercitation of the operations of medicines in humane bodies. Shewing the signs, causes and cures of most distempers incident thereunto ... As also a treatis of the scurvy, and the several sorts thereof, with their symptoms, causes and cure*. London, UK: Printed for T. Dring, C. Harper, and J. Leigh.

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# **DINÉ (NAVAJO) HEALER PERSPECTIVES ON COMMERCIAL TOBACCO USE IN CEREMONIAL SETTINGS: AN ORAL STORY PROJECT TO PROMOTE SMOKE-FREE LIFE**

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*Abstract: Many American Indian (AI) healers are faced with a dilemma of how to maintain the ceremonial uses of traditional tobacco meant to encourage the restoration and balance of mind, body, and spirit, while discouraging commercial tobacco use and protecting against secondhand smoke exposure in ceremonial settings. To explore this dilemma and offer culturally informed solutions, researchers conducted qualitative interviews with Navajo healers who describe the history and role of commercial tobacco within ceremonial contexts. Healers understand the importance of their role on their community's health and expressed deep concern about the use of commercial tobacco in the ceremonial setting. Healers play an important role in curbing the use of commercial tobacco and limiting the exposure to secondhand smoke in ceremonial settings and beyond. Study implications include the importance of understanding traditional and cultural knowledge and its potential as a pathway to solve contemporary public health issues facing AI communities.*

## **BACKGROUND**

For centuries, American Indian (AI) societies have used traditional tobacco to restore and balance spiritual, emotional, and physical wellbeing (Kahn-John & Koithan, 2015). While many AIs maintain a strong spiritual connection to traditional tobacco and fully exercise their right to use tobacco in accordance with their traditional and religious beliefs (Forster et al., 2007; Pego, Hill, Solomon, Chisholm, & Ivey, 1995), commercial tobacco, since its introduction into AI societies, has gradually gained acceptance as a substitute for traditional tobacco in AI prayer and ceremony (Margalit et al., 2013). For traditional healers of the Diné (Navajo) Nation, this shift has been noticeable, particularly in tobacco-based ceremonies (Chief et al., 2016; Nez Henderson et al., 2009). As a result, many healers are faced with a dilemma of how to maintain the ceremonial uses of traditional tobacco meant to encourage the restoration and balance of mind, body, and

spirit, while discouraging the use of commercial tobacco and protecting against secondhand smoke exposure in ceremonies. The purpose of this research is to explore Diné healer's knowledge, attitudes, and beliefs regarding this dilemma and their solutions to curbing the use and public health impact of commercial tobacco within ceremonial settings.

### **Tobacco and the Diné Context**

Traditional tobacco is grown, harvested, and prepared for specific healing purposes (Nadeau, Blake, Poupart, Rhodes, & Forster, 2012; Boudreau et al., 2016) and not for recreational use (Daley et al., 2006). In contrast to traditional tobacco, commercial tobacco is manufactured for recreational use and contains thousands of harmful chemicals and additives (USDHHS, 1988; 2014). In recent decades, traditional tobacco has been substituted or used in combination with commercial tobacco products, such as pipe tobacco, in some ceremonies and spiritual practices (Margalit et al., 2013; Arndt et al., 2013; Nadeau et al., 2012). This expanded use of commercial tobacco is controversial within many AI communities as concerns are being raised about the harm of secondhand smoke to people in ceremonial environments (Margalit et al., 2013; Arndt et al., 2013; Nadeau et al., 2012). This issue is a contested topic of discussion among healers who have varying perspectives on the power and agency of ceremonial forces to cleanse environments of harm to participants (Margalit et al., 2013; Arndt et al., 2013; Nadeau et al., 2012).

One of the most widely used traditional tobaccos for the Diné is *dził nát'oh* (traditional mountain smoke), which is a blend of indigenous plants found in and around Diné homelands, particularly in mountainous climates. Healers and herbalists treat *dził nát'oh* plants with great care and respect. Special songs, prayers, and sacred offerings are provided for the plants before collecting (Wyman & Harris, 1941). When smoked reverently, it is believed this sacred medicine helps heal and rejuvenate the mind and physical body (Holiday & McPherson, 2005).

### **Historical Trauma and Commercial Tobacco in American Indian Life**

Contemporary use of commercial tobacco among AI societies has been shaped by their experiences with American imperialism over the past few centuries (Burhansstipanov, 2000; Unger, Soto, & Thomas, 2008). With the passage of the Indian Removal Act in 1830, AI groups were forcibly removed from their homelands to clear the way for the westward expansion of settlers (Irwin, 1997). This law and its resulting actions were assaults to the ceremonial and

spiritual practices of many AI groups and a form of historical trauma (Braveheart-Jordan & DeBruyn, 1995). The resulting disconnection from their traditional lands and spiritual spaces bore heavy impact on ceremonial ways, including traditional tobacco use (Irwin, 1997). The forced relocation and loss of land impacted AIs' access to the traditional tobacco, and, more concerning, cultural protocols were lost (Boudreau et al., 2016). The Indian Religious Crimes Code in 1883 further suppressed the expression of Native religious beliefs by outlawing the performance of ceremonial dances, rites, songs, and prayers (Forster et al., 2007; Irwin, 1997). As a result, the use of ceremonial items, like traditional tobacco, was prohibited. In order to compensate for this prohibition, tribes substituted or mixed traditional tobacco with commercial tobacco in their spiritual practices. Such historical policies and the processes of colonization influenced the present use of commercial tobacco by people of the Navajo Nation today.

### **Role of Healers and Elders and Commercial Tobacco**

Traditional healers and elders hold highly esteemed positions within tribal communities, including those on Diné Nation, and are often looked to by younger generations for their guidance and cultural wisdom (Joe, Young, Moses, Knoki-Wilson, & Dennison, 2016; Kahn-John & Koithan, 2016). Through ceremonies and other cultural activities that promote holistic health and well-being, healers play powerful and important roles in shaping cultural norms of health in their communities (Bassett, Tsosie, & Nannauck, 2012; Joe et al., 2016). Healers are the resource about the traditional ways of life (Nadeau et al., 2012) and often serve as the link between Indigenous knowledge and Western medicine. For the Diné, traditional and cultural beliefs, often with guidance and support of a healer or medicine person, promotes personal and collective health inclusive of the family and community (Joe et al., 2016). Evidence of this relationship is the integration of Diné healers into Indian Health Service clinics to work alongside physicians and other providers to provide cultural services (e.g., prayers and ceremonies) to patients and their families (Joe et al., 2016). Integration of healers into Western medicine contexts have resulted in patients feeling empowered and comforted when treated with familiar traditional ceremonies (Joe et al., 2016).

## The Present Study

Conversations were sought with Diné healers to further understand the history and public health impact of commercial tobacco to advance culturally embedded solutions for reducing the use of commercial tobacco and exposure to secondhand smoke within ceremonial settings. The Diné Tobacco Oral Story Project (DOSP) study aimed to: 1) explore Diné healers' perspectives on the role and influence of commercial tobacco and secondhand smoke in the ceremonial setting and 2) develop culturally appropriate media-based prevention education focused on secondhand smoke exposure. This paper focuses on the healers' perspectives of the history, impact, and solutions for eliminating the use of commercial tobacco in various Diné ceremonial settings.

## METHODS

The DOSP is a research component of the National Cancer Institute funded "Networks Among Tribal Organizations for Clean Air Policies" research project aimed at assessing commercial tobacco smoke-free policy efforts on Diné Nation. Through a community based participatory research approach, the DOSP was guided by an advisory board consisting of members from Team Navajo, a health advocacy coalition focused on smoke-free policy on Diné Nation, and two Diné healer associations, the Diné Hataalii Association (DHA) and the Azeé Bee Nahaghá of Diné Nation (ABNDN). The DHA and ABNDN respectively represent two contemporary spiritual healing systems practiced by the Diné. The first set of ceremonies are defined traditional Diné ceremonial practices, of which there are hundreds, some of which engage tobacco, all protected by cultural and traditional protocol. The DHA represents the traditional *hataaliis* (healers) of the Diné Nation that practice the traditional Diné-centric healing way, or *hataal*. The second set of ceremonial practices examined in this study included those of the Native American Church, of which represents the intertribal peyote-based healing way, including the ABNDN (Begay & Maryboy, 2000; Lamphere, 2000). ABNDN continues to promote, protect, and advocate for the traditional healing practices centered on the *Hinááh Azeé* (peyote herb) and core Diné philosophy principles (Azeé Bee Nahaghá of Diné Nation, 2014). Both the DHA and the ABNDN involve the use of *dził nát'oh* (traditional mountain smoke) to initiate spiritual, mental, and physical healing and channel prayers to the *Diyiin Diné* (Holy People) and the Creator. Due to cultural and traditional protocol, we are unable to describe in detail any particular ceremony.

## Procedures

In collaboration with our advisory board, community partners and researchers co-developed a semi-structured guide to interview Diné healers. The interview consisted of eight standard questions regarding: 1) the history (e.g., “When did you first see commercial tobacco used in Diné traditional ceremonial settings?”); 2) role (e.g., “Why did Navajo healers start using commercial tobacco in ceremonies? How is commercial tobacco used in Diné ceremonial settings today?”); and 3) impact of commercial tobacco on Diné ceremonies (e.g. “How do you think the secondhand smoke from commercial tobacco affects people’s health in the Diné ceremonial setting?”). Interviews were co-facilitated by two Diné researchers; one of whom is fluent in the Diné language. The interviews averaged between 60-90 minutes, were audio recorded, and conducted in the location most convenient to the healer, either at a central location or the healer’s home.

## Sampling and Recruitment of Traditional Healers

Through a purposive sampling strategy, researchers worked with leadership of the two prominent Diné healer associations to identify 15 healers who hold specific cultural knowledge about *dził nát’oh* (traditional mountain smoke) and Diné culture. Diné researchers engaged Diné values of *k’é* (i.e., personal conduct and kinship) through the fundamental cultural practice of expressing one’s individual identity. *K’e* derives from the clans and the clanship system and allows Diné individuals to determine how they are connected (Bluehouse & Zion, 1993). In line with recommended indigenous health research practices, we have found this practice creates a positive relationship between the Diné researchers and research participants and contributes to building trust and mutual respect during the development of the study, the recruitment process, and the interviews (Chief et al., 2016). Diné researchers contacted the identified healers to explain the study using a recruitment strategy and research protocol approved by the Navajo Nation Human Research Review Board and Mayo Clinic’s Institutional Review Board. All participants provided informed consent and received an incentive to participate in the study.

## Analysis

Audio recordings were translated and transcribed from Diné to English. To ensure accuracy, the primary interviewer, who is Diné and holds cultural knowledge, reviewed each of

the transcripts for context and meaning. Once finalized, a team of five Diné and non-Diné research staff used a collaborative analysis approach to discuss and identify common stories and themes from the interviews (Teufel-Shone & Williams, 2010).

## RESULTS

A total of 14 Diné male healers and 1 female oral storyteller were interviewed. Among the healers, all practiced traditional Diné ceremonies, and 10 (71%) were considered healers of the ABNDN. The following sections describe healers' perspectives on the history of commercial tobacco use in the ceremonial setting, the rationale for its use, and perspectives on proposed policy or regulatory approaches for curbing the use of commercial tobacco in such contexts. On the outset of our interviews, healers made a clear distinction between commercial tobacco use within traditional Diné-centric healing way, or *hataal*, versus the *azeé bee nahaghá* (peyote herb based) ceremony of the ABNDN. Healers stated they have yet to observe the use of commercial tobacco in the traditional Diné-centric healing; therefore, the results section will only discuss commercial tobacco use in the *azeé bee nahaghá* ceremony of the ABNDN.

### History and Rationale for the Use of Commercial Tobacco in Ceremonial Settings

Most healers have observed the use of commercial tobacco in *azeé bee nahaghá* ceremonies for as long as they can remember. One healer recalls that his earliest observation of commercial tobacco within this ceremony was 1947. Healers describe the use of Bull Durham as the most commonly used loose-leaf commercial tobacco, which was mixed with *dził nat'oh* (traditional mountain smoke). Others described that the use of commercial tobacco within the *azeé bee nahaghá* ceremony was as old as the history of the Native American Church, so healers were simply practicing ceremonies as they had always done.

In response to why Diné healers began using commercial tobacco in ceremonial settings, healers explained how *dził nat'oh* is harder to obtain than commercial tobacco because *dził nat'oh* requires rigorous cultural protocols to collect. Such protocols require the individual to be culturally prepared and knowledgeable of the specific songs, practices, and seasons related to collecting *dził nat'oh*. For other healers, the use of commercial tobacco was provoked by the quality of the *dził nat'oh*, which is described as much stronger and bitter than commercial tobacco. Therefore, healers began mixing commercial tobacco with *dził nat'oh* to soften the taste. This softer taste was also

mentioned to be preferred by patients that are not accustomed to smoking dził nát'oh. Some healers attributed the use of commercial tobacco to the influence of tobacco advertising, which was prevalent during many healers' youth (1950s-1960s). One healer described that he observed the use of commercial tobacco beginning in 1958 and that using commercial tobacco was associated with being "a high-class person."

According to some participants, commercial tobacco is used in various ways during ceremonies. It can serve a very practical purpose as a tool to light and maintain the burning of dził nát'oh. It is also used as a filler to supplement the large amounts of tobacco required while conducting the ceremonies, which are often all night and attended by many people. Smoking a cigarette within a ceremony is considered offensive; however, smoking a cigarette during breaks or after the ceremony occurs often.

### **Public Health Implications of Commercial Tobacco Use in the Ceremonial Setting**

Healers varied in their opinions on whether commercial tobacco should be used in the ceremonial setting. Some were adamant that commercial tobacco should not be used as these ceremonies were aimed to restore balance and health, and using commercial tobacco and knowing that it causes serious health problems was not acceptable. Healers recalled stories of their own grandfathers who were reverent of dził nát'oh; in their day, commercial tobacco was never acceptable within ceremonies. Others explained that the use of commercial tobacco within a ceremony was the choice of the patient, or the individual for whom the ceremony was being performed, and to dictate to a patient was not respectful.

Despite the current mixing of commercial tobacco with dził nát'oh, healers were deeply aware of the potential harmful health effects of secondhand smoke from commercial tobacco. They understood that secondhand smoke is harmful to "the throat and lungs" and that it has cancer-causing chemicals or additives, as one of the oldest healers interviewed described:

The mixture of the tobacco with other people sitting around that person who is smoking, and us blowing smoke among those around us, some maybe having health issues, and with the blowing smoke we will likely inhale into our system...there's a risk/danger present, like our cold or coughing and other health ailments. It's concerning to me. The old traditional mountain smoke in its plain use has no negative effects.



In terms of the effects of commercial tobacco during a ceremony, healers described how secondhand smoke from the mixture of commercial tobacco and *dził nát'oh* has the potential to cause harm. Healers believed that if commercial tobacco dominates the mixture, then harmful effects could occur. Healers were also concerned about the risks of secondhand smoke exposure on youth who participate in ceremonies. As one elder healer describes:

The commercial tobacco is not good for us. Because I am aware of it and understand it, it is best that we don't use this. If they want to go outside [of the ceremonial setting] and smoke commercial tobacco, then that's up to them. Inside the tipi/Hogan where the ceremony is taking place, the secondhand smoke exposure poses a risk to children, youth, and students, and they are not allowed to smoke. There's a risk present that could affect them.

Healers know these negative effects of commercial tobacco for various reasons. Some healers drew on their own personal experiences as young adults and their previous personal use of commercial tobacco. Others described the harmful effects they observed among their grown children who had become addicted to commercial tobacco products. Some healers came to understand the potential harmful effects of commercial tobacco through their grandparents who were also healers and respected people in the community. They discussed their elder relatives' reverence for *dził nát'oh*, the ways they would make known their concerns about mixing commercial tobacco with *dził nát'oh* during the ceremonial setting, and how their elder relatives avoided doing it.

It will affect someone. That's what my father used to say...When he would smell commercial tobacco, and it would not be entirely holy in that ceremonial setting, he would excuse himself, and he would sit at the entrance/exit of the Hogan because of the strong stench of commercial tobacco in the air. To him, the commercial tobacco had an awful smell. He was strict and reverent in the area of traditional herbs. For our children to use *dził nát'oh* in a ceremonial way is good, even though they are getting comfortable with commercial tobacco as acceptable use of tobacco in a ceremony. That's why it's good to tell these stories and inform people so that ABN[DN] road men and medicine men can clearly understand this.



High levels of knowledge regarding the scientific evidence of the detrimental health effects of secondhand smoke were discussed and debated in juxtaposition with the transcendent nature and healing power of the actual ceremony. Healers debated the actual effect of commercial tobacco during a ceremonial setting on a person's health. Healers described protocols a practitioner must conduct to begin the ceremony and ensure that the ceremonial artifacts are blessed. Once blessed, the artifacts, including the tobacco, are considered to be protected. Healers reflected on the power of the ceremony to transcend mind, body, and spirit and to create spiritual mindset and potentially transmute the negative properties in the commercial tobacco used in the ceremony, as one healer suggested:

I don't smoke commercial tobacco. However, when there is someone smoking beside me, it does impact me, and I think the smoke coming from them stinks. But when I actually go into the ceremonial setting, your mindset changes. The tobacco becomes sacred when it is used....But, on the other hand, I think that the ingredients that...commercial tobacco has...are still there. And so...it would be a concern.

Yet, given healers' knowledge of the known risks associated with the use of commercial tobacco and secondhand smoke, many want to see scientific evidence on the health effects of commercial tobacco on patients and participants in the ceremonial context.

Well, this is very sensitive and very controversial, as you may already know. Some say that there is a claim that the commercial tobacco is safe within the context of an actual ceremony....They say it's safe, but I really don't think so. I wish there was a case study by young people, you know, that could look at that, you know, maybe 5 years, 10 years. And you'll find that these people that utilize commercial tobacco within a ceremony would develop those problems that are associated with cancer. That has never been done. There is no study whatsoever that I know – as far as I know – there has been no study to substantiate...that it poses a health hazard.

While other healers were unclear in their understanding of the potential risk of using commercial tobacco in their ceremonial practices, one healer who does not use commercial tobacco in his ceremonies observed:

My concern with commercial tobacco is that it is identified to contain *doo izhdo'yeeligii* [substances that one should not consume], chemicals that [are] released when lit in a ceremonial setting. Everyone in a traditional ceremonial setting partakes of the smoke, and if abused in this way, it would cause a lot of harm [rather] than good.

Risks posed by commercial tobacco and secondhand smoke were widely understood by healers, yet the specific health risks posed by commercial tobacco in the context of ceremonial settings were debated.

### **Perspectives on Smoke-free Policy within the Ceremonial Setting**

Finally, healers reflected on the benefits and challenges of a smoke-free policy that prohibits the use of commercial tobacco in ceremonial and whether it would place a greater reliance on *dził nát'oh*, which was potentially both beneficial and worrisome to healers. In terms of benefits, some healers said practitioners would be obligated to reconnect with the earth and ancestral teachings and practices where *dził nát'oh* is collected, and this process alone would require practitioners to remember the sacred songs, stories, and prayers that accompany those rituals. As one of the younger healers suggested:

It would force practitioners to get up and get out and return to nature, to remember those songs and prayers. [To go] to these spots where ancestors gathered these medicines, which is not practiced so much today. So, if [a policy prohibiting commercial tobacco in ceremonial settings] was passed, it would benefit practitioners [by] bring[ing] them back to earth.

Conversely, some healers expressed concern that such a policy would be burdensome and described *dził nát'oh* as difficult to obtain because the natural supply is limited and harvested from specific mountainous locations during distinct times of the year. Healers said mixing commercial tobacco is so common that some healers would probably continue to use commercial tobacco despite a prohibitive policy. A few healers mentioned that such a policy would at very least generate discussion among practitioners to identify alternatives and solutions to commercial tobacco.

## DISCUSSION

Our study provides valuable insight into the history, role, and impact of commercial tobacco in the Diné ceremonial setting and the dilemma posed by policy that prohibits healers from mixing or replacing traditional tobacco with commercial tobacco in such a context. Diné healers are highly knowledgeable about the scientific evidence related to the harms of commercial tobacco and secondhand smoke and expressed deep concern about how to manage the use of commercial tobacco by practitioners in the ceremonial setting. Our findings were consistent with emerging research with healers and elders from other tribes, for whom commercial tobacco is not considered sacred and is considered to diminish quality of life, including the potential for living a full and good life (Arndt et al., 2013; Margalit et al., 2013; Struthers & Hodge, 2004).

Healers also described practical dilemmas of supply and demand of *dził nát'oh*, the sheer convenience and accessibility of commercial tobacco, and the loss of cultural and traditional knowledge required to keep commercial tobacco out of ceremony. Such phenomena are in line with emerging research in this area. Lakota elders and Ojibwe healers have acknowledged the struggle with the ways in which commercial tobacco has been used in place of traditional tobacco over time and is currently imbued with traditional tobacco's cultural meaning (Arndt et al., 2013; Margalit et al., 2013; Struthers & Hodge, 2004). For the Menominee tribe, tobacco is also considered sacred and required to be used only in a sacred way; however, the loss of cultural and traditional teachings about tobacco has also contributed to the integration of the use of commercial tobacco (Arndt et al., 2013).

In 2015, the ABNDN amended their association bylaws to prohibit the use of commercial tobacco in the ceremonial setting. Although this policy has not been completely implemented, ABNDN has taken a proactive step in recognizing the health, social, and cultural risks posed by using commercial tobacco in ceremonial settings. The ABNDN policy promotes the use of *dził nát'oh* and encourages healers to limit the use of commercial tobacco. The policy also allows patients seeking ceremonies to choose non-commercial tobacco and for healers to honor the patient's request to use unadulterated *dził nát'oh* in his/her ceremony. This healer-patient dialogue presents an opportunity for discourse on the issue of commercial tobacco in the ceremonial setting and beyond. Healers involved in this study described the ways in which a commercial tobacco free policy that bans the use of commercial tobacco within the ceremonial setting could promote the greater use and reliance for *dził nát'oh*; however, they are also concerned about the quantity and availability of *dził nát'oh*. Some healers believe a commercial tobacco free policy serves as a pathway to reclaim traditional knowledge of *dził nát'oh*. By using and collecting traditional herbs,

certain cultural protocols will be required of healers and other community members; therefore, the increased use of traditional herbs may contribute to decreasing exposure to secondhand commercial tobacco smoke and promote the reclamation of traditional knowledge.

Critical to the advancement of integrating Indigenous knowledge into public health, and more specifically smoke-free policy and practice, is the application of culturally driven intervention strategies that empower behavior change (Davis, Peterson, Rothschild, & Resnicow, 2011; Geana, Greiner, Cully, Talawyma, & Daley, 2012). In the United States, such indigenous knowledge holders and elders have been engaged to inform multi-level public health intervention to improve health outcomes in many areas of Native health and well-being, including nursing practices (Kahn-John Dine & Koithan, 2015), youth suicide prevention (Wexler et al., 2017), parenting and child well-being (Walkup et al., 2009), and cancer prevention (Christopher, Gidley, Letiecq, Smith, & McCormick, 2008). Traditional knowledge holders have been particularly important to the systems and policy issue of food sovereignty (CDC, 2015; Hoover 2014). In the United States, seventeen tribes developed traditional food programs aimed to reclaim traditional foods by embracing their identity and history and recovering traditional ways of combating chronic disease epidemic in their communities (CDC, 2015). One extraordinary example is the Tohono O’odham tribe, which worked heavily with traditional knowledge holders to develop and implement a series of food sovereignty initiatives (CDC, 2015; Tohono O’odham Community Action, 2017). The initiatives were centric to the traditional Tohono O’odham ways and demonstrated to be a successful pathway to reach youth, families, and elders (Tohono O’odham Community Action, 2017). Elders and healers can play a similar role in curbing the use of commercial tobacco and limiting the exposure to secondhand smoke in ceremonial settings (Daley et al., 2006; Nadeau et al., 2012; Chief et al., 2016).

### **Limitations**

Information generated from this study is not intended to be representative of, or generalizable to, all traditional healers practicing various Diné traditional ceremonies or those of the ABNDN. Despite this limitation, several scientific and cultural protocols were used which increased the likelihood of the generation of meaningful qualitative information from a section of the population – elder and traditional healers – whose perspectives on the topic of commercial tobacco are largely unknown. Another limitation of the study was the purposeful selection of healers may have excluded healers who would have additional stories or perspectives on the issues.

## CONCLUSION

Traditional knowledge and knowledge holders (i.e., healers and elders) play an important role in reclaiming traditional knowledge to promote the health and well-being of indigenous people globally. To optimize the impact of culturally appropriate prevention and care for AI populations the in the United States, healers must be recognized as agents of change. Healers in our study understand the importance of their role and influence on their patients' and community's health. Strategies to meaningfully engage healers in understanding contemporary public health problems, such as the exposure to secondhand commercial tobacco in ceremonial settings, among many other health and well-being issues, are required. Continued engagement and dialogue with elders and healers are fundamental in locating traditional knowledge and pathways to solve contemporary public health issues facing AI communities today.

## REFERENCES

- Arndt, L. M., Caskey, M., Fossum, J., Schmitt, N., Davis, A. R., Smith, S. S., . . . Waukau, J. (2013). Menominee perspectives on commercial and sacred tobacco use. *American Indian and Alaska Native Mental Health Research*, 20(3), 1-22. <http://dx.doi.org/10.5820/aian.2003.2013.1>
- Azeé Bee Nahaghá of Diné Nation. (2014). *Constitutional Bylaws*. Retrieved from <http://abndn.blogspot.com/>
- Bassett, D., Tsosie, U., & Nannauck, S. (2012). "Our culture is medicine": Perspectives of native healers on posttrauma recovery among American Indian and Alaska Native patients. *The Permanente Journal*, 16(1), 19-27. <http://dx.doi.org/10.7812/tpp/11-123>
- Begay, D. H., & Maryboy, N. C. (2000). The whole universe is my cathedral: A contemporary Navajo spiritual synthesis. *Medical Anthropology Quarterly*, 14(4), 498-520. <http://dx.doi.org/10.1525/maq.2000.14.4.498>
- Boudreau, G., Hernandez, C., Hoffer, D., Preuss, K. S., Tibbetts-Barto, L., Villaluz, N. T., & Scott, S. (2016). Why the world will never be tobacco-free: Reframing "Tobacco Control" into a traditional tobacco movement. *American Journal of Public Health*, 106(7), 1188-1195. <http://dx.doi.org/10.2105/ajph.2016.303125>
- Bluehouse, P., & Zion, J. W. (1993). Hozhooji Naat'aanii: The Navajo justice and harmony ceremony. *Mediation Quarterly*, 10(4), 327-337. <http://dx.doi.org/10.1002/crq.3900100403>
- Burhansstipanov, L. (2000). Urban Native American health issues. *Cancer*, 88(5 Suppl), 1207-1213. Retrieved from <https://onlinelibrary.wiley.com/journal/10970142>

- Braveheart-Jordan, M., & DeBruyn, L. (1995). So she may walk in balance: Integrating the impact of historical trauma in the treatment of Native American Indian women. In J. Adleman & G. M. Enguíanos (Eds.), *Racism in the lives of women: Testimony, theory, and guides to antiracist practice* (pp. 345-368). Binghamton, NY: Harrington Park Press/Haworth Press.
- Centers for Disease Control and Prevention (CDC). (2015). *Traditional foods in Native America—Part IV: A compendium of stories from the Indigenous Food Sovereignty Movement in American Indian and Alaska Native communities*. Atlanta, GA: Native Diabetes Wellness Program, Centers for Disease Control and Prevention. Retrieved from [https://www.cdc.gov/diabetes/ndwp/pdf/Part\\_IV\\_Traditional\\_Foods\\_in\\_Native\\_America.pdf](https://www.cdc.gov/diabetes/ndwp/pdf/Part_IV_Traditional_Foods_in_Native_America.pdf)
- Chief, C., Sabo, S., Clark, H., Henderson, P., Yazzie, A., Nahee, J., & Leishchow, S. (2016). Breathing clean air is Sa'áh Naaghái Bik'eh Hózhóó (SNBH): A culturally centered approach to understanding commercial smoke-free policy among the Diné (Navajo People). *Tobacco Control*, 25(1), 19-25. <http://dx.doi.org/10.1136/tobaccocontrol-2016-053081>
- Christopher, S., Gidley, A. L., Letiecq, B., Smith, A., & McCormick, A. K. (2008). A cervical cancer community-based participatory research project in a Native American community. *Health Education Behavior*, 35(6), 821-834. <http://dx.doi.org/10.1177/1090198107309457>
- Davis, R., Peterson, K., Rothschild, S., & Resnicow, K. (2011). Pushing the envelope for cultural appropriateness: Does evidence support cultural tailoring in type 2 diabetes interventions for Mexican American adults? *Diabetes Education*, 37(2), 227-238. <http://dx.doi.org/10.1177/01457217110395329>
- Daley, C., James, A., Barnoskie, M., Segraves, M., Schupbach, R., & Choi, W. (2006). "Tobacco has a purpose, not just a past": Feasibility of developing a culturally appropriate smoking cessation program for a pan-tribal Native population. *Medical Anthropology Quarterly*, 20(4), 421-440. <https://doi.org/10.1525/maq.2006.20.4.421>
- Forster, J. L., Rhodes, K. L., Poupart, J., Baker, L. O., Davey, C., & Council, A. I. C. T. P. S. (2007). Patterns of tobacco use in a sample of American Indians in Minneapolis-St. Paul. *Nicotine Tobacco Research*, 9(Suppl 1), S29-37. <http://dx.doi.org/10.1080/14622200601083434>
- Geana, M. V., Greiner, K. A., Cully, A., Talawyma, M., & Daley, C. M. (2012). Improving health promotion to American Indians in the Midwest United States: Preferred sources of health information and its use for the medical encounter. *Journal of Community Health*, 37(6), 1253-1263. <http://doi.org/10.1007/s10900-012-9564-x>
- Holiday, J., & McPherson, R. (2005). *A Navajo Legacy: The Life and Teachings of John Holiday* (Vol. 251). Norman, OK: University of Oklahoma Press.
- Hoover, E. (2014, September 17). Tohono O'odham Community Action. [Web blog post]. Retrieved from <https://gardenwarriorsgoodseeds.com/2014/09/17/toho-oodham-community-action-toca-sells-az/>



- Irwin, L. (1997). Freedom, law, and prophecy: A brief history of Native American religious resistance. *American Indian Quarterly*, 21(1), 35-55. <http://dx.doi.org/10.2307/1185587>
- Joe, J. R., Young, R. S., Moses, J., Knoki-Wilson, U., & Dennison, J. (2016). At the bedside: Traditional Navajo practitioners in a patient-centered health care model. *American Indian Alaskan Native Mental Health Research*, 23(2), 28-49. <http://dx.doi.org/10.5820/aian.2302.2016.28>
- Kahn-John Dine, M., & Koithan, M. (2015). Living in health, harmony, and beauty: The Dine (Navajo) hozho wellness philosophy. *Global Advances in Health and Medicine*, 4(3), 24-30. <http://dx.doi.org/10.7453/gahmj.2015.044>
- Lamphere, L. (2000). Comments on the Navajo Healing Project. *Medical Anthropology Quarterly*, 14(4), 598-602. <http://dx.doi.org/10.1525/maq.2000.14.4.598>
- Margalit, R., Watanabe-Galloway, S., Kennedy, F., Lacy, N., Red Shirt, K., Vinson, L., & Kills Small, J. (2013). Lakota elders' views on traditional versus commercial/addictive tobacco use; oral history depicting a fundamental distinction. *Journal of Community Health*, 38(3), 538-545. <http://dx.doi.org/10.1007/s10900-012-9648-7>
- Nadeau, M., Blake, N., Pouport, J., Rhodes, K., & Forster, J. (2012). Circles of Tobacco Wisdom: Learning about traditional and commercial tobacco with Native elders. *American Journal of Preventive Medicine*, 43(5S3), S222-S228. <http://dx.doi.org/10.1016/j.amepre.2012.08.003>
- Nez Henderson, P., Kanekar, S., Wen, Y., Buchwald, D., Goldberg, J., Choi, W., . . . Henderson, J. A. (2009). Patterns of cigarette smoking initiation in two culturally distinct American Indian tribes. *American Journal of Public Health*, 99(11), 2020-2025. <http://dx.doi.org/10.2105/ajph.2008.155473>
- Pego, C., Hill, R., Solomon, G., Chisholm, R., & Ivey, S. (1995). Tobacco, culture, and health among American Indians: A historical review. *American Indian Culture and Research Journal*, 19(2), 143-164. <http://dx.doi.org/10.17953/aicr.19.2.x3277u12152v0144>
- Struthers, R., & Hodge, F. S. (2004). Sacred tobacco use in Ojibwe communities. *Journal of Holistic Nursing*, 22(3), 209-225. <http://dx.doi.org/10.1177/0898010104266735>
- Teufel-Shone, N. I., & Williams, S. (2010). Focus groups in small communities. *Preventing Chronic Disease*, 7(3), A67. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2879999/#>
- Unger, J. B., Soto, C., & Thomas, N. (2008). Translation of health programs for American Indians in the United States. *Evaluation and Health Professions*, 31(2), 124-144. <http://dx.doi.org/10.1177/0163278708315919>
- U.S. Department of Health and Human Services (USDHHS). (2014). *The health consequences of smoking – 50 years of Progress: A report of the Surgeon General*. Retrieved from <https://www.surgeongeneral.gov/library/reports/50-years-of-progress/full-report.pdf>



- U.S. Department of Health and Human Services (USDHHS). (1988). *The health consequences of smoking: Nicotine Addiction: A report of the Surgeon General*. Retrieved from <https://profiles.nlm.nih.gov/NN/B/B/Z/D/>
- Walkup, J. T., Barlow, A., Mullany, B. C., Pan, W., Goklish, N., Hasting, R., . . . Reid, R. (2009). Randomized controlled trial of a paraprofessional-delivered in-home intervention for young reservation-based American Indian mothers. *Journal of the American Academy of Child & Adolescent Psychiatry*, 48(6), 591-601. <http://dx.doi.org/10.1097/CHI.0b013e3181a0ab86>
- Wexler, L., Trout, L., Rataj, S., Kirk, T., Moto, R., & McEachern, D. (2017). Promoting Community Conversations About Research to End Suicide: Learning and behavioural outcomes of a training-of-trainers model to facilitate grassroots community health education to address Indigenous youth suicide prevention. *International Journal of Circumpolar Health*, 76(1), 1-10. <http://dx.doi.org/10.1080/22423982.2017.1345277>
- Wyman, L., & Harris, S. (1941). *Navajo Indian Medical Ethnobotany* (Vol. 3). Albuquerque, NM: University of New Mexico Press.

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# **THROUGH THE DIAMOND THRESHOLD: A COMMUNITY-BASED PSYCHO-EDUCATIONAL GROUP TRAINING PROGRAM FOR TREATMENT OF SUBSTANCE USE DISORDERS AMONG AMERICAN INDIANS**

Rockey R. Robbins, PhD, Bryan G. Stare, PhD, and Brittany M. Riggan, MA

*Abstract: Researchers offer Through the Diamond Threshold, a culturally relevant, community-based training program to increase awareness and promote healing related to substance use disorders (SUD) among American Indians (AIs). For providers, this program seeks to promote greater cultural responsiveness, empathy, cultural humility, and effectiveness in SUD treatment provision. Largely interactive in nature, the activities offer an opportunity for participants to immerse themselves in an AI experience through the use of stories, music, a traditional meal, and experiential exercises. Twenty-six participants (the majority AI) associated with helping professions participated in a two-day program and then met in focus groups to discuss and report their views concerning the effectiveness of the program. Findings suggest that use of an immersive training experience, the centering of AI traditions and collectivism, as well as attention to historical context, were cited as key components in the success of the training. Several AI communities later used the program in a number of different venues and with a variety of participants.*

## **INTRODUCTION**

Historically, many community interventions for use with American Indians (AIs) have not been especially helpful because they have not addressed the primary concerns of tribal communities, have not utilized appropriate approaches, and have not addressed power differentials in partnerships (Edwards, Lund, Mitchell, & Andersson, 2008; McKennitt & Fletcher, 2007). Persons who formulated and implemented interventions were often limited in their knowledge of community strengths, traditions, values, and participation in tribal communities (Thomas, Donovan, & Sigo, 2010). Further, intervention research has been misinterpreted because of inadequate knowledge of tribal values and perspectives (Edwards et al., 2008). Tribal communities have expertise and knowledge that is critical to the development of culturally grounded interventions. Specifically, tribal elders and leaders have profound knowledge about psychological

health that it is imperative to acknowledge and utilize. It is also ethically imperative for outside health providers to enter into partnerships with tribal people and learn about tribal values and traditions as they collaborate in creating community interventions to minimize the potential for harm to tribal communities and individuals (Goldberg-Freeman et al., 2007). Duran, Jojola, Tsosie, and Wallerstein (2008) clearly articulated basic principles that foster collaboration and equity in working relationships and partnerships with tribal communities. They emphasize the utilization of community resources and culturally relevant and acceptable interventions.

Theoreticians and researchers argue that there are three major problems with Western mental health care systems being imposed on AI communities. First, ideas about mental health are ideologically different. Duran (2006) contends that Western approaches to counseling are based on individualism. Gone (2004) argued that Western counseling approaches are often lacking in contextualization, and they emphasize hierarchy and individualistic views, while AI paradigms reflect notions of interconnectedness, spirituality, nature, and different rules of behavior. Second, professionals trained in Western notions of mental health do not provide effective services to AIs. This is reflected in part by lower rates of mental health services being sought by AIs compared to non-AIs (Harris, Edlund, & Larsons, 2005), higher drop-out rates, and experiences of racism among AIs (Sarche & Spicer, 2008). Third, the Western paradigm of psychology, when imposed on AIs, is a form of continued colonization. This can be exemplified by emphases on individuality rather than participation within tribal communities, epistemological conflicts that materialize in contrasting views about mental disorders, and ontological conflicts such as different views regarding being and becoming.

We seek to address these discrepancies with the Western health care system by advocating ethical and culturally responsive counseling by presenting a community-based intervention for AIs. The Mid-America Addiction Technology Transfer Center, an organization striving to improve the health and quality of life of AI communities through advocacy and education, partnered with the University of Missouri-Kansas City, a facility helping professionals and organizations analyze, customize, and implement training programs to provide support to community-based psycho-educational group programs such as the one presented in this paper. These organizations attempted to create a culturally appropriate program, *Through the Diamond Threshold*, to facilitate AI community members' redefining the source and nature of substance use disorder (SUD), while also incorporating healing within relevant historical, cultural, and identity contexts. This partnership which utilized feedback from helping professionals offered evidence of the

effectiveness of the *Through the Diamond Threshold* program. Largely interactive in nature, the activities offered an opportunity for participants to immerse themselves in an AI experience, by using stories, music, a traditional meal, and experiential exercises. The program provided a context in which participants explored how life experiences and Eurocentric perspectives have shaped AI attitudes about themselves, their relationships, and their views of SUD. Several AI communities later used the program in a number of different venues and with a variety of participants.

In this article we describe the creation of the *Through the Diamond Threshold* program and the training of mental health professional participants who would eventually implement the program in their communities. Participants engaged in the training program and then gathered into focus groups where they evaluated it. After a brief literature review related to key components of the program, authors provide a comprehensive description of the *Through the Diamond Threshold* program and report participants' comments about the program.

## Literature Review

### Cultural Competency

Cultural competency was a primary consideration to the persons responsible for the creation and the implementation of the *Through the Diamond Threshold* program. Cultural competence is “a set of congruent behaviors, attitudes, and policies that come together in a system...and enable those professionals to work effectively in cross-cultural situations” (Cross, Bazron, Dennis, & Isaacs, 1989, p. 13). *Culture* refers to “the integrated pattern of human behavior that includes thoughts, communications, actions, customs, beliefs, values, and institutions of a racial, ethnic, religious, or social group”; and *competence* denotes the capacity to function effectively (Cross et al., 1989, p. 13). Sue (2006) maintains that cultural competency in a mental health setting is based around the idea that counselors and mental health providers should possess culture-specific skills and knowledge. They can in turn use this knowledge to implement appropriate interventions and effectively counsel members of differing cultures.

The need for multicultural competencies in the counseling profession has become widely accepted and acknowledged and is reflected in an increase in literature, training, and multicultural competence guidelines put forth by the American Psychological Association (APA, 2003). Meta-analysis of multicultural competency research has shown that client perception of therapist multicultural competency has shown a strong positive relationship with key therapeutic factors including client satisfaction, provider competence, and session depth (Tao, Owen, Pace, & Imel,

2015). Despite the consensus on the importance of multicultural competencies, how this competency is defined and implemented, as well as the underlying mechanisms of its effectiveness, have varied in the literature (Chu, Leino, Pflum, & Sue, 2016).

Various models of multicultural competency differ in the emphasis placed on attention to competency at the level of the person (the provider), competency at the process level of therapy, and competency in the use of skills and interventions (Chu et al., 2016). It has been proposed that engaging in multicultural competencies is helpful through its ability to create a contextual match between the client and their external realities, create an experiential match in the microcosm of the therapeutic relationship, and foster feelings of being understood and empowered (Chu et al., 2016). Additionally, few empirical studies have measured the development and presence of such competency during training, with most relying predominantly on self-report measures (Tormala, Patel, Soukup, & Clarke, 2018). While acknowledgement of the importance of multicultural competencies is certainly a step in the right direction, much of the literature appears to focus on the personal development of such competency but provides little in the way of concrete translation into work with clients. This may be especially true for novice providers seeking to grow in their use of purposeful and culturally mindful interventions and may be compounded by findings suggesting that most clinical supervisors did not receive extensive multicultural competency training (Duan & Roehlke, 2001). This reality may leave novice therapists with even less guidance in their everyday implementation of culturally congruent interventions. It is the authors' hopes that the present article will help fill this gap. Trimble (2003) ascertains that cultural competence should be a prerequisite for any type of psychological service delivered.

### **Community-based Interventions**

The *Through the Diamond Threshold* program is a community-based intervention, in which the authors sought to gain significant contributions from persons of communities where the program would later be utilized. Community-based interventions are those that are not aimed at a particular individual, but rather with a goal of targeting collective members of a defined group, community, or organization. Through this framework, community-based intervention helps to center a social justice perspective that many view as necessary to maintaining an ethically sound practice (Enns, 2004; Louis, Mavor, La Macchia, & Amiot, 2014). Community-based interventions have been successfully utilized with AI and indigenous populations (Holkup, Tripp-Reimer, Salois, & Weinert, 2004; Nelson & Tom, 2011; Thomas, Donovan, Sigo, & Price, 2011), as well as communities who report drug and alcohol abuse-related problems (D'Amico, Chinman,

Stern, & Wandersman, 2009; Gilligan, Sanson-Fisher, Anderson, & D'Este, 2011; Holder et al., 2000).

Previous researchers documented harmful effects and deficits associated with using Eurocentric evidence-based practices to counsel Native community members. Approaches may alienate clients by dismissing their traditions, values, and heritage; coercing assimilation; excluding experiences of oppression and historical trauma; and using mechanistic and reductive lenses incongruent with client spirituality (Gone, 2009). Unfortunately, recent pushes for use of evidence-based treatments have been criticized for not being culturally mindful. Relating trauma to multicultural competencies has received overall little attention in the literature (Mattar, 2011); however, most appropriately it has been the work of indigenous scholars who produced significant insight to help bridge the gap. Specifically, attention to the ways in which standard research practices and conceptualization of mental illness and trauma perpetuate colonization and use of community-based interventions are recommended (Hill, Lau, & Sue, 2010).

Researchers began developing community-based interventions by collaborating with AI and indigenous people in community-based participatory research approaches (Mohatt, 1989). These approaches better fit the needs of target group populations often misrepresented and further marginalized by researchers using more traditional methodologies (Whitesell, Sarche, Keane, Mousseau, & Kaufman, 2018). Gone (2009) adopted a bottom up approach to bridging the gap between evidence-based and culturally informed practice. That is, instead of taking existing evidence-based practices and modifying them to better fit oppressed populations, his work began within the AI community and highlighted important differences between how Westernized practice and Indigenous peoples conceptualize intrapsychic versus systemic factors, comprehensive healing versus symptom reduction, and how evidence for a treatment's effectiveness is measured. Further, it has been found that the concept of community connectedness serves as a protective factor for AIs, and thus, should be prioritized as a target of treatment and research (Schultz et al., 2016).

### **Alcohol Use Disorder and American Indians**

Alcohol use disorder (AUD) is one of the most significant problems for AIs and is associated with almost 12 percent of AI deaths, a number three times higher than the general population (NBC News, 2008). AIs have higher rates of driving while intoxicated and related deaths than the general population and are five times more likely than Whites to die of alcohol-related causes, such as liver disease (USDHHS, 2007). In the 2012 National Survey on Drug Use



and Health, it was determined that of six racial and ethnic groups, 41.7 percent of AIs had used alcohol within the past month, the second lowest percentage among the groups. However, 30.2 percent of AIs reported binge use of alcohol (five or more drinks on the same occasion), and 8.5 percent reported heavy use of alcohol (five or more drinks on the same occasion for five or more days), the highest of any other racial or ethnic group (USDHHS, 2012). This survey indicated that although AIs consume alcohol less frequently than other races, those that do often use alcohol in excess.

Not only is AUD prevalent within AI populations, but underage drinking has also become a major issue. Collins and Pritchard (2007) found that the average age of first time alcohol use in AI populations was 13.2 years of age, one year younger than the national average. They also found that 11 percent of 12- to 17-year-olds had reported past-month binge drinking (Collins & Pritchard, 2007). Nearly one in 10 AIs die from alcohol related causes, and 66% are under the age of 50 (NBC News, 2008). These statistics show the prevalence of AUD within the AI community and the need for culturally minded interventions.

### **Training Overview**

*Through the Diamond Threshold* is a culturally relevant, community-based program for AI community members who experience SUDs. The goal of this project is to benefit AI communities through community action research; consequently, the program began with contacting community representatives by phone and asking them what areas of concern they had and then about relevant ways of addressing them. During initial discussions, representatives stated that communities wanted a program that community members could take primary responsibility for and utilize long term. Professional helpers from tribal communities that expressed an interest in initiating new approaches to address drug and alcohol issues were especially targeted for participation. The program creators were adamant that integrating the unique understandings, strengths, and responsibilities involved in creating and implementing projects in AI communities would enhance outcomes and relevance (Jacklin & Kinoshameg, 2008) for community members. The *Through the Diamond Threshold* program focuses on the larger community and in educating participants about tribal/cultural perspectives, experiences, and therapeutic interventions. It brings persons who struggle with SUD and community members who are both directly and indirectly impacted together with professional helpers. It does not replace existing intervention programs but may serve as a gateway to participation in them.



A meeting was held with 25 adults from mental health agencies that serve AI people. Fifteen tribal nations were represented. They discussed the need for a curriculum that might facilitate tribal members to discuss issues related to SUD in their communities. A few months later, the same group reconvened to participate in activities potentially suitable for a curriculum. After participating in only three activities, participants expressed discontent. They reported that the first activity's title, "The Wagon Wheel" was insensitive to AIs because of its association with colonialization. Several of the other activities, such as a family problem solving activity, failed to represent typical AI configurations and protocols. Another activity required moving in tabooed directions (different tribes move around circles in different directions during dances, ceremonies, etc. and will not move in the opposite direction as it would run counter to the way they see the movement of positive energy). Consequently, participants and representatives from both organizations decided to involve AIs who had previous experience writing curricula for AIs in the creation of a new curriculum with greater cultural relevance and appropriateness. During the first "failed" planning meeting, comments revolved around an interesting statement by one of the participants: "We don't want a program that is based on some Western psychology with beads and feathers hung on it." Present authors attempted to follow Duran et al.'s (2008) admonition for interventions that emerge from a community's traditions, values, and indigenous knowledge and resources.

Five people, representing five tribes, met three times to discuss what kind of a curriculum might serve AIs in a more culturally relevant fashion. The group decided to write a curriculum that would focus on community rather than individual education. They incorporated tribal histories, interpersonal processing, and holistic wellness rather than focusing solely on cognitive education. They also focused on stories rather than problem solving, inner and outer experiences over behavioral and cognitive change, and relational instead of didactic learning. The group found that focusing on strengths and healing rather than on problems and deficits was beneficial for understanding SUDs. Some researchers suggested that less prescriptive, more flexible programs promoting culturally relevant and effective psycho-educational group techniques are more beneficial for AI populations. They found that programs promoting cultural identity, self-disclosures, processing, altruism, and an emphasis on strength-based models were preferable to psychology's traditional deficit model or a specifically alcohol treatment-focused model (Robbins, Tonemah, & Robbins, 2002; LaFromboise & Rowe, 1983).

### **Overarching Goals and Objectives**

The main goal of this program was to provide mental health professionals with an immersion experience that they might replicate with clients experiencing SUDs. Facilitators implemented three objectives to achieve this goal. The first objective was to provide an atmosphere in which participants could immerse themselves in an AI experience in order to explore their own attitudes, beliefs, and perceptions of SUDs from a cultural perspective. The second objective was for participants to experience the AI worldview of interpreting reality “through heart and hand as well as mind” (quote from focus group meeting). The third and final objective was to create an environment of trust and openness where personal reflection and group discussion fostered evaluation of one’s beliefs and attitudes relating to one’s own life experiences.

In the appendix are edited summaries of four activities drawn from the *Through the Diamond Threshold* curriculum booklet (Robbins, Asetoyer, Nelson, Stilen, & Tall Bear, 2011) that were used during the program described in this paper, as well as a sample agenda and a description of the facilities.

## **METHODS**

### **General Qualitative Approach**

Researchers utilized a general qualitative research approach in this study. Interpretive techniques were utilized in seeking to describe, decode, translate, and otherwise come to terms with the meaning, not the frequency, of comments made by participants. The researchers assume knowledge and reality are constructed in and out of interaction between human beings. In this case, focus group (described later) members constructed what they interpreted as the meaning of their experience as participants in the *Through the Diamond Threshold* program. Later, as will be described in the analysis section, researchers employed an inductive thematic analysis of the transcripts of participant comments. Researchers read and re-read the transcripts, coded significant ideas, and placed them in categories, formulated themes, and then interpreted and theorized (Creswell, 1998).

### **Indigenous Methodology Framework**

This article is built on the framework of Indigenous Methodology, which is defined as “research by and for indigenous peoples, using techniques and methods drawn from the traditions

and knowledges of those peoples” (Evans, Hole, Berg, Hutchinson, & Sookraj, 2009, p. 894). The main intention of Indigenous Methodology is to ensure that research is conducted in a respectful and culturally sensitive fashion from an Indigenous perspective. Thus, our contention is neither to reject nor compete with Western psychology, but to generate meaningful discussions by challenging Western psychology with the questions folk and indigenous knowledges raise about the nature of our being and healing. It is our assumption that the certainty and “scientific rigorousness” of Western psychology and its process of judging knowledge and truth (Kincheloe & Steinberg, 2008) need reassessment. Locally constructed and transmitted knowledges and values can provide new and different perspectives of psychological theories.

The methods involved: 1) community involvement at every stage guiding the project creation, implementation, and research (i.e., participants decided that they wanted focus groups to solicit qualitative data rather than individual interviews arguing that such an approach is more congruent with AI group participatory values); 2) local knowledge, expertise, and traditions informed the development of research questions and later interpretations of data (a traditional tribal member assisted in both regards); and 3) the research benefited the tribal communities when the project was implemented by trained facilitators at several tribal communities.

## **Participants**

The leaders of the program selected 25 AI and non-AI professional behavioral health helpers from across several states to participate in a two-and-a-half day *Through the Diamond Threshold* program training. The participants consisted mainly of Native and non-native behavioral health professionals who serve AI people; however, also in attendance were AI tribal leaders and elders, spiritual healers, and non-native behavioral health workers. Fourteen different tribes were represented as well as one African American and four Euro-American counselors. The non-AI participants had experience working with tribes and AI populations. The ages of participants ranged from 26 to 62, while the range of counseling experience ranged from 1 to 30 years. Out of the 25 participants, 16 were female and 9 were male. Eight participants were drug and alcohol counselors, 6 social workers, 3 AI community counselors, 3 service organization volunteers, 2 mental health administrators, and 2 AI medicine persons. The fourteen tribes represented were Cherokee, Choctaw, Potawatomie, Shawnee, Comanche, Navaho, Chickasaw, Creek, Cheyenne, Seminole, Kickapoo, Kiowa, Apache, and Cheyenne-Arapaho.

## Curriculum

The *Through the Diamond Threshold* program is an attempt to provide a culturally relevant intervention that may contribute to helping AI communities where persons struggle with tribal identity issues and SUDs. Available literature suggests that some AI individuals may experience feelings of distrust as a product of colonization with regard to Eurocentric forms of treatment and may prefer treatment which draws upon indigenous healing traditions (Moore, Aarons, Davis, & Novins, 2015). A perceived cultural mismatch between the individual seeking treatment and the type of treatment available has also been identified as a barrier to treatment regarding SUDs (Venner et al., 2012). The purpose of the *Through the Diamond Threshold* program, evaluated later in this article, was to provide mental health professionals with a validated model, knowledge, and skill set that could be used in their work with AI community members.

Training activities emphasized small and large group discussions and were often experienced through storytelling and facilitator-guided experiential exercises. Exposure to images and the use of movies (DVD) and music (live and CD/MP3) were also utilized along with a smudging ceremony and a traditional meal. The curriculum used in this study can be accessed in its entirety online at [http://www.attcnetwork.org/regcenters/productDocs/5/Through\\_Diamond\\_Threshold.pdf](http://www.attcnetwork.org/regcenters/productDocs/5/Through_Diamond_Threshold.pdf). The format consists of the following subtitles: goals, material needs, time needed for completion, and procedures and questions (each activity has 10 sample questions for discussion purposes). Twelve activities (four detailed in Appendix A) include the Naming Wheel, Acculturation Issues, Firewater Myth Deconstruction, Give-Away, Indian Country Role Play, Lakota Medicine Wheel, Soul Wound, Sucker Punched, Talking Circle, Through the Diamond Threshold: Storytelling Wisdom, Walking in Another's Moccasins, and Web of Life. All the activities have SUD as the primary theme in relation to historical trauma, lateral oppression, acculturation issues, humor, interconnectedness, nuclear and extended family issues, tribal and personal identity, prejudice, and community healing among AIs.

All activities were assigned one of three ratings to denote their emotional intensity. An activity with a low emotional intensity involves a passive and/or cognitive activity requiring minimal self-disclosure. A moderate emotional intensity activity includes storytelling by the facilitator followed by active discussion, as well as a moderate level of participant self-disclosure and anticipated emotional responses. A high emotional intensity rating contains activities unfamiliar to most participants that include simulations intended to evoke participant emotions and/or dissonance regarding previously held perceptions. Interspersed throughout the program,

traditional AI rituals were performed, such as AI songs, smudging, a stomp dance exhibition, prayers prayed in tribal languages, giveaways, and traditional foods.

### **Researchers/Facilitators**

Two facilitators led the activities for *Through the Diamond Threshold*: one Kiowa woman and the other a Cherokee/Choctaw man. They were behavioral health specialists who had credibility with Native and non-native audiences and were attuned to their own tribal cultures. They had a high degree of knowledge about the dynamics of training and intercultural and inter-generational learning. Each facilitator was well prepared and comfortable with the exercises.

In addition to the facilitators described above, two other researchers also assisted in the writing of this paper.

### **Focus Groups**

Facilitators/researchers conducted focus groups with the *Through the Diamond Threshold* program's participants the morning after their two-day training. Focus groups involved the gathering together of small groups of people to gather meaningful data (Bradbury-Jones, Sanbrook, & Irvine, 2009). They are especially effective when data collection time is limited. The 4 focus groups consisted of 6 participants each, split randomly. One participant could not attend the focus group. Each group elected a scribe to take notes during the focus group discussions. Later the scribe would read the notes back to the group, and the group told the scribe what they thought were the most "salient points" of their discussions. They were given one question for discussion about every 45 minutes. Each group provided the facilitators/researchers their most salient points written on a piece of paper.

### **Data Analysis**

The participants' written comments were collected for the use of triangulation (Stake, 2000; Yin, 1984) to provide understanding of the focus group work. Three researchers (including one of the program's facilitators) took care, when separately considering themes, to not reduce or manipulate remarks. First, they independently coded the transcripts and then compared them. There was general agreement (90%), and through discussion some of the codes were deleted, modified, and merged. Gradually, through ongoing discussions, larger categories were agreed

upon and meanings were formulated (Corbin & Strauss, 1998). As researchers analyzed and began to write the discussion section, efforts were made not to provide too much personal interpretation, yet not to fail to provide insightful commentary (Wolcott, 1994). Lastly, researchers made their interpretations available for fellow scholars, including AI scholars, and sought their feedback.

The researchers read and reread the interview transcripts, field notes, and memos and then highlighted significant remarks throughout the documents. The highlighted remarks were compared, contrasted, and aggregated in order to find similar patterns and categories. Throughout this process, the researchers triangulated and summarized the extensive text into core themes that reflected overall contexts and meaning (Creswell, 1998). During the process, the researchers deconstructed concepts from Western psychology aiming to loosen any rigidity related to meaningful interpretation that the researchers might be influenced by. It was the researchers' hope to expand and enrich the limited Western meanings.

## RESULTS

Following is a summary of participant responses to the four focus group questions.

### **Question One: What did you learn during the program?**

One focus group said that the program had reminded them of “the tribal wisdom that the past, present, and future are all on one script, now.” They explained that they felt “at one with massacred ancestors and with those who will live seven generations from now and compelled to work at alleviating some of the pain.” Other participants reported the program reminded them they had “a voice,” and they could tell their experience as a “story.” It provided a space where participant experiences of historical trauma were “validated” and insights were gained about the “different dimensions of the soul wounds.” Two groups reported that having non-Natives present during the training enriched the experience. Others claimed they had learned to contextualize “knowledge in unfolding history.” Participants claimed to have gained knowledge about AUD, such as: viewing it as “a symptom of larger political and psychological issues,” considering “early drinking patterns” and “gender differences” in regard to drinking, and to have been provided with a “new model” with which to treat it. They learned about “generational conflicts” and differences about “types of alcohol misuse.” They reported that “healing” had occurred because of the “emotional level of the learning” that had taken place. One group said they “learned how to

restructure situations and information to gain new interpretations.” One focus group said they “felt empathy in a way they had never felt before, for all tribal people” concerning historic trauma.

### **Question Two: What was helpful and unhelpful about the training?**

The most repeated helpful statements had to do with a renewed awareness of “oneness” which was a word that participants used throughout the program. They found it helpful that the “feeling of community” was emphasized, creating trust and an emphasis on the idea of “one heart and one mind.” Another focus group reported that the “communal sense of the program” reflected a tribal approach to healing. Some reported appreciation of the “circular nature” of the arrangements, conversations, and worldviews. More than one group reported healing in a “no time, no space American Indian spirituality” and awareness of “spiritualities’ deeper meanings.” One group reported that it helped to appreciate both the oneness of all people, but also their differences. They said that they had a sense of the “reality of historic trauma” and how it related to SUDs. They reported having deepened their understanding of “cultural competence” regarding tribal differences and respect for AIs in general. Focus group participants appreciated focusing on “strengths rather than the deficits” of AI people. One group said that using “cultural ways and stories” as the basis of all the interactions and conversations was “key to the healing” that took place. One group added that they liked the “democratic but hierarchical nature of the program that reflected American Indian ways.” Another group said they learned about “lateral oppression-in terms of race and gender.” One group reported that the program had resulted in “the coining of new terms to help participants to understand the power of occurrences” and appreciation of the use of “Native American language to catch the deeper meanings.” The “incredible experiential nature and narrative story basis” of the program was praised. Only one group offered a criticism saying that the Talking Stick gift was “not given away with enough clarification of how it was to be used and taken care of.”

### **Question Three: Describe activities you found were helpful or not helpful**

One group reported that the Naming Wheel activity “helped all of us to know where we came from and who we are” and to “connect with ancestors.” The Talking Stick activity led to “surprising discoveries about how we all need to heal.” It also “touched something old, reminding us of our structures, respect, and ways of expressing feelings in a group.” The Web of Life helped



to make both “physical and emotional connections and to support and encourage each other.” It also “summed up the unity that permeated the workshop and made it so successful.” Soul Wound helped participants to “feel and to have a long-awaited catharsis about attempts of genocide against Native Americans.” The Action/Replay game “tapped into Indian humor and silliness in a good way.” Indian Country Role Play “got at some complex psychological as well as community experiences with alcohol.” One group reported that all the “ceremonies from songs, dancing, prayer, and arrangements were deeply moving and life changing.” Criticisms were: “We are at a time now when women should be able to touch the talking stick even if they are on the moon.” Another was: “If you go to some other places you want to change the Cherokee story out to letting an elder to tell a story from the tribe you are working with.”

#### **Question Four: With what groups might you use this program?**

They suggested using the program to train mental health staffs (Native and non-native) as well as for staff team building. It might be used in outpatient programs in AI communities. Trained facilitators could use it with youth groups and at family nights in tribal communities to address SUDs. One focus group said it might be used with non-native professional helpers to “increase cultural sensitivity and competence for when they are working with Native Americans.” Persons on tribal councils would benefit from the awareness this program could offer. The individual activities could be used in group counseling sessions. It might be “conducted with students at Indian colleges, tribal and boarding schools,” youth camps, and detention centers. It could be used at the “front end of staff planning retreats.” It could be used with groups for AI advocacy. It should be presented at state and national social workers and psychology conferences. “The booklet should be shared on a website.”

Though there were no participants who criticized the Soul Wound activity (Appendix A), the facilitators had discussions following the interventions that demonstrated their concerns that the activity may have re-traumatized AI participants. While the facilitators agree that this activity may potentially be harmful to some participants, they also believe that including discussion of AIs’ historic trauma is a necessary component of any psychological intervention with AIs. American Indian identity activities that do not include a realistic grappling with past atrocities cannot affectively address AI identity issues. Nonetheless, it is vital that the timing and the contextualization of this activity is sensitively taken into account when scheduling, implementing, and facilitating group process.

## DISCUSSION

We began this paper describing the importance of community interventions in Indian Country. Researcher and theorists' references suggested that a focus on individual at the expense of tribal community interventions contradicted AI values (Hill et al., 2010). The *Through the Diamond Threshold* program addressed this issue from several angles. As described in the description of the program above, participants were drawn from health providers who worked in tribal communities. Facilitators encouraged participants to forge partnerships with their tribal people in their communities. Participants began planning a variety of activities for their communities at the end of the program, not only to train health providers to carry out the program but also to use the activities they learned in youth groups, family nights, retreats for tribal employees, and team building situations.

The literature review also suggested that AUD was often a problem in tribal communities and early alcohol usage was specifically referenced (Collins & Pritchard, 2017). This program provides activities that are not only culturally relevant but age-appropriate for teenage persons and their families. The persons who wrote this program put in much effort into writing activities and questions for processing to promote discussions in which alcohol use disorder and other challenges were linked to historical trauma and contemporary inequalities and discrimination. Participants appeared to appreciate this in their comments about gaining a more "complex psychological understanding" and seeing alcohol use disorder as "a symptom of generational conflicts."

One cannot overestimate the crucial contribution made by the tribally relevant activities that foregrounded historical context, generational influences, and ancestors. These activities were punctuated with experiences (such as a stomp dance, Kiowa and Choctaw songs, prayers in Muscogee, and a traditional Cheyenne meal) that had a sizable impact on the overall success of the program. Instead of focusing only on dispensing cognitive information (which was especially effective when discussing SUDs), spaces were created to respect spiritual being and emotional intelligence. This was especially apparent in the Soul Wound activity, as AIs have experienced over 500 years of genocidal governmental policies and prejudicial acts. In Soul Wound there was less emphasis on what can be learned cognitively than on how participants emotionally understood historical trauma.

The genocidal heritage discussed in *Through the Diamond Threshold* involved both victims and oppressors, AIs and non-AIs. By putting problems such as SUDs, depression, and anxiety in historical and current oppressive discursive contexts, participants believed they could

develop more profound and complex understandings that might lead to more appropriate interventions for AIs. AI participants expressed gratitude for the validation and empathy from non-native participants (Whitbeck, Adams, Hoyt, & Chen, 2004; Brave Heart, 2003). Having AI's and non-AI's together helped to embody the tension of both present and past conflicts between cultures. To attempt to deal with the pain as a single culture would have been limited. The appreciation of the narratives of the contemporary and the past necessitates an awareness of their inextricable connection and of how they influence each other. This kind of training had to be utilized in order for holistic and inter-connected healing to take place.

The literature review presented in this publication shows the necessity of carefully and appropriately integrating tribal/cultural values into intervention programs for AIs (LaFromboise & Fatema, 2011; LaFromboise, Trimble, & Mohat, 1990). Specifically, participants reported that the use of stories (Robbins, Scherman, Holeman, & Wilson, 2005) was culturally and personally meaningful. Respecting hierarchy while operating within communal structures was noted as culturally consistent (Garrett, 2006). Openly discussing lateral oppression (BigFoot, 2000; Robbins et al., 2006), acknowledgement of diversity and commonalities amongst different tribes as well as different acculturation levels (Reickman, Wadsworth, & Deyhle, 2004), and engagement in spirituality in terms of depth of experience (Duran & Duran, 1995) were other important elements. As reported in the results section, participants appeared to have truly experienced, not simply on a cognitive level, but on a profoundly emotional level, a variety of content areas that the above referenced researchers have deemed as integral elements that should make up programs involving AIs.

The value of inter-connectedness was especially emphasized in the literature review (Gone, 2009). A possible reason for participants' exceptional experiences of interconnectedness, as reported above, was the *Through the Diamond Threshold* program and the facilitators' acceptance of affective and intuitive wisdom, historicity, and collectivistic tribal culture awareness as being as valuable as empirical knowledge. Too often education in general may ignore tribal wisdom traditions, which value knowledge gained through mystical and inter-subjective, emotional experiences. The spiritual traditions of AIs and other traditional Native collectivist cultures are less likely to reduce experience into narrowly defined categories. Such openness may have contributed to the participants freely expressing feelings and thoughts about their personal, transpersonal, and tribal mythical experiences and how their personal experiences related to tribal stories and knowledges. Notwithstanding, participants also appreciated the grounding of

facilitators' recurrent efforts to concretize experience with empirical research, psychological theory, and tribal histories.

Participants freely offered comments that transcended Western cultural ideology. They remarked on intuitions beyond typical categories of thought. Participants argued that what they were talking about could only be pointed at through the use of their Native language. The rituals honoring ancestors, the talking stick, the circular movements of the activities, the shell shaking, the playfulness, the story telling, and much more contributed, for some, to a healthy dissociative state of mind (Robbins, Hong, & Jennings, 2011) that has the potential to unlock creative potentials. Joseph Campbell (1964) argued that the state of healthy disassociation is the “most important single creative force in the history of civilization” (p.57). He describes these states of being as “a release from the yoke of individuality achieved through group rites that induce rapture” (p. 141). He contended that these types of group experiences connected participants to spirit (“the inherent reality of us all,” p. 345). He defines the spirit as the “force that moves by itself” (p. 328), which results in unselfish creative activity. Participants suggested the tribal spiritual focus of the program contributed to personal transformation and realizations such as seeing the past, present, and future as a single script of which they played a role in caring about addressing the suffering of others.

Regarding the criticisms listed in the result section, one might have noted that they all have to do with proper tribal protocol and secret tribal ceremonial knowledges. The ethical dilemma is whether, how much, and when it is appropriate to ever specifically discuss tribal healing with White civilization, which primarily values the accessibility of knowledge or, worse, is voyeuristically curious about AI ways. For AIs, the mystical experiences are inherent in healing interactions. The activities in *Through the Diamond Threshold* are not simply metaphorical framework, they provide the space and contribute to authentic, coherent experiences of reality, dynamically changing and healing human beings. It is vital that whoever uses this program is careful to adapt it to the particular tribal groups they are working with. In addition, when using sacred objects, a respected elder should be present, guiding their use.

## **Follow Up**

Since the program took place two years ago, the researchers have been informed directly that the *Through the Diamond Threshold* program in the form described above has been utilized with drug and alcohol counselors and other professional helping people in two tribal communities,

both reporting great success. Eleven persons have reported using at least a portion of the program with their tribal communities. Dozens of interested persons (no record has been kept, but we estimated 50 calls) across the United States, from Boston to Palms Springs, have called either the Mid-America Addiction Technology Transfer Center, Inter-tribal Counsel, or the primary author requesting the use of the materials, especially “Soul Wound.” Because of this interest, the *Through the Diamond Threshold* curriculum book has been made available online ([http://www.attcnetwork.org/regcenters/productDocs/5/Through\\_Diamond\\_Threshold.pdf](http://www.attcnetwork.org/regcenters/productDocs/5/Through_Diamond_Threshold.pdf)).

### **Recommendations for Future Programs**

Having some non-AIs as participants in the project appeared to be highly valued by AI participants. Therefore, conscientious effort should be made to include at least a few non-native people who can help in terms of validation of AI experiences as well as providing the non-AI participants with experience and knowledge in their work with tribal people.

While this program was conducted over the course of three days for this research project, it can also be utilized in a more piecemeal fashion. For instance, one may choose to conduct the program during one full day of 6-8 hours or a single half day of 3-4 hours. Additionally, one may choose to employ the use of different activities for different situations and re-arrange the agenda to suit the situation. Later trainings that followed this one involved: two consecutive full days of 10 hours, another one full day of 8 hours, and another 5 hours. The training agendas provided here are suggestive only. The facilitators are encouraged to adapt the agenda relative to the participants and organizational context. Agendas should consider the range of low, moderate, and high-level emotional intensity of the activities. Certainly, it is better to delay highly emotional activities until participants trust each other.

It is highly recommended that the lead facilitator be a tribal person who has experience working with AIs and with experiential activities and processing. Furthermore, participants from different career areas may need facilitators with different characteristics and strengths. And when using tribal artifacts, an AI elder should be present. It should also be mentioned that it is difficult to reach desired outcomes of cultural humility for providers within a two-day program. Lastly, reliance on focus group comments for evaluation of a program may be limiting because, as previously described, it is potentially biased due to the modalities researchers used to collect participant data. It may be beneficial to implement one-on-one data collection in addition to focus group evaluation.

## Future Research

Further research may focus more on the impact on different therapeutic factors such as facilitator empathy, altruism among participants, imparting knowledge, social dynamics, group cohesion, or other factors that may impact outcome. Drawing from this study, researchers may want to measure the impact upon participants by non-native participants' effects. Pre and post measures might be used to measure increases in tribal identification, and longitudinal studies to measure impact on drug and alcohol use would be valuable. Researchers may also conduct a quantitative study to see if the training helps providers to become more culturally competent, empathetic, and effective in SUD treatment prevention.

## REFERENCES

- American Psychological Association (APA). (2003). Guidelines on multicultural education, training, research, practice, and organizational change for psychologists. *American Psychologist*, 58, 377-402. Retrieved from <http://www.apa.org/about/policy/multicultural-guidelines.pdf>
- BigFoot, D. (2000). *History of victimization in native communities*. Washington, D.C.: U.S. Dept. of Justice, Office of Justice Programs, Office for Victims of Crime. Retrieved from <https://www.oumedicine.com/docs/ad-pediatrics-workfiles/victimizationissues.pdf>
- Bradbury-Jones, C., Sambrook, S., & Irvine, F. (2009). The phenomenological focus group: An oxymoron? *Journal of Advanced Nursing*, 65(3), 663-671. <http://dx.doi.org/10.1111/j.1365-2648.2008.04922.x>
- Brave Heart, M. Y. H. (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>
- Campbell, J. (1964). *Occidental mythology: The masks of God*. New York, NY: Penguin Books.
- Chu, J., Leino, A., Pflum, S., & Sue, S. (2016). A model for the theoretical basis of cultural competency to guide psychotherapy. *Professional Psychology: Research and Practice* (47)1, 18-29. <http://dx.doi.org/10.1037/pro0000055>
- Collins, S., & Pritchard, M. (2007). *Alcohol trends among Native American youth: A look at a reservation in Nevada*. Retrieved from [http://scholarworks.boisestate.edu/cgi/viewcontent.cgi?article=1033&context=mcnair\\_journal](http://scholarworks.boisestate.edu/cgi/viewcontent.cgi?article=1033&context=mcnair_journal)
- Corbin, J., & Strauss, A. (Eds.). (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Thousand Oaks, CA: SAGE Publications, Inc.



- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: SAGE Publications, Inc.
- Cross, T. L., Bazron, B. J., Dennis, K. W., & Isaacs, M. R. (1989). *Towards a Culturally Competent System of Care: A Monograph on Effective Services for Minority Children Who Are Severely Emotionally Disturbed*. Washington, DC: Georgetown University.
- D'Amico, E. J., Chinman, M., Stern, S. A., & Wandersman, A. (2009). Community prevention handbook on adolescent substance abuse prevention and treatment: Evidence-based practices. In C. G. Leukefeld, T. P. Gullotta, & M. Staton-Tindall (Eds.), *Adolescent substance abuse: Evidence-based approaches to prevention and treatment* (pp. 213-249). New York, NY: Springer Science + Business Media. [http://dx.doi.org/10.1007/978-0-387-09732-9\\_11](http://dx.doi.org/10.1007/978-0-387-09732-9_11)
- Duan, C., & Roehlke, H. (2001). A descriptive "snapshot" of cross-racial supervision in university counseling center internships. *Journal of Multicultural Counseling and Development, 29*, 131-146. <http://dx.doi.org/10.1002/j.2161-1912.2001.tb00510.x>
- Duran, B., Jojola, T., Tsosie, N., & Wallerstein, N. (2008). Assessment, program planning and evaluation in Indian Country: Toward a postcolonial practice of indigenous planning. In R. M. Huff & V. Kline (Eds.), *Promoting Health in Multicultural Populations: A Handbook for Practitioners*. Thousand Oaks, CA: SAGE Publications, Inc.
- Duran, E. (2006). *Healing the soul wound: Counseling with American Indians and other native peoples*. New York, NY: Teachers College Press.
- Duran, E., & Duran, B. (1995). *Native American postcolonial psychology*. Albany, NY: State University of New York Press.
- Edwards, K., Lund, C., Mitchell, S., & Andersson, N. (2008). Trust the process: Community-based researcher partnerships. *Pimatisiwin: Journal of Aboriginal and Indigenous Community Health, 6*(2), 187-199. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2942844/>
- Enns, C. Z. (2004). *Feminist theories and feminist psychotherapies: Origins, Themes and Diversity*. (2<sup>nd</sup> ed.). New York, NY: Hayworth.
- Evans, M., Hole, R., Berg, L., Hutchinson, P., & Sookraj, D. (2009). Common insights, differing methodologies: Towards a fusion of indigenous methodologies, participatory action research, and white studies in an urban aboriginal research agenda. *Qualitative Inquiry, 15*(5), 893-910. <http://dx.doi.org/10.1177/1077800409333392>
- Garrett, R. K. (2006). Protest in an information society: A review of literature on social movements and new ICTs. *Information, Communication & Society, 9*(2), 202-224. <http://dx.doi.org/10.1080/13691180600630773>



- Gilligan, C., Sanson-Fisher, R., Anderson, A. E., & D'Este, C. (2011). Strategies to increase community-based intervention research aimed at reducing excessive alcohol consumption and alcohol-related harm. *Drug and Alcohol Review*, 30(6), 659-663. <http://dx.doi.org/10.1111/j.1465-3362.2010.00263.x>
- Goldberg-Freeman, C., Kass, N.E., Tracey, P., Ross, G., Bates-Hopkins, B., Purnell, L., ... Farfel, M. (2007). "You've Got to Understand Community": Community perceptions on "breaking the disconnect" between researchers and communities. *Progress in Community Health Partnerships*, 1(3), 231-40. <http://dx.doi.org/10.1353/cpr.2007.0021>
- Gone, J. P. (2004). Keeping culture in mind. In D.A. Mihesuah, & A.C. Wilson (Eds.), *Indigenizing the academy* (pp. 124-142). Lincoln, NE: University of Nebraska Press.
- Gone, J. P. (2009). A community-based treatment for Native-American historical trauma: Prospects for evidence-based practice. *Journal of Consulting and Clinical Psychology*, 77(4), 751-762. <http://dx.doi.org/10.1037/a0015390>
- Harris, M. H., Edlund, M. J., & Larsons, S. (2005). Racial and ethnic differences in the mental health problems and use of mental health care. *Medical Care*, 43(8), 775-784. <http://dx.doi.org/10.1097/01.mlr.0000170405.66264.23>
- Hill, J. S., Lau, M. Y., & Sue, D. W. (2010). Integrating trauma psychology and cultural psychology: Indigenous perspectives in theory, research, and practice. *Traumatology*, 16(4), 39-47. <http://dx.doi.org/10.1177/1534765610388303>
- Holder, H. D., Gruenewald, P. J., Ponicki, W. R., Treno, A. J., Grube, J. W., Saltz, R. F., & ... Roeper, P. (2000). Effect of community-based interventions on high-risk drinking and alcohol-related injuries. *JAMA*, 284(18), 2341-2347. <http://dx.doi.org/10.1001/jama.284.18.2341>
- Holkup, P. A., Tripp-Reimer, T., Salois, E. M., & Weinert, C. (2004). Community-based participatory research: An approach to intervention research with a Native American community. *Advances in Nursing Science*, 27(3), 1621175. <http://dx.doi.org/10.1097/00012272-200407000-00002>
- Jacklin, K., & Kinoshameg, P. (2008). Developing a participatory aboriginal health research project: "Only if it's going to mean something." *Journal of Empirical Research on Human Research Ethics*, 3(2), 53-67. <http://dx.doi.org/10.1525/jer.2008.3.2.53>
- Kincheloe, J. L., & Steinberg, S. R. (2008). Indigenous knowledges in education. In N.K. Denzin, Y.S. Lincoln, & L.T. Smith (Eds.), *Handbook of critical and Indigenous methodologies* (pp.135-156). Thousand Oaks, CA: SAGE Publications, Inc.
- LaFromboise, T. D., & Fatema, J. S (2011). Native American life skills: A community-based intervention for Indigenous mental health. In M. C. Sarche, P. Spicer, P. Farrell, & H. E. Fitzgerald (Eds.), *Native American and Alaska Native Children and Mental Health* (pp. 309-336). Santa Barbara, CA: Praeger.

- LaFromboise, T. D., & Rowe, W. (1983). Skills training for bicultural competence: Rationale and application. *Journal of Counseling Psychology, 30*, 549-595. <http://dx.doi.org/10.1037/0022-0167.30.4.589>
- LaFromboise, T. D., Trimble, J. E., & Mohatt, G. V. (1990). Counseling intervention and Native American tradition: An integrative approach. *The Counseling Psychologist, 18*, 628-654. <http://dx.doi.org/10.1177/0011000090184006>
- Louis, W. R., Mavor, K. I., La Macchia, S. T., & Amiot, C. E. (2014). Social justice and psychology: What is and what should be. *Journal of Theoretical and Philosophical Psychology, 34*(1), 14-27. <http://dx.doi.org/10.1037/a0033033>
- Mattar, S. (2011). Educating and training the next generations of traumatologists: Development of cultural competencies. *Psychological Trauma: Theory, Research, Practice and Policy, 3*(3), 258-265. <http://dx.doi.org/10.1037/a0024477>
- McKennitt, D. W., & Fletcher, F. L. (2007). Engaging with aboriginal communities in collaborative research. *University of Alberta Health Sciences Journal 4*(1), 30-32. Retrieved from <https://www.ualberta.ca/medicine/programs/resources/uahsj>
- Mohatt, G. V. (1989). The community as informant or collaborator? *American Indian and Alaska Native Mental Health Research, 2*(3), 64-70. <http://dx.doi.org/10.5820/aian.0203.1989.64>
- Moore, L. A., Aarons, G. A., Davis, J. H., & Novins, D. K. (2015). How to providers serving American Indians and Alaskan Natives with substance abuse problems define evidence-based treatment? *Psychological Services, 12*(2), 92-100. <http://dx.doi.org/10.1037/ser0000022>
- NBC News. (2008). *1 in 10 Native American deaths alcohol related*. Retrieved from <http://www.nbcnews.com/id/26439767/#.UrnErnlDFo0>
- Nelson, K., & Tom, N. (2011). Evaluation of a substance abuse, HIV and hepatitis prevention initiative for urban Native Americans: The Native Voices Program. *Journal of Psychoactive Drugs, 43*(4), 349-354. <http://dx.doi.org/10.1080/02791072.2011.629158>
- Reickmann, T. R., Wadsworth, M. E., & Deyhle, D. (2004). Cultural identity, explanatory style, and depression in Navajo adolescents. *Cultural Diversity and Ethnic Minority Psychology, 10*, 365-382. <http://dx.doi.org/10.1037/1099-9809.10.4.365>
- Robbins, R., Asetoyer, D., Nelson, D., Stilen, P., & Tall Bear, C. (2011). *Through the Diamond Threshold: Promoting cultural competency in understanding American Indian substance misuse*. Kansas City, MO: Mid-American Addiction Technology Transfer Center in Residence at the University of Missouri-Kansas City.
- Robbins, R., Colmant, S., Dorton, J., Schultz, L., Colmant, Y., & Ciali, P. (2006). Colonial instillations in Native American boarding school students. *Educational Foundations, 20*(3), 69-88. Retrieved from <https://files.eric.ed.gov/fulltext/EJ794733.pdf>

- Robbins, R., Hong, J., & Jennings, A. M. (2011). In the pause and listening to the little People: A folk healer's journey. *The Counseling Psychologist*, 40(1), 93-132. <http://dx.doi.org/10.1177/0011000011410892>
- Robbins, R., Scherman, A., Holeman, H., & Wilson, J. (2005). Roles of Native American grandparents in times of cultural crisis. *Journal of Counseling and Development*, 96(1), 46-56. Retrieved from <https://search.proquest.com/openview/fee70218b9f94d3dff4fc6a4a52f4005/1?pq-origsite=gscholar&cbl=34124>
- Robbins, R., Tonemah, S., & Robbins, S. (2002). Project Eagle: Techniques for multi-family psycho-educational group therapy with gifted Native American adolescents and their parents. *American Indian and Alaska Native Mental Health Research*, 10(3), 56-74. <http://dx.doi.org/10.5820/aian.1003.2002.56>
- Sarche, M., & Spicer, P. (2008). Poverty and health disparities for American Indian and Alaska Native children: Current knowledge and future prospects. *Annals of the New York Academy of Sciences*, 1136(1), 126-136. <http://dx.doi.org/10.1196/annals.1425.017>
- Schultz, K., Cattaneo, L. B., Sabina, C., Brunner, L., Jackson, S., & Serrata J. V. (2016). Key roles of community connectedness in healing from trauma. *Psychology of Violence*, 6(1), 42-48. <http://dx.doi.org/10.1037/vio0000025>
- Stake, R. E. (2000.) Case Studies. In N.K. Denzin, & Y.S. Lincoln (Eds.), *Handbook of qualitative research* (2nd ed., pp. 435-454). Thousand Oaks, CA: SAGE Publications, Inc.
- Sue, S. (2006). Cultural competency: From philosophy to research and practice. *Journal of Community Psychology*, 34(2), 237-245. <http://dx.doi.org/10.1002/jcop.20095>
- Tao, K. W., Owen, J., Pace, B. T., & Imel, Z. E. (2015). A meta-analysis of multicultural competencies and psychotherapy process and outcome. *Journal of Counseling Psychology*, 62(3), 337-350. <http://dx.doi.org/10.1037/cou0000086>
- Thomas, L. R., Donovan, D. M., & Sigo, R.L.W. (2010). Identifying community needs and resources in a native community: A research partnership in the Pacific Northwest. *International Journal of Mental Health and Addiction*, 8(2), 362-373. <http://dx.doi.org/10.1007/s11469-009-9233-1>
- Thomas, L. R., Donovan, D. M., Sigo, R., & Price, L. (2011). Community-based participatory research in Indian country: Definitions, theory, rationale, examples, and principles. In M. C. Sarche, P. Spicer, P. Farrell, & H. E. Fitzgerald (Eds.), *Native American and Alaska Native children and mental health: Development, context, prevention, and treatment* (pp. 165-186). Santa Barbara, CA: Praeger/ABC-CLIO.
- Tormala, T. T., Patel, S. G., Soukup, E. E., & Clarke, A. V. (2018). Developing measurable cultural competence and cultural humility: An application of the cultural formation. *Training and Education in Professional Psychology*, 12(1), 54-61. <http://dx.doi.org/10.1037/tep0000183>

- Trimble, J. E. (2003). Cultural sensitivity and cultural competence. In M. J. Prinstein, & M. D. Patterson (Eds.), *The portable mentor: Expert guide to a successful career in psychology* (pp. 13-32). New York, NY: Kluwer Academic/Plenum Publishers.
- U.S. Department of Health and Human Services (USDHHS). (2007). Fetal alcohol spectrum disorders among Native Americans. *DHHS Publication, 06(4245)*. Retrieved from [http://www.fasdcenter.samhsa.gov/documents/NI\\_WYNTK\\_FASD\\_Among\\_AIAN.pdf](http://www.fasdcenter.samhsa.gov/documents/NI_WYNTK_FASD_Among_AIAN.pdf)
- U.S. Department of Health and Human Services (USDHHS). (2012). *National Survey on Drug Use and Health*. Retrieved from <http://www.samhsa.gov/data/NSDUH/2012SummNatFindDetTables/NationalFindings/NSDUHresults2012.htm#fig3.1>
- Venner, K. L., Greenfield, B. L., O'Keefe, V., Vicuna, B., Munoz, R., & Bhatt, S. (2012). "I'm not one of them": Barriers to help seeking among American Indians with alcohol dependence. *Cultural Diversity and Ethnic Minority Psychology, 18(4)*, 352-362. <http://dx.doi.org/10.1037/a0029757>
- Whitbeck, L. B., Adams, G. W., Hoyt, D. R., & Chen, X. (2004). Conceptualizing and measuring historical trauma among Native American people. *American Journal of Community Psychology, 33*, 119-130. <http://dx.doi.org/10.1023/B:AJCP.0000027000.77357.31>
- Whitesell, N. R., Sarche, M., Keane, E., Mousseau, A. C., & Kaufman, C. E. (2018). Advancing scientific methods in community and cultural context to promote health equity: Lessons from intervention outcomes research with American Indian and Alaska Native communities. *American Journal of Evaluation, 39(1)*, 42-57. <http://dx.doi.org/10.1177/1098214017726872>
- Wolcott, H. F. (1994). *Transforming qualitative data: Description, analysis, and interpretation*. Thousand Oaks, CA: SAGE Publications, Inc.
- Yin, R. K. (1984). *Case study research: Design and methods* (1<sup>st</sup> ed.). Thousand Oaks, CA: SAGE Publications, Inc.

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## APPENDIX

### Appendix A: Activities

The following are edited summaries of four activities drawn from the *Through the Diamond Threshold* curriculum booklet that were used during the program described in this paper.

#### **Naming Wheel**

The Naming Wheel activity illustrates the importance placed on names and naming in most AI communities, and it gives participants an opportunity to share and partake in the unique stories associated with their names. Participants introduce themselves and briefly share stories behind how and why they received their names and, if they wish, offer meanings associated with their names. Each successive person, after sharing their stories, restates the names of those who have gone before them. Participants later engage in a group discussion focusing on the values inherent in naming within Native cultures with questions such as, “What values are expressed by this tradition?” and “How do our names not only reflect our views of ourselves but influence our lives?”

#### **Soul Wound**

An activity entitled “Soul Wound” provides participants with a brief immersion experience into the history of AIs in the United States and allows participants to feel some measure of the marginalization and mistreatment that Native people have felt in the past. On three separate pieces of paper each participant writes down three values, people, beliefs, or things that they cherish most. After discussing the importance of these items in their lives, they turn the pieces of paper upside down and set them in front of them. Next a facilitator walks around the circle of participants, taking one of the pieces of paper from each participant, crushing it and throwing it violently into a trashcan. Participants are asked about how they feel in the moment, and how they would feel if it happened in a real-life situation as facilitators hold a space for trainee emotional processing. Each participant is then given a piece of paper with one issue or problem on it such as diabetes, high blood pressure, high rate of high school drop outs, new religion, etc. Lastly, participants discuss how this activity might be related to the experience of historical trauma as experienced by AIs.

#### **Through the Diamond Threshold: Storytelling Wisdom**

Through the Diamond Threshold: Storytelling Wisdom utilizes a Cherokee legend (or another appropriate tribal story) to illustrate how AI communities can come together as communities to combat problems such as alcohol use disorder. The story found in the curriculum

booklet describes how a Cherokee community was invaded and nearly destroyed by a spiritual enemy. The elders knew about the enemy but kept it secret from the villagers for fear that it would upset them. Eventually, they called a meeting to explain and seek remedies for the problem. After much discussion, the villagers joined together and successfully did battle with the spiritual enemy and brought balance and harmony back to the village. Questions are asked during discussion to help participants tie the symbolism and the problems within the story to experiences participants have in their own community with substance use disorders.

### **Firewater Myth Deconstruction**

The Firewater Myth Deconstruction activity is powerful and might be used to challenge harmful stereotypes and clichés. Facilitators aim not just to challenge these ideas, but to also look at unconscious meanings and political implications imbedded within stereotypes about AIs and their relationships with drugs and alcohol. Four participants are placed sitting in front of the other participants. Two are facing two others, and the facilitators are in between them. The four participants are presented with four stereotypes concerning AIs and alcohol. An example might be “Most American Indians have drinking problems” or “American Indians become violent when they drink.” The facilitators will turn to two of the persons in the front of the room and ask for their opinions about the statement. Questioning might begin simply about the truth of the statement and gradually move to how AIs might feel about themselves as a people if they swallow the comment as truth. Or if the general public believes this statement, how might it be used to justify not hiring AIs? The two persons not talking witness the other’s discussion silently. At some point the two listeners are asked to supplement the first twos’ comments with their own ideas about the subjects discussed. Lastly, the audience, who have witnessed the deconstruction activity, discuss what they felt and thought having “overheard” the interactions.

### **Appendix B: Agenda**

The program described here spanned two and a half consecutive days. The training began at 9:00am and ended at 5:00pm on the first day. At 6:00pm on the same day, a traditional AI meal was provided for participants, followed by a ceremonial giveaway. The second day also followed a 9:00am–5:00pm schedule. Care was taken to begin each day with activities of a low emotional intensity, progressively heightening the intensity throughout the day. The third day was reserved for the participants to meet from 9:00am–11:00am in four focus groups to evaluate the program



and activities, as well as to consider possible contexts and populations the program may be effectively utilized.

Specifically, the agenda consisted of the following activities:

*Day One*

9:00am – noon	Introductions & Naming Wheel
1:00pm – 5:00pm	Sucker Punched & Firewater Myth Deconstruction
6:00pm – 7:00pm	Traditional Meal, Through the Diamond Threshold Story, & Indian Country Family Role Play and Give Away

*Day Two*

9:00am – noon	Soul Wound & Talking Stick
1:00pm – 5:00pm	Instant Replay, Enactment of Stomp Dance, & Web of Life

*Day Three*

9:00am – 11:00am	Focus groups
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**Appendix C: Facility**

This program was held in a hotel conference room with the dimensions of about 60 feet by 45 feet. It was carpeted, which stifles echo. Chairs were usually placed in a large circle, though they could be moved to suit different activities. The facility had a long table for the facilitators' materials and equipment. Additionally, for the Soul Wound activity only, facilitators utilized a laptop, LCD projector, projection screen or white wall, and audio capability (speaker and connection to audio system).