

Program Evaluation Report: Phase II Extension

United American Indian Involvement, Inc. (UAI)
CDEP name: UAI Drum, Dance, & Regalia Program
Priority population: Native American
Local evaluation time period: January 18, 2024 - May 14, 2025

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2. Executive Summary

Purpose

The United American Indian Involvement (UAI) Drum, Dance, and Regalia Program is a community-based initiative serving American Indian/Alaska Native (AI/AN) families through cultural activities and education grounded in traditional principles of holistic wellness. Delivered as a two-hour weekly workshop, the program includes an opening prayer, communal meal, a brief mental health presentation, and experiential instruction in drumming, dancing, and regalia making. The CRDP Phase II Extension (Cycles 6–8; 2023–2025) aimed to strengthen evidence for the program as a Community-Defined Evidence-Based Practice and to advance statewide recognition of Indigenous cultural revitalization as essential to behavioral-health equity for urban AI/AN communities. Key program modifications included extending Cycles 6 and 7 to 20 sessions each by incorporating 10 weeks of regalia making, refining quantitative evaluation measures for Cycles 7 and 8, and expanding the total number of sessions to 50 under the Phase II Extension.

Evaluation Questions

The evaluation was designed to understand the impact of participation on cultural identity and spirituality, mental health and wellness, substance use, and coping skills among American Indian/Alaska Native (AI/AN) children, adolescents, and adults. The following questions guided this study:

1. To what extent does participation in the Drum, Dance, & Regalia program strengthen participants' cultural identity, pride, and spiritual connection?
2. Does participation in the program lead to improvements in participants' mental health outcomes, including reductions in symptoms of depression, anxiety, and historical loss–related distress?
3. Does participation in the program reduce substance use behaviors?
4. Does participation enhance participants' coping abilities, including self-efficacy, managing cultural and racial stressors, and sense of hope?

Evaluation Research Design

The evaluation employed a quantitative, pre–post, community-based participatory research (CBPR) design across three program cycles (Cycles 6–8). This design allowed for measurement of individual change over time among the four key outcomes including cultural identity and spirituality, mental health and wellness, substance use, and coping skills. Data were collected through validated, standardized instruments such as the Patient Health Questionnaire (PHQ-9), Timeline Followback, and culturally adapted self-

report tools including the Cultural Activity Measure administered at baseline (pre), midpoint (10 weeks), and endpoint (20 weeks) where applicable. Convenience sampling was employed. A total of 122 participants completed at least one of the evaluation surveys. Participants ranged in age from 4 to 65+ years old, representing over 14 distinct tribal affiliations.

Key findings

Across three evaluation cycles, participants in the Drum, Dance, & Regalia Program demonstrated consistent improvements in cultural connection, emotional well-being, and coping abilities. Children showed significant increases in cultural identity scores, and adults reported the highest overall gains in reduced depression and anxiety symptoms. Over half of all participants demonstrated individual improvements in mental health indicators, with 101 reporting decreased depression and 107 indicating decreased anxiety. Substance use declined among adult participants—particularly in cigarette, alcohol, and marijuana use—while youth reported very low rates of use across all cycles. Participants across age groups reported feeling prouder of their Native identity, more spiritually connected, and better able to manage stress and motivation in daily life. These outcomes indicate that culturally grounded, intergenerational programs such as Drum, Dance, & Regalia strengthen cultural connection and promote mental wellness.

Conclusions

Findings from the evaluation demonstrate that the Drum, Dance, & Regalia Program is an effective, culturally grounded intervention that enhances mental wellness and community connectedness among urban American Indian and Alaska Native participants. The program's intergenerational structure and focus on traditional practices—such as drumming, dancing, and regalia making—proved vital in fostering identity, belonging, and resilience. Improvements in cultural connectedness were associated with better emotional health and lower substance use, underscoring culture as a central pathway to healing. Future program efforts should continue expanding youth participation, strengthen long-term follow-up to assess sustained outcomes, and integrate mental health education addressing broader social determinants such as housing stability and access to care. Continued investment in Community-Defined Evidence Practices (CDEPs) is recommended to support statewide policy shifts recognizing Indigenous healing traditions as essential components of behavioral health equity.

3. Introduction

Mental Health Issues Among the AI/AN Population

American Indian and Alaska Native (AI/AN) communities experience some of the highest rates of behavioral health disparities in the United States, stemming from the impact of colonization and oppression which has led to historical loss and intergenerational trauma. Nationally, AI/AN adults report higher rates of psychological distress, substance use disorders, and suicide compared to other racial and ethnic groups (Substance Abuse and Mental Health Services Administration [SAMHSA], 2023). In California, urban AI/AN populations—who comprise more than 90% of the state’s Native population—face unique challenges related to cultural disconnection, invisibility within mainstream service systems, and limited access to Indigenous-centered healing models (California Department of Public Health, Office of Health Equity, 2022).

CDEP Need

Within Los Angeles County, the American Indian population is the largest in any urban area in the United States (U.S. Census Bureau, 2022), yet it remains among the most underserved in behavioral health access and outcomes (LA County Department of Public Health, 2017). Generations of forced relocation, assimilation policies, and disrupted kinship networks have contributed to disproportionate rates of depression, anxiety, and substance use, alongside limited availability of culturally responsive care (Gone, 2013; Hartmann, Wendt, & Burrage, 2020). These disparities are compounded by ongoing inequities in funding, workforce representation, and service delivery systems that rarely center Indigenous knowledge or community-defined wellness frameworks.

Despite the resilience and strength of Native communities, conventional Western mental health approaches continue to overlook the enduring impact of colonization and the essential role of cultural reintegration, identity restoration, and collective healing in achieving wellness (Brave Heart, 2003; Gone, 2013; Hartmann, Wendt, & Burrage, 2020). This disconnect has reinforced systemic invisibility for urban American Indian and Alaska Native populations, underscoring the urgent need for interventions like the UAII Drum, Dance, & Regalia Program—a Community-Defined Evidence Practice (CDEP) that reclaims traditional teachings as vital pathways toward healing, balance, and community wellness.

Approach

The United American Indian Involvement (UAII) Drum, Dance, & Regalia Program was developed as a Community-Defined Evidence Practice (CDEP) to reconfront the impact of colonization and reclaim traditional teachings as a vital pathway toward community wellness and healing among urban American Indian and Alaska Native (AI/AN) populations. Rooted in the Medicine Wheel framework, the program promoted balance across spiritual, emotional, physical, and mental domains through traditional practices such as drumming, dancing, and regalia making (Gone, 2011; National Aboriginal

Health Organization, 2007). Guided by Indigenous knowledge systems, the approach emphasized intergenerational learning to restore cultural identity and strengthen community wellness. By engaging families in traditional teachings, the program cultivated cultural pride, social connectedness, and resilience—protective factors linked to lower rates of depression, anxiety, and substance use. Within this framework, the Drum, Dance, & Regalia Program functioned as both a cultural intervention and a health-equity strategy, integrating Indigenous pedagogy and community-based participatory methods to ensure that implementation and evaluation remain led by Native elders, cultural practitioners, and families (Bassett et al., 2012; McIvor, Napoleon, & Dickie, 2009; Whitbeck et al., 2004).

4. CDEP Purpose, Description & Implementation

A. CDEP Purpose

The Phase II Extension of the UAI Drum, Dance, & Regalia Program built upon outcomes from the original Native American Drum, Dance, and Regalia (NADDAR) initiative implemented from 2017 to 2021 under the California Reducing Disparities Project (CRDP) Phase II. The program demonstrated significant improvements in cultural identity, community connection, and overall well-being among participants (United American Indian Involvement [UAI], 2021).

The Extension phase (Cycles 6–8, 2023–2025) sought to strengthen and sustain these outcomes by expanding intergenerational participation, extending the duration of the workshop intervention, refining quantitative evaluation measures, and assessing the long-term benefits of cultural engagement on cultural identity and spirituality, mental health, substance use, and coping skills. The purpose of this phase was to further validate the CDEP model as a culturally grounded prevention and early-intervention approach for urban AI/AN communities while advancing statewide recognition of Indigenous cultural revitalization as a vital component of behavioral-health equity.

B. Description & Implementation Process

Components & Activities

Native American Drum, Dance, and Regalia (NADDAR) Program is an American Indian/Alaska Native (AI/AN) culturally based program that reclaims traditional teachings as vital pathways toward healing, balance, and community wellness. This interactive program incorporates AI/AN drumming, dancing, and regalia making providing participants with the opportunity to engage in cultural activities that have been utilized for centuries among indigenous populations to promote wellness. The NADDAR program originally comprised eight two-hour workshops that included an opening prayer, communal dinner, a 15-minute mental health focused presentation, and experiential education on drum and dance with regalia making workshops offered each week. Two additional sessions were added for data collection at the beginning and end of the eight weeks. The goal was to have one location per cycle and meet consecutively

each week, though the program accommodates necessary changes when needed. The workshop location varied per cycle to maximize participant reach.

The first day of the ten weeks began with an orientation as an introduction to the program objectives, research study, data collection, and a drum and dance demonstration. Participants were introduced to various styles of dance and two styles of drums. For men, there were the grass dance, traditional dance, and fancy dance. For women, there were the jingle dress dance, fancy shawl dance and traditional dance. Drum workshops consisted of an introduction to the drum, the songs and the meaning of the northern style and southern style traditional songs. AI/AN musical techniques were shown, and additionally, the traditional values, protocols and expectations of the American Indian traditional songs and dance were taught. The regalia making workshops were offered weekly for participants to begin creating their regalia. Participants were also able to participate in a separate beading class to assist with bead work on their regalia or making other types of bead work. The final session included a performance at the end of the workshop to demonstrate the drum and dance participants have learned.

Delivery

Phase II extension included three intervention cycles between March 2024 and May 2025 on Wednesdays for two hours from six to eight in the evening. The three cycles were conducted at three different sites.

Cycle 6 was conducted from January 18 to June 30, 2024, a twenty-week workshop held at the Autry Museum in Los Angeles County.

Cycle 7 took place from September 12, 2024 to March 6, 2025 at Live Oak Park in Temple City, California, a twenty session workshop spanning twenty-two weeks due to two cancellations for a fire and a storm.

Cycle 8 was implemented from March 12, 2025 to May 14, 2025 at the San Pedro Angel's Gate Cultural Center for 10 weeks, excluding the regalia component.

Demographics

Program recruitment methods successfully focused on recruiting families to ensure cultural experiences span across generations. In cycles 6-8, there were 122 individual participants in the study ranging in age from 4 to 65+ years old. In addition to self-identifying their age, sexual orientation, gender identity, race and ethnic origins, employment status (adult questionnaire only), place of birth, and preferred language, each participant was also given the option to disclose their tribal affiliation/identity. There were 14 tribal affiliations disclosed: Yaqui, Shoshone, Oglala Lakota, Navajo, Mayo Yoreme, Lakota/Yurok, Comanche, Colville, Chicana (not a recognized tribe), Spokane, Hochunk/Oglala Lakota, Lakota, Pima, Salt River Pima. Participant demographics (Table 1) were pulled from the *Statewide Evaluation* (SWE) pre-survey data.

Table 1: Participant Demographics UAlI Drum, Dance, and Regalia Cycles 6-8

		Cycle 6	Cycle 7	Cycle 8
Age^a		% (n)		
	Child (4-11)	18 (8)	8 (2)	12 (3)
	Adolescent (12-17)	23 (10)	15 (4)	32 (8)
	Adult 18+	59 (26)	78 (20)	52 (14)
Sexual Orientation^b		% (n)		
	Straight/heterosexual	68 (30)	77 (20)	84 (21)
	Gay	7 (3)	0 (0)	0 (0)
	Bisexual	7 (3)	8 (2)	0 (0)
	Pansexual/Non-monosexual	2 (1)	4 (1)	0 (0)
	I am not sure who I am attracted to sexually	2 (1)	0 (0)	0 (0)
	I am not sure who I am attracted to romantically	2 (1)	0 (0)	0 (0)
	Something else	2 (1)	4 (1)	0 (0)
Gender Identity^c		% (n)		
	Man/Male	32 (14)	23 (6)	48 (12)
	Woman/Female	66 (29)	62 (16)	56 (14)
	Genderqueer/Gender non-conforming	0 (0)	0 (0)	4 (1)
	Two Spirit	2 (1)	15 (4)	4 (1)
	Intersex	0 (0)	8 (2)	4 (1)
	Something else:	2 (1)	0 (0)	0 (0)
Race and Ethnic Origins^d		% (n)		
	Multi-racial	48 (21)	12 (3)	16 (4)
	AI/AN**	89 (39)	88 (23)	88 (22)
	Latino, Hispanic, or Spanish	34 (15)	12 (3)	16 (4)
	White	16 (7)	4 (1)	16 (4)
	Black or African American	0 (0)	4 (1)	8 (2)
	Asian	2 (1)	0 (0)	8 (2)

^a The cohorts were defined by age range: *child 4-11, adolescent 12-17, adult 18+*.

Only children ages 6+ for cycle 6 and ages 8+ for cycle 7&8 were eligible to participate in the local evaluation surveys.

^b Sexual orientation was asked as "What is your sexual orientation? (choose all that apply)" - Data not shown for the following options that were all 0 across all cycles: Lesbian, Asexual, Queer.

^c Gender was asked as "When it comes to my gender, I think of myself as (choose all that apply)" - Data not shown for the following options that were all 0 across all cycles: Transgender/Trans, Trans man/Trans male, Trans woman/Trans female, Nonbinary (not exclusively male or female), I am not sure about my gender identity, I do not have a gender/gender identity. The intersex option in this survey was displayed as Intersex (neither male or female).

^d Race and ethnic identity were derived from a survey question which asked: "What is your race and ethnic origin(s)? (choose all that apply)". If participants self-identified as multi-racial or chose multiple races and/or ethnic backgrounds, they are counted within the "Multi-racial" option as well as any self-identified ethnic or racial backgrounds.

All participants were asked if they self-identified as Transgender/Trans, Trans man/Trans male, or Trans woman/Trans female. No children endorsed these answer options; however, results indicated that 54% of children who responded self-reported different Sex and Gender responses which could indicate transfeminine (3 participants) or transmasculine (4 participants) identities.

Table 2: Adult Participant Employment Status^a

		Cycle 6	Cycle 7	Cycle 8
		% (n)		
	Working full-time	27 (12)	27 (7)	24 (6)
	Working part-time	11 (5)	15 (4)	0 (0)
	Working seasonally	2 (1)	0 (0)	0 (0)
	Temporarily not working	11 (5)	12 (3)	8 (2)
	Other	5 (2)	15 (4)	12 (3)

^a Employment status was asked as "Which statement best describes your current employment status?" of all participants who participated in the Adult survey (18+).

While only the adult questionnaire assessed the employment status of participants (Table 2), adolescent participants (ages 12-17) were asked "In the past 6 months, have you done any volunteer work or community service that you have not been paid for?" Fifty percent of adolescent respondents in Cycle 6 (5/10 adolescent participants in cycle 6) recorded "YES" as their answer. Across all three cycles, 24% of all adolescent respondents who disclosed unpaid volunteer work as part of their lives.

Attrition Rates

The sign-in method led to difficulty in measuring program adherence with attendance records. Nearly all participants filled out the sign-in log as a “family” without an indication of which family members were present for each session. Self-reported attendance was collected in each post-survey. Self-reported and sign-in sheet data are shown in Figure 1. The adherence data varied across each age group. Cycles 6 and 7 were 20-week programs with most participants reporting that they attended at least 15 sessions. Cycle 8 was a 10-week program with each age group attending an average of 8 sessions.

Figure 1

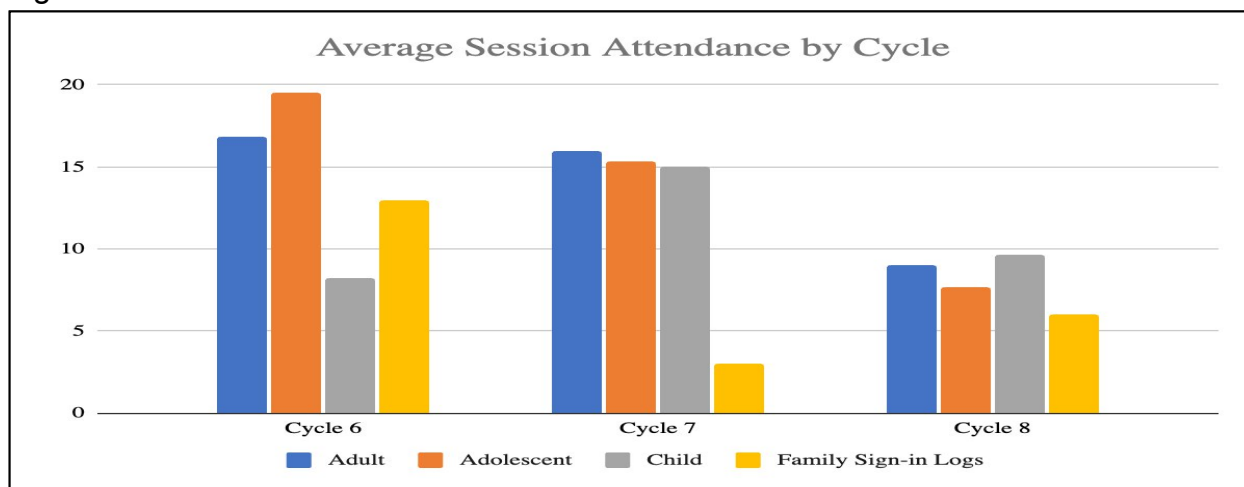


Figure 1 Caption: Adult (first column, blue), Adolescent (second column, orange), and Child (third column, grey) data were from the self-reported attendance questions in each post-10 and post-20 week survey for each age group. Cycle 6 data were added together from post-10 and post 20, cycle 7 data was from post-20 survey only, cycle 8 was from post-10 survey as this cycle was 10 weeks and only had one post survey.

While participants were not asked directly about reasons for attrition, several factors likely contributed to decreases in sample size. These include difficulties accessing reliable transportation, the geographic spread of recruitment locations that created distance barriers for some participants, weather-related disruptions (including multiple fires and a storm during Cycle 7), and daily challenges related to finances, school, and work.

Strategies Used to Incorporate Indigenous Knowledge

The Drum, Dance, & Regalia Program was grounded in Indigenous ideals of wellness as a balance of spiritual, emotional, physical, and mental harmony. Traditional teachings, protocols, and intergenerational learning guided all aspects of program development and implementation. Program activities were led by Native elders, cultural practitioners, and community leaders who ensured that instruction adhered to tribal protocols and reflected the values of respect, humility, and collective responsibility.

Opening and closing prayers were incorporated into each session to honor spiritual balance and the cultural importance of beginning and ending gatherings in a sacred manner. Shared community meals reinforced relational connection and reciprocity, reflecting the Indigenous teaching that healing occurs in community.

Cultural activities such as drumming, dancing, and regalia making served as primary modes of transmitting traditional knowledge. Participants were taught the spiritual meaning of songs, dance styles, and regalia elements—including the significance of colors, designs, and movements tied to tribal identity. The instruction emphasized the cultural responsibilities of carrying songs and dances, connecting participants to ancestral teachings and land-based wisdom.

The evaluation process also integrated Indigenous knowledge through community-based participatory research (CBPR) methods. Program staff, cultural advisors, and elders reviewed and approved evaluation instruments. Indigenous frameworks, including the Medicine Wheel, informed the program's teachings on health and well-being, emphasizing balance, connection, and collective wellness as key outcomes.

These strategies ensured that Indigenous knowledge remained central to the program's identity, fidelity, and impact—positioning the Drum, Dance, & Regalia Program as a model for culturally grounded behavioral health prevention and early intervention within urban Native communities.

Significant Changes to Activities/Delivery

To strengthen fidelity to the Drum, Dance, & Regalia intervention model, the workshop series for Cycles 6 and 7 was extended from the original 10-week format to 20 weeks. This adjustment allowed for integration of the regalia making component, a core component of the program's cultural curriculum. Previously, regalia making workshops were offered on different days of the week in addition to the two-hour weekly workshop. The regalia making sessions provided participants with time to learn the significance of regalia, develop sewing and beading skills, and complete their pieces in alignment with traditional protocols. By expanding the duration of Cycles 6 and 7, the program ensured that all participants—particularly new families—could experience the full arc of learning, creation, and performance that defined the cultural integrity of the intervention. Cycle 8 was a 10-week program to adhere to the grant data collection timeline.

5. Local Evaluation Questions

With the purpose of further validating UAI's Drum, Dance, and Regalia program as a culturally grounded prevention and early-intervention approach for urban AI/AN, the following questions guided this study:

1. To what extent does participation in the Drum, Dance, & Regalia program strengthen participants' cultural identity, pride, and spiritual connection?

2. Does participation in the program lead to improvements in participants' mental health outcomes, including reductions in symptoms of depression, anxiety, and historical loss–related distress?
3. Does participation in the program reduce substance use behaviors?
4. Does participation enhance participants' coping abilities, including self-efficacy, managing cultural and racial stressors, and sense of hope?

Evaluation Question Changes

Across the Phase II Extension, the evaluation questions remained consistent with previous phases of this study. The evaluation measures, however, were reviewed after Cycle 6 was completed with the goal of shortening the survey to reduce fatigue and enhance completion rates. Across all populations; survey length decreased substantially—37 fewer questions for children (127 vs. 90), 75 fewer for adolescents (211 vs. 136), and 43 fewer for adults (180 vs. 137). These refinements improved developmental appropriateness, reduced burden on participants, enhanced cultural relevance, and strengthened the validity of evaluation data collected during Cycles 7 and 8.

The informant of the evaluation questions transitioned from a child proxy design in Cycle 6—where adults completed surveys on behalf of children ages 5–11—to a child-centered self-report design in Cycles 7 and 8 for children ages 8 and older. This change was made for three primary reasons.

First, shifting to self-report improved fidelity and accuracy by allowing children to answer evaluation questions directly, providing a more valid reflection of their emotional, psychological, and cultural experiences. Direct responses were essential when assessing constructs such as anxiety, depression, spiritual connection, and sense of identity.

Second, the revision ensured that all child measures aligned with validated age ranges and cognitive ability for ages 8 and above. Instruments added in Cycles 7 and 8—such as the SCARED and CES-DC—were specifically developed and tested with children in this age group, making them appropriate for independent completion. This addressed earlier issues in Cycle 6 where children ages 5–7 had difficulty understanding abstract concepts or responding accurately to emotional and cultural items.

Third, transitioning to self-report allowed the evaluation team to remove measures inappropriate for children and replace them with tools designed to capture their own experiences. Measures eliminated included the Cultural and Racial Socialization Self-Efficacy Scale, which assesses parenting behaviors, and the Historical Loss and Historical Loss Associated Symptoms scales, which require abstract reasoning more suitable for adolescents and adults. The revised child survey focused on developmentally appropriate and culturally relevant measures, including:

- SCARED – child anxiety

- CES-DC – child depression
- Sense of Community Index–2 (SCI-2) – community connection
- Cultural Activity Assessment (CAA) – cultural engagement and program-specific outcomes

Together, these changes created a more valid, developmentally appropriate, and culturally aligned assessment of children’s experiences in Cycles 7 and 8.

Explanation for Unanswered Evaluation Questions

The program’s sign-in method limited the ability to accurately assess individual participation and, consequently, analyze participation rates in relation to evaluation outcomes. Because most families signed in collectively rather than identifying which members were present at each session, attendance records did not reliably capture individual adherence. Although self-reported attendance was collected in post-surveys, these data varied across age groups and cycles and could not be fully reconciled with the sign-in logs. As a result, we were unable to evaluate the impact of participation frequency on outcomes.

6. Evaluation Design & Methods

A. Design

The evaluation employed a quantitative, pre–post, community-based participatory research (CBPR) design across three program cycles (Cycles 6–8). This design allowed for measurement of individual change over time on the four primary outcomes: cultural identity and spirituality, mental health and wellness, substance use, and coping skills. Data were collected through validated, standardized instruments and culturally adapted self-report tools administered at baseline (pre), midpoint (10 weeks), and endpoint (20 weeks) where applicable.

Strategies for Culturally Responsive Evaluation Development and Implementation

The evaluation plan was designed and implemented using culturally responsive strategies that addressed the specific needs, barriers, and strengths of the AI/AN community served by the UAI Drum, Dance, and Regalia Program. Consistent with Indigenous values of relational accountability, respect, and community care, the evaluation team took several steps to ensure that data collection was accessible, inclusive, and reflective of participants’ lived experiences.

To reduce participation burden and honor community rhythms, participants were provided additional time to complete surveys when needed, and some were offered the option to take surveys home and return them at the next workshop. For participants with disabilities or literacy barriers, evaluation staff offered one-on-one assistance, including reading survey items aloud in a respectful and supportive manner. Staff remained available throughout data collection to answer questions, clarify items, and ensure participants felt confident and comfortable with the process.

The survey was offered in multiple formats, as both paper and electronic formats were used. In Cycle 6, paper surveys were provided. In Cycles 7 and 8 participants were provided the option, with most choosing electronic forms.

Recognizing that relational follow-up fosters trust and improves data accuracy, the evaluation team conducted phone calls and in-person check-ins when surveys contained missing items. These conversations focused on confirming whether blank responses were intentional or collecting the needed information when appropriate. This approach honored participant autonomy while supporting data completeness.

The evaluation also incorporated the Cultural Activity Assessment (CAA), a post-survey measure developed by UAI and grounded in community knowledge, to capture participants' culturally specific experiences and the perceived impact of engaging in traditional activities such as drumming, dancing, and regalia making. To enhance cultural relevance, the Sense of Community Index-2 was tailored as instructed by the measure to explicitly reference the UAI program as the community of reference, making the measure more meaningful by grounding questions in participants' actual cultural community context.

Evaluators conducted a safety and risk screening of the data collected, ensuring values of responsibility and responsiveness were implemented. All participant surveys were reviewed for positive endorsement of risk-related items, which included questions assessing emotional distress, thoughts of self-harm, feelings of hopelessness, significant anxiety or depressive symptoms, and any indicators of harm to self or others. A standardized risk review protocol directed evaluators to identify responses suggestive of acute distress, safety concerns, or substantial functional impairment.

Any identified risk was documented in the *Risk Responses, Inconsistencies, and Missing Questions* tracking sheet. When risk was endorsed, evaluators followed up with the participant by phone—or in person at the workshop when contact via phone was not accomplished—using contact information from the official UAI sign-out sheets. Staff used a scripted protocol to introduce themselves, clarify the survey response, and conduct a brief risk assessment. A standardized Safety Plan was implemented when needed. All follow-up actions (e.g., calls, safety planning, or emailing resource lists) were documented in the tracking sheet. Participants were offered an emailed list of culturally relevant and behavioral health resources when appropriate.

B. Sampling Method

The sampling method used for this evaluation was convenience sampling, which involved selecting participants based on their availability and willingness to participate. This approach was appropriate for a community-based prevention program where participation was voluntary enrollment and was consistent with CBPR by relying on cultural participation rather than random assignment. Convenience sampling allowed the evaluation team to include participants who were actively engaged in cultural activities and accessible through UAI's community network.

Inclusion and Exclusion

The program welcomed people of all ages who self-identified as American Indian or Alaska Native, resided in Los Angeles, and were available to engage in the program. All eligible participants were asked to fill out the program evaluation surveys. In Cycle 6, the age limit for completing surveys was 5, and for Cycles 7 and 8 the age limit was 8 years old. All children younger than 5 in Cycle 6, and younger than 8 in Cycles 7 and 8, were not eligible to participate in the evaluation surveys, though they were able to participate in the program. The only exclusion criterion for participation in the evaluation surveys was age.

Recruitment

Participants were recruited into the program through established networks of Los Angeles County-based AI/AN community organizations, including Tribal TANF, the American Indian Counseling Center, Pukuu, and other regional service providers. Recruitment strategies included outreach via social media platforms, as well as the development and maintenance of both new and existing relationships within these organizations and their staff. Efforts were also made to ensure inclusivity by sharing recruitment materials with local AI/AN Two-Spirit and LGBTQ+ community-based organizations. A flyer was provided with the details of the workshop, eligibility, research study, benefits, and a phone number to register. Benefits included a \$20 gift card for each survey completion, dinner, and free education and materials.

Representative Sample of CDEP Participant Universe

The evaluation sample for Cycles 6–8 appeared broadly representative of the Urban American Indian and Alaska Native (AI/AN) population of Los Angeles across core demographic, cultural, and mental health dimensions. Los Angeles County is home to one of the largest, youngest, and most tribally diverse urban Native populations in the United States, with community members frequently identifying as multiracial, representing multiple tribal nations, and participating in extended kinship networks (Los Angeles City/County Native American Indian Commission [LANAIC], 2018; Urban Indian Health Institute [UIHI], 2011). The program's recruitment strategies—intentionally designed to engage whole families across generations—align with these patterns, resulting in a sample that includes participants aged 4 to 65+ and reflects multigenerational involvement typical of urban AI/AN cultural programming.

The sample's racial and ethnic composition was consistent with regional population data indicating that a significant proportion of AI/AN individuals in Los Angeles identify with more than one racial or ethnic background (LANAIC, 2018; Yellow Horse et al., 2021). Across cycles, participants identifying as AI/AN or multiracial comprised the majority, paralleling census and community health profiles showing that multiracial identity is a defining characteristic of the urban AI/AN population. The disclosure of 14 distinct tribal affiliations—spanning Plains, Southwest, Northwest, and Great Basin nations—also aligned with the well-documented tribal heterogeneity of urban centers, where

individuals from many tribal communities reside due to relocation policies, intertribal migration, or family networks (Norris et al., 2012).

Gender identity and sexual orientation data also demonstrated representativeness. Urban AI/AN communities often include visible Two-Spirit and LGBTQ+ participants supported by local networks and cultural revitalization efforts. The presence of Two-Spirit and gender-diverse individuals in the evaluation sample is consistent with findings that AI/AN people report higher levels of gender and sexual diversity compared to non-Native populations (Reisner et al., 2021; Sevelius & White Hughto, 2020). Similarly, the range of sexual orientations reported mirrors national data showing heightened LGBTQ+/Two-Spirit representation among Native youth and adults living in urban contexts.

Mental health screening data further reinforce that the evaluation sample was representative of the broader population served. Urban AI/AN communities have experienced disproportionately high rates of depression, anxiety, trauma exposure, and stress due to ongoing effects of structural racism, historical trauma, and limited access to culturally responsive care (Gone & Hartmann, 2020; Leavitt et al., 2018; Sarche & Whitesell, 2012). Children in the evaluation showed elevated rates of likely depression (64%) and clinically significant anxiety (45%), which aligned with research documenting high emotional and behavioral health needs among AI/AN youth in urban environments (UIHI, 2011). Adolescents presented with lower overall distress but maintained a notable proportion with mild to moderate symptoms, reflecting established patterns of emerging mental health concerns during adolescence in Native communities. Adults demonstrated the highest distress levels—48% with elevated depressive symptoms and 42% with elevated anxiety—consistent with national studies identifying urban AI/AN adults as experiencing some of the most significant mental health disparities relative to other racial or ethnic groups (CDC, 2018; Sarche & Whitesell, 2012).

Taken together, the demographic profile, cultural diversity, and mental health needs observed in the evaluation sample closely mirrored the characteristics of the CDEP participant universe and the larger Urban AI/AN population of Los Angeles. The breadth of tribal affiliations, multigenerational participation, gender and sexual diversity, and elevated mental health burden indicated that the evaluation findings can be interpreted as meaningfully representative of the community served.

Local Evaluation Attrition

Survey completion rates reflected both strong community engagement (122 participants completing at least one survey) and expected attrition patterns within voluntary, culturally grounded programs. While 34% completed all required surveys, this rate aligned with comparable community-based AI/AN programs.

Several structural and participant-related factors that commonly affect voluntary, community-based programs limited the effectiveness of efforts to support full survey completion. Irregular attendance—especially among newer or less consistently engaged

participants—limited opportunities to complete both pre- and post-surveys. Survey fatigue also emerged as a barrier. Some participants seemed to have difficulty sustaining attention on paper-based surveys. In addition, some surveys were partially completed or missing key items, making them unscorable and therefore excluded from analysis. Competing family, work, and transportation-related demands further contributed to attrition, as participants experiencing interruptions in attendance often did not return to complete follow-up surveys. Collectively, these challenges reduced the proportion of participants who completed all surveys despite strong initial engagement.

The program's relationship-centered approach and strong initial engagement were effective in facilitating survey completion. Participants were willing to complete surveys when first introduced, reflected in the 122 individuals who completed at least one measure. Consistent staff presence, cultural respect, and trust-building helped reduce hesitation and supported ongoing participation. Clear and repeated communication about the purpose of the surveys—emphasizing that participant feedback directly strengthens the program and supports continued funding—also increased understanding and buy-in. Additionally, flexible and accessible survey administration, such as offering the survey during the first two sessions of the program, and providing staff support as needed, helped reduce logistical barriers. Culturally aligned reciprocity, including gift cards, meals, and educational materials, further encouraged participants to complete surveys during their attendance.

IRB Approval Status

During the Phase II Extension, the study was deemed exempt from the Statewide IRB.

C. Measure & Data Collection Procedures

For Cycle 6 the evaluation measures remained the same as Cycles 1-5. Cycle 6 hypotheses per population for the four main research study questions were as follows:

1) Cultural Identity & Spirituality

- a) Adult and youth participants will demonstrate increased scores on the Multigroup Ethnic Identity Measure (MEIM), the AI/AN Cultural Identity Scale, and the Sense of Community Index (SCI-2).
- b) Child proxy participants will demonstrate improvements on the Sense of Community Index (SCI-2) and the Cultural Activity Assessment (post only), reflecting greater cultural engagement and connectedness.

2) Mental Health & Wellness

- a) Adult participants will demonstrate reduced symptoms on the Patient Health Questionnaire (PHQ-9), the Generalized Anxiety Disorder 7-item scale (GAD-7), Historical Loss Scale (HLS), and the Historical Loss Associated Symptoms Scale (HLASS).

- b) Youth participants will demonstrate reduced symptoms on the PHQ-9, GAD-7, and the Adolescent versions of the HLS and HLASS.
- c) Child proxy participants will show reduced symptoms on the Historical Loss Scale and Historical Loss Associated Symptoms Scale.

3) Substance Use

- a) Adult and youth participants will demonstrate reduced use on the Timeline Follow Back Substance Use Measure (TLFB).

4) Coping Skills

- a) Adult participants will demonstrate improvements on the Cultural and Racial Socialization Self-Efficacy Scale, Discrimination Scale, Herth Hope Index, and Cultural Activity Scale (post only).
- b) Youth participants will demonstrate improvements on the Herth Hope Index, Discrimination Scale, and Cultural Activity Scale (post only).
- c) Child proxy participants will demonstrate increased scores on Herth Hope Index, Discrimination Scale, and the Cultural and Racial Socialization Self-Efficacy Scale.

Cycle 7 and 8 had the following evaluation hypotheses:

1) Cultural Identity & Spirituality

- a) Adult and youth participants will demonstrate increased scores on the Multigroup Ethnic Identity Measure (MEIM), the AI/AN Cultural Identity Scale, and the Sense of Community Index (SCI-2).
- b) Child-Proxy participants are expected to show higher scores on SCI-2, and the Cultural Activity Assessment (post only).

2) Mental Health & Wellness

- a) Adult participants will demonstrate reduced symptoms on the PHQ-9, GAD-7, HLS, and the HLASS, and the *Cultural Activity Assessment (post only)*.
- b) Youth participants are expected to show reduced symptoms on the PHQ-9, Severity Measure for Generalized Anxiety Disorder (ages 11–17); the Adolescent Versions of the HLS and HLASS, and positive ratings on the Cultural Activity Assessment.
- c) Child participants are expected to report reduced depressive symptoms, as measured by the *Center for Epidemiological Studies Depression Scale for*

Children (CES-DC); and lower anxiety symptoms, as measured by the SCARED Child Form and positive ratings on the Cultural Activity Assessment (post only).

3) Substance Use

- a) Adult and youth participants will demonstrate reduced use on the Timeline Follow Back Substance Use Measure (TLFB).

4) Coping Skills

- a) Adult participants are expected to show increased scores on the *Cultural Connectedness Scale*, and the *Cultural Activity Assessment (post only)*.
- b) Youth participants are expected to show increased scores on the *Cultural Connectedness Scale* and positive ratings on the *Cultural Activity Assessment (post only)*.
- c) Child participants will show increased ratings on the *Cultural Activity Assessment (post only)*.

Most of the measures were validated or standard clinical quantitative measures besides the Cultural Activity Assessment, created by the organization to administer after community activities and included in the post-surveys. The items in the measure ask participants to rate a series of statements on how they felt after program participation. The questions in this measure were divided across the four main outcome categories addressed.

The measures used to assess the four main outcomes are described below with tables indicating the time points and populations each measure was administered per cycle.

Cultural Identity and Spirituality

Table 3: Timeline of Cultural Identity Data Collection

	Cycle 6 ^a						Cycle 7/8 ^b					
	Adult		Adolescent		Child ^c		Adult		Adolescent		Child	
Measure	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
SCI-2												
MEIM												
CCS-CA												
CAA												

Fill color indicates that the test was made available

^a Post-surveys in cycle 6 were open 10-weeks and 20-weeks after the first session

^b The same surveys were given during all cycle 7 and cycle 8 pre and post survey collection periods. Cycle 7 had post surveys collected 10-weeks and 20-weeks after the first session. Cycle 8 was a shorter cycle and only had time for a 10-week post survey collection.

^c Child surveys were filled out by an adult proxy

Sense of Community Index – 2 (SCI-2) is a 24-item measure that covers attributes of an individual's sense of community (Chavis, Lee, & Acosta, 2008). The SCI-2 was designed for all ages and was offered across all cycles of the program extension (cycles 6-8). To ensure the measure was specific to AI/AN communities, specific tribal community terms were inserted into the scale where appropriate.

Multigroup Ethnic Identity Measure (MEIM) is a 12-item survey developed for youth and young adults in 1992 (Phinney, 1992) to assess the strength of connection an individual has to their culture or identity. The test was further validated for youth as young as junior high students (Roberts et al., 1999). For this program, the survey was administered to all adult and adolescent participants for each of the extension cycles. This survey addresses the depth of connection an individual has to their culture.

Cultural Connectedness Scale – California (CCS-CA) was used to assess cultural identity connection by assessing the breadth of connection an individual has to their culture with a 29-point measure covering connection to traditions, identity, and spirituality (King et al., 2019). This measure was specifically designed for the indigenous communities of California. The CCS-CA was administered to all adult and adolescent participants for each of these cycles without an N/A answer option, which is typically required for scoring according to validated methods. Consequently, these data were interpreted separately for connection to culture and exposure to cultural traditions.

Cultural Activity Assessment (CAA) measure was developed by the project team to assess what participants' takeaways were from the program activities. The questions were asked using a 5-point Likert scale (not much to very much) for participants to

respond to each statement. The questions were presented to all participants in each post-survey through all extension cycles. The following questions in this measure specific to this outcome were:

Since participating in cultural and traditional activities, how much do you think they have helped you in the following ways?

- ☐ *I feel more proud of my AI/AN identity*
- ☐ *I feel more comfortable with my AI/AN identity*
- ☐ *I feel more connected with my spirituality god, creator or other*

Mental Health and Wellness

This outcome was assessed by a number of age-appropriate measures for depression, anxiety, and historical loss. Together, these measures assess overall mental health and wellness outcomes associated with the program.

Table 4: Timeline of Mental Health Data Collection

Measure	Cycle 6 ^a						Cycle 7/8 ^b					
	Adult		Adolescent		Child ^c		Adult		Adolescent		Child	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
PHQ												
CES-DC												
GAD												
SCARED												
HLS												
HLAS												
CAA												

Fill color indicates that the test was made available

^a *Post-surveys in cycle 6 were open 10-weeks and 20-weeks after the first session*

^b *The same surveys were given during all cycle 7 and cycle 8 pre and post survey collection periods. Cycle 7 had post surveys collected 10-weeks and 20-weeks after the first session. Cycle 8 was a 10-week post survey collection.*

^c *Child surveys were filled out by an adult proxy for cycle 6*

Patient Health Questionnaire is a standard 9-item clinical measure for depression. The adult version is referred to as the PHQ-9 (Kroenke et al., 2001) and the adolescent version is referred to as the PHQ-A (Johnson, 2002). This measure was administered to all adults and adolescent participants for each extension cycle.

Center for Epidemiological Studies Depression Scale for Children (CES-DC) is a standard 20-item clinical measure for depression in children (Bright Futures, n.d.). This measure was administered to all children during Cycles 7 and 8.

Generalized Anxiety Disorder (GAD) severity measure is a 7-item standard clinical test. The adult version is referred to as the GAD-7 (Spitzer, 1999), and the adolescent version is the GAD-Child Age 11-17 (American Psychiatric Association, 2013). This measure was administered to all adults and adolescent participant for each extension cycle

Screen for Child Anxiety Related Emotional Disorders (SCARED) is a 41-item standard clinical measure for anxiety in children (Birmaher et al., 1997). This measure was administered to all child participants during Cycles 7 and 8.

Historical Loss Scale (HLS) is an established and verified measure of the historical loss that is felt by indigenous communities (Armenta et al., 2016). The adult scale is a 12-item scale while the adolescent scale is a 10-item scale that omits the 2 questions based around loss of respect for elders and traditional ways by younger generations. All other parts of this scale are the same for adults and adolescents. The age-appropriate versions of the test were administered to all adult and adolescent participants for each of the extension cycles. The full 12-item adult scale was administered to all child proxy respondents during Cycle 6. Due to the child surveys being administered directly to children, this measure was removed from the child surveys for Cycles 7 and 8.

Historical Loss Associated Symptoms (HLAS) is an established and verified 17-item measure that tracks the symptoms associated with historical loss (Whitbeck et al., 2004) specifically for indigenous communities. This measure accompanies the HLS as a two-step analysis that indicates the presence of historical loss and the range of symptoms that stem from that sense of loss (Sebwenna-Painter et al., 2023). This measure was administered to all adult and adolescent participants for each of the extension cycles, and to child proxies in Cycle 6.

Cultural Activity Assessment (CAA) measure was developed by the project team to assess what participants takeaways were from their participation in the program activities. The questions were asked using a 5-point Likert scale (not much to very much) for participants to respond to each statement. The questions were presented to all participants in each post-survey through all extension cycles. The following questions in this measure were specific to this outcome were:

Since participating in cultural and traditional activities, how much do you think they have helped you in the following ways?

- ☐ *I feel happier*
- ☐ *I feel less anxious/worry*

Substance Use

Table 5: Timeline of Substance Use Data Collection

	Cycle 6 ^a						Cycle 7/8 ^b					
	Adult		Adolescent		Child ^c		Adult		Adolescent		Child	
Measure	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
TFSU												
CAA												

Fill color indicates that the test was made available

^a Post-surveys in cycle 6 were open 10-weeks and 20-weeks after the first session

^b The same surveys were given during all cycle 7 and cycle 8 pre and post survey collection periods. Cycle 7 had post surveys collected 10-weeks and 20-weeks after the first session. Cycle 8 was a shorter cycle and only had time for a 10-week post survey collection.

^c Child surveys were filled out by an adult proxy

Timeline Followback - Substance Use (TFSU) is a standard method to collect self-reported substance use (Sobell & Sobell, 1992). Participants were asked to report the number of days they used each substance over the past 30 days; cigarettes, smokeless tobacco, alcohol, marijuana, inhalants, and other illicit, prescription, or over the counter drugs. This measure was administered to all adult and adolescent participants for each of the extension cycles.

Cultural Activity Assessment (CAA) measure was developed by the project team to assess what participants takeaways were from their participation in the program activities. The questions were asked using a 5-point Likert scale (not much to very much) for participants to respond to each statement. The questions were presented to all participants in each post-survey through all extension cycles. The following questions in this measure were specific to this outcome were:

Since participating in cultural and traditional activities, how much do you think they have helped you in the following ways?

☐ *I feel less likely to use drugs/alcohol*

Coping Skills

Table 6: Timeline of Coping Skills Data Collection

	Cycle 6 ^a						Cycle 7/8 ^b					
	Adult		Adolescent		Child ^c		Adult		Adolescent		Child	
Measure	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
CRS SES												
MDS												
CAA												

Fill color indicates that the test was made available

^a Post-surveys in cycle 6 were open 10-weeks and 20-weeks after the first session

^b The same surveys were given during all cycle 7 and cycle 8 pre and post survey collection periods. Cycle 7 had post surveys collected 10-weeks and 20-weeks after the first session. Cycle 8 was a shorter cycle and only had time for a 10-week post survey collection.

^c Child surveys were filled out by an adult proxy

Cultural and Racial Socialization Self-Efficacy Scale (CRS SES) is a validated 18-item measure developed to analyze how prepared parents feel about teaching their children about their culture or race. For this program, the measure was used to determine if the adult participants grew more confident in being able to teach the children in their lives about their indigenous culture and traditions. This measure was administered to adults and child proxies for cycle 6 only. It was excluded from cycles 7 and 8 due to it being designed and validated for parents, and not all participants were parents.

Microaggressions Distress Scale (MDS) is a validated measure for AI/AN populations to assess the number of microaggressions faced and the level of distress different types of microaggressions cause (O'keefe & Greenfield, n.d.). This measure was given to all participants in cycle 6. The measure was removed from the surveys for cycle 7 and 8 due to some of the terms and terminology within the questions being outdated for this population and containing slurs that might be triggering.

Cultural Activity Assessment (CAA) measure was developed by the project team to assess what participants takeaways were from their participation in the program activities. The questions were asked using a 5-point Likert scale (not much to very much) for participants to respond to each statement. The questions were presented to all participants in each post-survey through all extension cycles. The following questions in this measure were specific to this outcome were:

Since participating in cultural and traditional activities, how much do you think they have helped you in the following ways?

☐ *I could think more clearly at school/work*

☐ *I have more energy/motivation*

Outlook

Herth Hope Index (HHI) is a 12-item standard clinical measure that has been validated across many diverse populations (Herth, 1992). This instrument was administered to all adult and adolescent participants during cycle 6. Due to survey fatigue and the lack of significant results in prior cycles, this test was removed from surveys for cycles 7 and 8. The measure of hope in this instrument is similar to the combined measures of depression and anxiety in the PHQ and GAD tests. While this outcome measure was dropped for cycles 7 and 8, improvements in mental health and wellness captured much of what the HHI covered.

Table 7: Timeline of Outlook Data Collection

	Cycle 6 ^a						Cycle 7/8 ^b					
	Adult		Adolescent		Child ^c		Adult		Adolescent		Child	
Measure	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
HHI												

Fill color indicates that the test was made available

(a) Post-surveys in cycle 6 were open 10-weeks and 20-weeks after the first session

(b) The same surveys were given during all cycle 7 and cycle 8 pre and post survey collection periods. Cycle 7 had post surveys collected 10-weeks and 20-weeks after the first session. Cycle 8 was a shorter cycle and only had time for a 10-week post survey collection.

(c) Child surveys were filled out by an adult proxy

Data Collection

For cycle 6, paper copies of the pre-surveys were prepared for both Local and SWE surveys. Participants' names, emails, and phone numbers were collected on a sign-out sheet for follow-up communication. Verbal consent was conducted using the template provided by the grant. Paper surveys were distributed and collected during the first two weeks of the program (January 18, 2024, and January 25, 2024). Participants who completed and returned their surveys received gift cards as an incentive for participation.

At the 10-week mark, Local post-surveys were prepared using SurveyMonkey for adults (18+), adolescents (12–17), and children (5–11). Participants were provided their participant codes and survey links on the data collection dates (March 27, 2024, and April 4, 2024). The evaluation team sent email reminders on March 22, 26, and 27, 2024. Follow-up phone calls were made on April 4, 2024, to encourage survey completion, and gift cards were distributed in person at the next workshop or at UAll for those who submitted their surveys.

For the 20-week follow-up, Local post-surveys were again prepared in SurveyMonkey, and SWE post-surveys were shared using Qualtrics links provided by PARC LMU for adults, adolescents, and children. Participants received their participant codes and links on May 29, 2024. The initial deadline for completing the surveys was June 6, 2024, which was later extended to June 19, 2024, to increase response rates. Participants who submitted surveys received their gift cards in person or via email if not completed at the workshop. Throughout this process, the team monitored completion rates in SurveyMonkey and provided multiple points of support such as reaching out via email and phone calls to ensure high response rates.

Paper responses were manually entered into SurveyMonkey by selecting “Web Link 1” under the “Collectors” tab, then “Manual Data Entry,” and clicking “Add New Response.” Survey responses were transcribed exactly as written. If any questions were left unanswered, had multiple answers, or were completed in an unscorable format, those fields were left blank. Once entered, survey completion was documented in Column D of the Cycle 6 tab in the “Quality Review C6 and C7” spreadsheet. A quality review process among four reviewers was implemented to ensure accurate transcription by cross-checking paper responses with digital entries.

Cycles 7 and 8 exclusively used SurveyMonkey for all survey administration to standardize data collection and improve tracking of participant responses. Though paper copies were available for those who preferred paper. Cycle 8 was conducted as a shortened version of the intervention, lasting only 10 weeks compared to the 20-week format used in Cycles 6 and 7. Additionally, Cycle 8 used only the SWE survey for pre-surveys, as there was no 20-week post-survey administered for that cycle.

Participants again completed surveys corresponding to their age group using updated SurveyMonkey links. Responses were reviewed digitally through SurveyMonkey’s “Analyze Results” tab under “Individual Responses” in “Single” view. Reviewers documented any incomplete or inconsistent responses in Column C of the Cycle 7 tab in the quality review spreadsheet. For surveys initially completed on paper and later digitized, data accuracy was reviewed and noted in Column D. When errors or omissions were identified, follow-up contact with participants was conducted in consultation with the supervising psychologist, Dr. Mihecoby.

The evaluation team also conducted a structured quality review of SWE survey data using an Excel tracking workbook. This document consisted of three main sheets. The “General Summary of Issues” sheet provided an overview of common problems and recommended resolutions. The “Specific List of Issues” sheet detailed individual concerns by Participant ID (PID), allowing staff to enter corrective actions per case or apply blanket resolutions for recurring problems. The “PID List” sheet tracked all received PIDs, including unmatched pre- and post-surveys and duplicates. Each sheet included a column titled “IPP Response/Solution,” where staff recorded final decisions or corrective actions in response to evaluator feedback from PARC. The evaluation team called participants to clarify or collect any responses possible. This process was adapted for our local survey questions and included the risk review protocol described

earlier. This standardized review process supported consistency, accountability, and transparency across the evaluation.

Data Analysis

Data analysis began after data were collected, entered into the online survey platform, and reviewed for quality across Cycles 6 through 8. This allowed for a cohesive look at the overall impact of the program. All outcomes were assessed using one or more standard or validated measures, with the complete list of measures and coding provided in Table 2.

All analyses were conducted using GraphPad Prism version 10. Descriptive statistics were used to summarize demographic data collected in the SWE survey. Summary statistics were also used to describe the central tendency and dispersion of outcome scores and key variables in the dataset. This included means, standard errors, and frequency distributions for all relevant demographic and outcome variables (Appendix A).

To assess the program's impact, inferential statistics were applied to compare pre- and post-survey results. Unpaired t-tests were used for Cycle 8, and one-way ANOVAs were used for Cycles 6 and 7. Tukey's post-hoc tests followed each ANOVA to compare differences between group means. All tests were conducted at a significance level of $\alpha = 0.05$. Effect sizes and p-values were calculated and are reported in the results tables to support interpretation of the strength and statistical significance of findings.

Triangulation was applied by using multiple quantitative data sources, including demographic variables, pre and post measures, and attendance data, to strengthen the internal validity of observed outcomes. Although qualitative analysis was not part of the original design, participant reflections documented in a program video were included in the final report to support interpretation of key trends and highlight participant voice and lived experience.

The participant reflections quoted in this report were drawn from a program video created by United American Indian Involvement (UAI) to document the Drum, Dance, and Regalia program. While the transcript captured spoken content, the video itself showed powerful visual context: community members of all ages coming together to drum, sing, dance, and create traditional regalia. Scenes of intergenerational learning, group movement, and cultural expression were woven throughout, offering a visual narrative of healing, connection, and cultural continuity. These images reinforced the qualitative reflections shared by participants and helped illustrate the program's impact as a culturally grounded space for wellness, belonging, and identity.

Table 8: Data Analysis Methodology

Outcome	Measure	Method	Exclusion Criteria	Coding	Citation
Cultural Identity and	SCI-2	Sum	Partial responses	Not at All = 0, Somewhat = 1, Mostly = 2, Completely = 3	(O'keefe & Greenfield,

Spirituality			(n=13)		n.d.)
	MEIM	Mean ^a	N/A	Strongly agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly disagree = 1	(Phinney, 1992)
	CCS-CA	Descriptive ^b	N/A	N/A	N/A
Mental health and wellness	PHQ	Sum	Partial responses (n=15)	Not at all = 0, Several Days = 1, More than half the days = 2, Nearly every day = 3	(Sun et al., 2020)
					(Patra & Kumar, 2022)
	CES-DC	Sum	Partial responses (n=0)	Not At All = 0, A Little = 1, Some = 2, A Lot = 3	(Weissman, Orvaschel, & Padian, 1980)
	GAD	Sum	Partial responses (n=11)	Not at all / Not at all sure = 0, Several Days = 1, Over half the days = 2, Nearly everyday = 3	(Spitzer et al., 2006)
		Sum/ Pro-rated Average	N/A	Never = 0, Occasionally = 1, Half of the time = 2, Most of the time = 3, All of the time = 4 Scored with up to 3 missing responses	(American Psychiatric Association, 2013)
	SCARE D	Sum	Partial responses (n=3)	Not True or Hardly Ever True = 0, Somewhat True or Sometimes True = 1, Very True or Often True = 2	(Birmaher et al., 1997)
	HLS	Mean	N/A	Several times a day = 1, Daily = 2, Weekly = 3, Monthly = 4, Yearly or only at special times = 5, Never = 6 NULL: Don't know/Refused ^c	(Armenta et al., 2016) (Armenta et al., 2016)
Substance Use	HLAS	Mean	N/A	Always = 5, Often = 4, Sometimes = 3, Seldom = 2, Never = 1 NULL: Don't know/Refused ^c	(Whitbeck et al., 2004)
	TFSU	Mean	N/A	N/A	(Sobell & Sobell,

					1992)
Coping Skills	CRS SES	Sum	Partial responses (n=9)	Scored from 0 (Not At All Confident) to 6 (Highly Confident)	(Lee et al., 2018)
	MDS	Sum (odd) Mean (even)	Partial responses (n=0)	ODD ITEMS: MDS Total Score No = 0, I'm not sure but I think so = 1, Yes = 2 EVEN ITEMS: Not at all = 0, A little = 1, Some = 2, A lot = 3, Extremely = 4	(O'keefe & Greenfield, n.d.)
Outlook	HHI	Sum	Partial responses excluded (n=7)	Strongly agree = 4, Agree = 3, Disagree = 2, Strongly disagree = 1 Items 3 & 6 Reverse Scored	(Herth, 1992)

^a Validated scale has 4 answer options; data collected for the program has 5 options. Interpretation is based on “higher” or “lower” scores rather than actual values. Data set coded for all 5 responses and analyzed/interpreted using validated methods.

^b Validated analysis method includes a 3-answer option for survey items 1-11 (yes, no, N/A). Data collected for this program included a 2-answer option for those questions. Interpretation of this survey is based on total score sum and was unable to be analyzed with validated methods. Instead, the Mean for each question was calculated.

^c Validated scale doesn't include don't know/refuse to answer. Interpretation is based on “higher” or “lower” averages rather the sum of responses. Added option was coded as a skipped question (NULL) and all other data were analyzed/interpreted using validated methods

Data Cleaning

Prior to analysis, a comprehensive data cleaning process was undertaken to ensure the accuracy, consistency, and reliability of the dataset housed in SurveyMonkey. The quality review was completed to ensure that duplicate responses were resolved from participants who submitted multiple responses within a single survey cycle, retaining only the more complete or recently entered response. Survey responses were also excluded if a valid participant ID was not used to identify the response – to ensure that only verifiable survey results were used. Ten full responses were excluded using these criteria.

Missing values were addressed with specific rules: constructs analyzed by summing scores (including PHQ9, GAD7, SCARED, HHI, CRS SES, and SCI-2) were required to have complete data, while constructs analyzed by producing a mean were eliminated from the analysis if more than three values were missing. In total, one or more measure scores of 51 participants were excluded from the full analysis. In addition, the dataset

was checked for inconsistencies and standardized, ensuring all categorical variables were uniform, and numerical data were of the correct type.

A master dataset was reconstructed from multiple data sources, which required creating a detailed data map to reconcile and combine files with varied ID systems. Finally, data integrity was ensured by correcting systematic encoding and formatting issues, such as misaligned item responses or mixed values. The cleaned dataset served as the foundation for subsequent data analysis.

The SWE demographic dataset was also checked for duplicate values, inconsistencies, and missing data that was gathered during quality review.

7. Results

Data were analyzed to determine the impact of the program on a number of outcomes; cultural identity and spirituality, mental health and wellness, substance use, coping skills, and outlook (cycle 6 only). The data included validated measures, and a project developed self-report of impact.

Cultural Identity and Spirituality

This outcome was measured with three validated tests, SCI-2, MEIM, and CSS-CA which was analyzed with an alternative to the validated scoring method. Additionally, participants were asked three questions on each post-survey aimed at collecting self-reported outcomes for this measure.

There was no statistically significant change in this outcome measure for adult or adolescent cohorts in any of the three cycles (data not shown). The cohort of children in cycle 8 showed a significant ($p < 0.0001$) increase in the SCI-2 scale, indicating an increase in cultural connection throughout the program.

Scores for the SCI-2 measure range from 0-100 where higher scores are related to greater cultural connection. Across all cycles, the average scores ranged from 50-56 for adults, 40-64 for adolescents, and 53-60 for child or child proxy responses.

Individual scores were assessed for differences between pre- and post-surveys. An increase in cultural connectedness in over 50% of participants was observed for adults in cycles 6 and 8 and adolescents in cycles 7 and 8. These findings were supported from the qualitative data from the program's video when a participant said, "Even when things were hard at home, coming to the program made me feel like I had a reason to keep going. It helped me stay grounded" (UAll, 2025, 0:05:15–0:05:26).

One participant reflected, "I'm just here to dance and let that be healing to whoever needs to see it. It's one of the biggest avenues for me to have connected with as many people as I have right now" (UAll, 2025, 0:03:27–0:03:42).

Table 9: Participants with Improved Cultural Identity Scores

Measure	Cycle 6		Cycle 7		Cycle 8
	Pre to Post 10 % (n)	Pre to Post 20 % (n)	Pre to Post 10 % (n)	Pre to Post 20 % (n)	Pre to Post 10 % (n)
	Adults				
SCI-2	50 (18)	50 (20)	45 (29)	44 (18)	60 (20)
MEIM	43 (21)	43 (23)	52 (29)	42 (19)	30 (23)
	Adolescents				
	40 (10)	50 (6)	57 (7)	83 (6)	64 (11)
	20 (10)	67 (6)	44 (9)	33 (6)	50 (12)
	Child (proxy)		Child		
	43 (7)	50 (4)	43 (7)	33 (6)	100 (3)

1. N values include participants who had scores for both the pre-survey and the corresponding post-survey
2. Highlighted responses are all of the results where more that 50% of respondents showed a positive improvement in their scores for the corresponding clinical test

While the CCS-CA measure wasn't scored using validated methods as previously discussed, descriptive statistics for the Likert scale questions about cultural connectedness showed a large difference in cultural connectedness between Adults and Adolescents. While the yes/no questions about exposure to cultural traditions indicate little difference between the Adult and Adolescent scores was observed.

Figure 3: CCS-CA Results in Adults and Adolescents

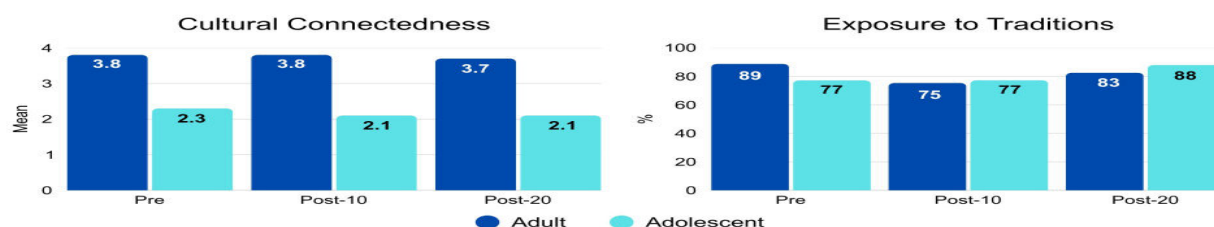


Figure 3: Cycle 6 data shown as an example of the difference between cultural connectedness (mean of a 4-point scale, where 4 was very connected) and exposure to traditions (% of respondents reporting exposure) results for Adults and Adolescents. Cycle 7 and 8 (data not shown) are similar to cycle 6 results.

When participants were asked to assess how much this program improved their connection to cultural identity, the responses were overwhelmingly positive. The mean responses across all age groups were that they felt that this program “very much” increased how proud they were of their identity, their comfort with their identity, and their connection to their spirituality.

Figure 4: Responses to Cultural Identity CAA Questions

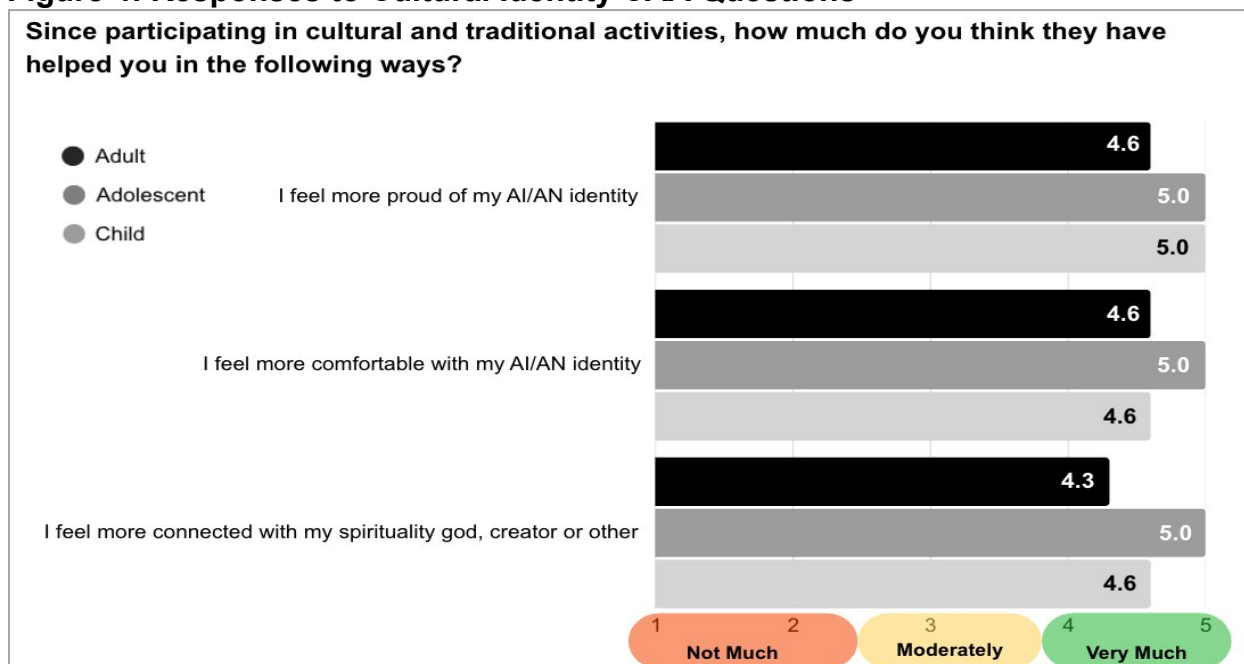


Figure Caption: Cycle 6, post-20 survey data shown as an example of the responses to the CAA questions. These questions were asked in every post-survey and the data were extremely similar across all cycles.

Results for the cultural identity outcome indicated that the participants had an average connection to their cultural identity. The children had the most significant increase in their cultural connection. Additionally, adults and adolescents with similar exposure to cultural traditions differed in their sense of connection to those traditions. The generational differences in response to programming and in cultural connection scores displayed the impact and necessity of these types of cultural programs for adolescents and children. Bringing together elders and youth in these programs weaves cultural traditions throughout the entire program design.

Mental Health and Wellness

This outcome was assessed with four validated measures to assess depression (PHQ, CES-DC), anxiety (GAD, SCARED), and historical loss (HLS, HLAS). Additionally, participants were asked two questions through the CAA measure aimed at collecting self-reported improvements.

The measures for depression and anxiety severity were standard and validated clinical measures. Scores for the PHQ range from 0-27 with 0-4 being no depression and 20-27

being severe depression in adults and adolescents, while depression in children was assessed through the CES-DC where scores over 15 indicate severe depression. Overall, initial depression and anxiety were higher in adult and child populations than in adolescents. A majority of adults (51, 55%) and adolescents (80, 85%) scored at minimal to no depression or anxiety symptoms, respectively. The child measures were only given in cycle 8 where only 36% of children scored below the threshold for depression and 55% scored below the clinical threshold for anxiety when they began the program.

The post-10 and post-20 survey scores were lower for adults and adolescents in Cycles 6 and 7 compared to the pre-survey scores; only the adult cohort in cycle 6 had a significant decrease in depression. The results for cycle 8 showed a (non-significant) increase in depression for all age groups and an increase in anxiety for adolescent and child age groups. With the increase in scores only being observed in the cycle 8 data, the data should be interpreted with consideration for the context of what was happening in the world or within the local community at that time to see if there are associated community events that could contribute to this phenomenon.

By the end of each cycle, over 50% of the adult cohort who responded to both the pre- and post- surveys showed a decrease in depression. The adult cohort for cycle 7 also showed over 50% of respondents with a decrease in anxiety scores. The adolescent cohort with over 50% of the respondents showing a decrease in depression and anxiety scores was shown only for cycle 8.

A participant shared, “When I’m there, I don’t feel anxious. I don’t feel depressed. I actually feel good... it has helped me to be a lot more open and a lot more approachable” (UAI, 2025, 0:02:27–0:02:52).

Table 10: Participants with Improved Mental Health Scores

Measure	Cycle 6		Cycle 7		Cycle 8
	Pre to Post 10 % (n)	Pre to Post 20 % (n)	Pre to Post 10 % (n)	Pre to Post 20 % (n)	Pre to Post 10 % (n)
	Adults				
PHQ	67 (21)	81 (21)	57 (28)	53 (17)	44 (18)
GAD	57 (21)	48 (21)	50 (26)	56 (18)	50 (20)
HLS	31 (16)	20 (20)	11(27)	61 (18)	17 (18)
HLAS	55 (20)	50 (22)	56 (27)	53 (17)	50 (18)
	Adolescents				
PHQ	0 (10)	17 (6)	43 (7)	25 (4)	64 (11)
GAD	33 (9)	29 (7)	56 (9)	33 (6)	58 (12)

HLS	44 (9)	25 (4)	20 (5)	50 (4)	33 (9)
HLAS	38 (8)	67 (6)	57 (7)	50 (6)	57 (7)
	Child (proxy)		Child		
CES-DC	-	-	57 (7)	50 (6)	67 (3)
SCARED	-	-	86 (7)	60 (5)	67 (3)
HLS	38 (8)	20 (5)	-	-	-
HLAS	60 (10)	75 (8)	-	-	-

1. N values include participants who had scores for both the pre-survey and the corresponding post-survey
2. Highlighted responses are all of the results where more that 50% of respondents showed a positive improvement in their scores for the corresponding clinical test

Figure 5: Responses to Mental Health and Well-being CAA Questions

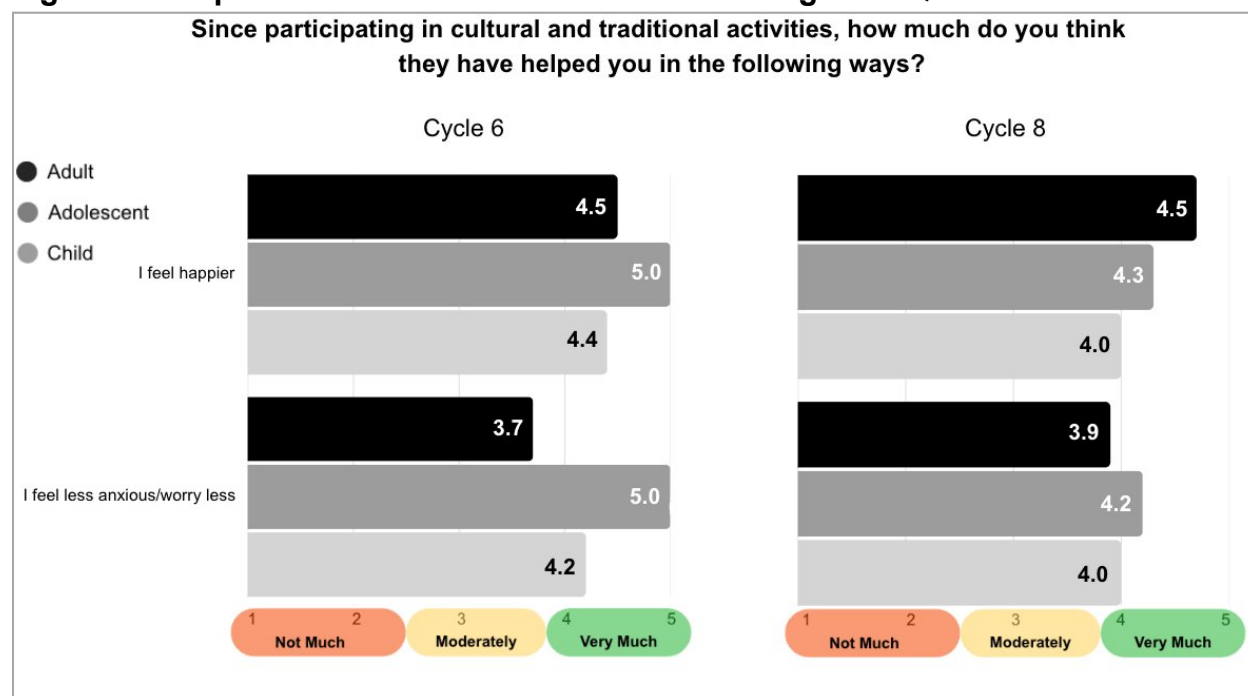


Figure 5 Caption: Data from Cycle 6, post-20, and cycle 8, post-10 surveys represent the difference in the impact the program had on anxiety/worry in cycle 8 compared to earlier cycles.

When each age group was asked to report how much the program impacted their happiness and anxiety/worry the results indicate that adults endorsed the least amount of change. For adolescent and child age groups, they reported lower levels of change in cycle 8 than they did in cycle 6.

Cycle 8 took place from March – May 2025 and throughout this timeline rhetoric about immigration policy and the acceptability of immigrants within the USA was ramping up.

The community impact of the changes in federal immigration policy was getting especially heated during this time and burst into public demonstrations and protests in early June 2025. It is likely that the increase in rhetoric and impact of immigration policy implementation could have impacted feelings of depression and anxiety within all age groups during this cycle (Valero, 2025).

The historical loss and associated symptom data showed little to no change throughout the program timeline. The scores for HLS and HLAS surveys showed a low level of both historical loss and related symptoms in all cycles for all age groups. Low HLS scores in larger cohorts have been associated with lower levels of substance use as well as lower anxiety and depression scores (Ehlers et al., 2013). The low HLS and HLAS scores make sense with the low levels of depression and anxiety also observed.

These measures put numbers to how many people's mental health and well-being were improved by the program. There were at least 101 people with improvement in their measure of depression, and 107 people with improvements in their measure of anxiety across all 3 cycles included in this analysis. In a program with 122 participants, this is a high rate of positive change overall.

Substance Use

This outcome was measured with one validated test (TFSU) and one CAA question to assess changes in substance use from pre- to post-surveys.

The Adult cohort for cycle 6 showed a decrease in the % of respondents reporting use of cigarettes, alcohol, as well as a reduction in binge drinking (Figure 6). A reduction in marijuana use among adult participants was also shown in all three cycles as well (data not shown).

Figure 6: Adult Change Substance Use

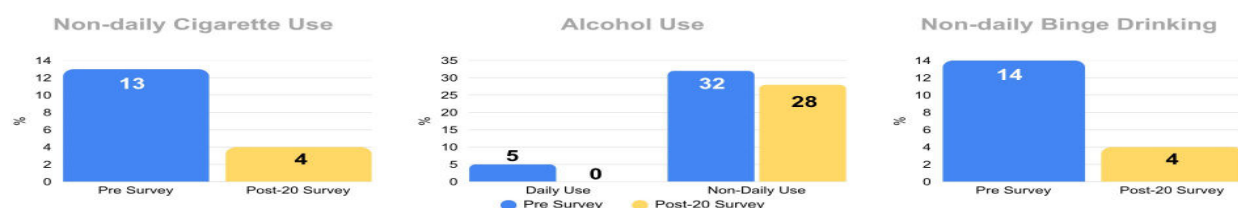


Figure Caption: Cycle 6 substance use shown as an example. Non-daily cigarette use fell from 8 to 4%, daily alcohol use fell from 5 to 0%, non-daily alcohol use fell from 32 to 28%, and non-daily binge drinking fell from 14 to 4% from the pre survey to post-20 survey.

Across all three cycles, there was only one adolescent respondent who reported any substance use. Due to the low/non-existent reporting of substance use among adolescent participants in the TFSU, these data were not analyzed.

The adolescent tobacco use rate (0%) was lower than the youth use rates reported for the state of California within AI/AN youth (11%, (Zhu, 2021)). This could be due to an unwillingness to disclose tobacco use at a program that included their whole family, or it could be the small sample size. The tobacco use rates among adults (21-6%) is slightly lower than the adult AI/AN tobacco use rates reported for the state of CA (27%, (Tobacco and Cancer - California Rural Indian Health Board, 2019)). The adult rates are closer to the statewide data, and this could indicate that tobacco use among AI/AN adults in LA county may be lower than the statewide use rates. There have been efforts in California's tobacco control and prevention programs to clearly define the differences between commercial tobacco and sacred use tobacco (CTPP Tobacco Control Funding Opportunities and Resources, 2019), this distinction was not explicitly addressed within the TFSU tobacco use questions.

When participants were asked to assess how much participating in this program decreased their desire to use drugs or alcohol, the responses were overwhelmingly positive. Adults and adolescents reported feeling a lot less likely to use drugs or alcohol. This question was also on the cycle 6 child proxy surveys as well as the cycles 7&8 child surveys, and the responses from the children indicate less of a change than the adult or adolescent surveys. Little to no change in a child's desire to use drugs or alcohol is likely linked to youth under 11 years of age not being likely to have a desire to use drugs or drink to begin with.

Figure 7: Responses to Substance Use CAA Questions

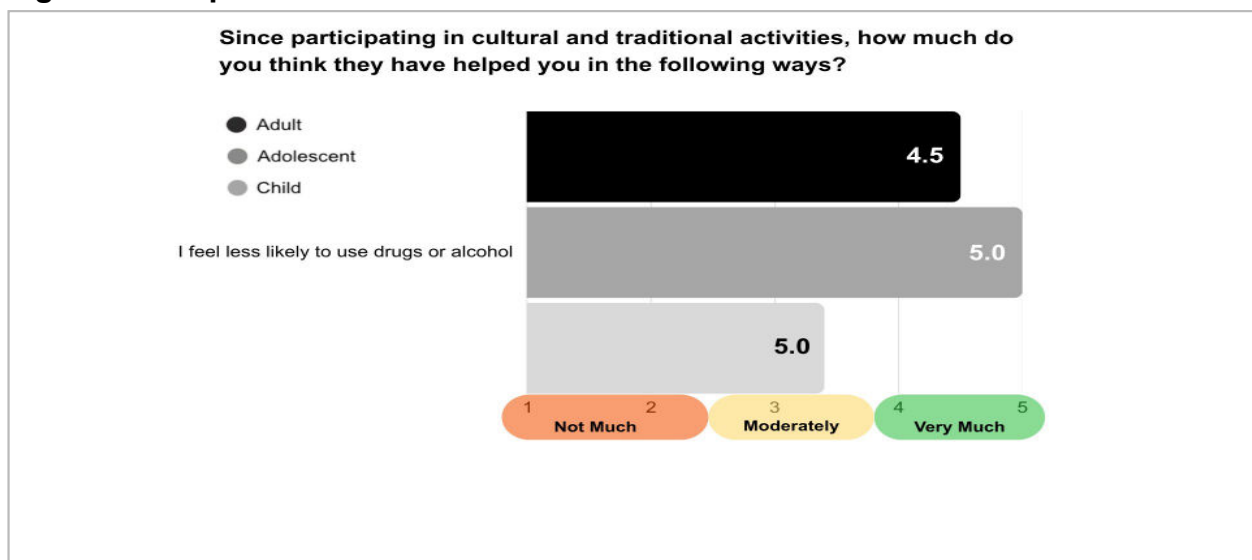


Figure 7 Caption: Data from Cycle 6, post-20, survey represents the difference in the impact the program had on desire to use substances shown as the mean of a 5-point Likert scale where 5 was completely agree.

The TFSU found rates of substance use among participants to be lower than the average use reported among AI/AN communities nationwide (Kaliszewski, 2024). Even so, substance use rates fell throughout the project timeline with marijuana use decreasing across all three cycles.

Coping Skills

This outcome was measured with two validated tests about cultural/racial socialization (CRS SES) and microaggressions (MDS). Additionally, participants were asked two coping questions on the CAA during each post-survey aimed at collecting self-reported outcomes for this measure.

The CRS SES was only available in cycle 6 for adults and the child proxy cohorts, and the MDS was only available in cycle 6 for all cohorts. There was no change in the microaggressions faced by any of our cohorts (data not shown). The CRS SES encompasses the way caregivers transmit cultural heritage or racial identity as well as attitudes about discrimination to their children. It is most widely used to assess cross cultural or cross racial adoptive parents/child relationships to the child's culture or race of origin. While the test didn't yield any significant changes throughout the program, 55% of the adults who participated in both the pre- and post-20 surveys showed an improvement in their scores. This indicates that the adults in this cohort felt better able to connect the children in their communities to their cultural heritage or traditions.

"It's not always about being the best dancer, it's just about showing up and giving it your all and being proud of yourself... I feel so much more confident" (UAIL, 2025, 0:04:20–0:04:34).

Table 11: Participants with Improved Coping Skills Scores

Measure	Cycle 6	
	Pre to Post 10 % (n)	Pre to Post 20 % (n)
	Adults	
CRS SES	39 (18)	55 (20)
CRS SES	Child (proxy)	
	56 (9)	86 (7)

1. N values include participants who had scores for both the pre-survey and the corresponding post-survey

2. Highlighted responses are all of the results where more than 50% of respondents showed a positive improvement in their scores for the corresponding clinical test

To track an increase in coping skills across cycles 6-8, all participants were asked to self-report how much the program helped them think more clearly or how it helped with their energy and motivation. The responses to these questions were overwhelmingly positive in the Adolescent and Child or Child Proxy cohorts and also indicated a positive impact for the adult cohort.



Figure 8: Responses to Coping Skills CAA Questions

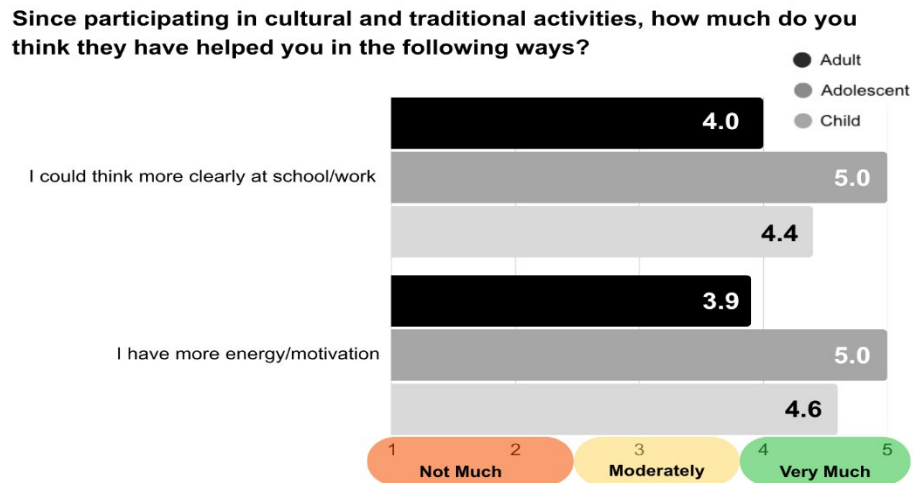


Figure 8 Caption: Cycle 6, post-20 survey data shown as an example of the responses to the self-assessment questions. These questions were asked in every post-survey and the data were extremely similar across all cycles.

The MDS measure used included some alternative language to the measure in the literature. The terms included in this survey could have had an impact on the results, and the measure was ultimately not included in surveys past Cycle 6. This measure is scored from 0 to 20 with 0 indicating no microaggressions faced and 20 indicating that someone has faced all microaggressions asked about in the survey. Adult cohort scores ranged from 8.0 - 10.4 and adolescent cohort scores ranged from 2.3 - 9.2. Previous studies with AI/AN communities in Oklahoma and New Mexico reported average responses of 2.9 - 3.2 (O'keefe & Greenfield, n.d.). This cohort scored well above the previously reported MDS scores, and the scores showed little to no change across the program timeline (data not shown).

Outlook

This outcome was measured in Adults and Adolescent cohorts with one validated test (HHI) and was only represented in cycle 6. This test was selected because it is a validated measure of Hope that has been widely used within many cultures, languages, and settings. The test has become more narrowly used in recent years for people recovering from or living with illness or chronic diseases.

The test did not yield any significant changes in cycle 6 for either cohort. What was observed in the data was that 55% of the adult participants who filled out these questions for both the pre- and post-20 surveys in cycle 6 showed an improvement in their scores, indicating an increase in their outlook or perception of hope.

Table 12: Participants with Improved Outlook Scores

Measure	Cycle 6	
	Pre to Post 10 % (n)	Pre to Post 20 % (n)
	Adults	
HHI	39 (18)	55 (20)
HHI	Adolescents	
	30 (10)	33 (6)

1. N values include participants who had scores for both the pre-survey and the corresponding post-survey
2. Highlighted responses are all of the results where more than 50% of respondents showed a positive improvement in their scores for the corresponding clinical test

Results Summary

Across Cycles 6 through 8, evaluation findings indicated positive trends in all core outcome areas, including cultural identity and spirituality, mental health and wellness, substance use, coping skills, and in Cycle 6, hope and safety. While not all changes reached statistical significance at the cohort level, more than half of participants in most domains showed individual improvements from pre to post-survey. This was especially evident among children and adolescents, where cultural connectedness and motivation scores improved consistently. Mental health indicators such as depression and anxiety also showed reductions for a majority of participants, and substance use remained minimal, especially among youth.

These quantitative results were supported by participant reflections that described increased confidence, emotional resilience and connection. One young adult shared, “When I’m there, I don’t feel anxious. I don’t feel depressed. I actually feel good... it has helped me to be a lot more open and a lot more approachable” (UAI, 2025, 0:02:27–0:02:52). Triangulation of multiple data sources, including validated scales, demographic data and participant comments, helped support the interpretation of outcomes. Taken together, the results show that Drum, Dance, and Regalia offers a culturally grounded and effective approach to prevention and early intervention in Indigenous communities.

Table 31: Summary of Evaluation Results

Cycle	Outcome	Age	Clinical Results	Self-Reported (CAA)
6	Cultural Identity and Spirituality	Adult	No Significant Change	Positive Change
		Adolescen	No Significant Change	Positive Change

		t		
		Child	No Significant Change	Positive Change
		Adult	Significant Improvement	Moderate Improvement
		Adolescent	No Significant Change	Positive Change
	Mental health and wellness	Child	No Significant Change	Moderate Improvement
	Substance Use	Adult	Decrease in Cigarette Use Decrease in Alcohol Consumption Decrease in Binge Drinking Decrease in Marijuana Use	Positive Change
		Adolescent	No Change	Positive Change
	Coping Skills	Adult	No Significant Change	Positive Change
		Adolescent	No Significant Change	Positive Change
		Child	No Significant Change	Positive Change
	Outlook	Adult	No Significant Change	-
		Adolescent	No Significant Change	-
7	Cultural Identity and Spirituality	Adult	No Significant Change	Positive Change
		Adolescent	No Significant Change	Moderate Improvement
		Child	No Significant Change	Positive Change
	Mental health and wellness	Adult	No Significant Change	Positive Change
		Adolescent	No Significant Change	Moderate Improvement
		Child	No Significant Change	Moderate Improvement
	Substance Use	Adult	Decrease in Marijuana Use	Positive Change
		Adolescent	No Change	Moderate Improvement
	Coping Skills	Adult	No Significant Change	Positive Change

8		Adolescent	No Significant Change	Moderate Improvement
		Child	No Significant Change	Moderate Improvement
	Cultural Identity and Spirituality	Adult	No Significant Change	Positive Change
		Adolescent	No Significant Change	Positive Change
		Child	Significant Improvement	Positive Change
	Mental health and wellness	Adult	No Significant Change	Positive Change
		Adolescent	Significant Improvement	Positive Change
		Child	No Significant Change	Positive Change
	Substance Use	Adult	Decrease in Marijuana Use	Positive Change
		Adolescent	No Change	Positive Change
	Coping Skills	Adult	No Significant Change	Positive Change
		Adolescent	No Significant Change	Positive Change
		Child	No Significant Change	Positive Change

1. Scoring for the self-assessment based on a Likert scale response where a cohort average of 1-2 was a negative change, 3 was a moderate improvement, and 4-5 was a positive change for the questions related to each outcome measure

2. Significance was determined based on a $p < 0.05$ on any of the tests associated with each outcome measure in each cohort

8. Discussion and Conclusion

The evaluation findings highlight the importance of culturally rooted interventions, such as this program, in mitigating historical trauma and fostering mental wellness, including as an early intervention model for urban American Indian and Alaska Native communities.

Participant reflections supported the observed outcomes in areas such as emotional healing, self-expression and cultural connection. One participant said, “I’m just here to dance and let that be healing to whoever needs to see it. It’s one of the biggest avenues for me to have connected with as many people as I have right now” (UAIL, 2025, 0:03:27–0:03:42). These reflections provide context for the reported gains in cultural identity and social-emotional wellness, highlighting relational and spiritual impacts that may not be fully captured by quantitative tools.

The greatest strength of this program was the strong emphasis on cultural and social connectedness. As previously found in research, social connectedness, or lack thereof, has a profound impact on mental health and well-being (Holt-Lunstad, 2024). The tribal communities in California have experienced lasting effects on cultural continuity and identity due to aggressive colonization and assimilation practices that included the slavery of tribal populations that built the California missions (Schneider, n.d.). This program was designed to improve several outcome measures through a series of immersive and multi-generational workshops centering on family and cultural traditions. This program addressed the disruptions in cultural continuity and aligned with the idea that cultural identity can be a protective factor against psychological distress and substance use.

One of the most notable findings was the difference in cultural connectedness between adult and adolescent cohorts. Even with similar exposure to cultural traditions, adolescents reported lower baseline levels and smaller positive benefits, reflecting the impact of cultural disruption on younger generations. This highlights a need for programs that focus on youth connection and involvement to strengthen cultural identity and connectedness.

There were positive outcomes reported for every measure, pointing to the success of this immersive program in bringing AI/AN communities together to share and practice their traditions and improving mental health, decreasing substance use, and increasing the ability to cope, particularly for communities that have regularly experienced high rates of microaggressions, discrimination, and systemic inequities. Programs like this offer connection and wellness that act as a model for culturally grounded prevention.

Limitations

Several limitations should be considered when interpreting the findings of this evaluation. The use of convenience sampling limited generalizability, as participants were not randomly selected and may not represent the broader AI/AN population in Los Angeles or other urban settings. While the study intentionally centered on self-identified American Indian/Alaska Native individuals, variability in self-identification and underrepresentation of other racial and ethnic groups, particularly among younger cohorts, may limit cultural breadth. Small sample sizes further reduced the statistical power of the findings, especially when analyzing subgroups.

Attendance and attrition also posed challenges, affecting both consistency and the completeness of data. Data collection in community-based settings introduced additional challenges including self-report bias, missing responses, and environmental distractions (e.g., meals or concurrent activities), that can compromise reliability. Fidelity to the intervention protocol is inherently complex in Community-Based Participatory Research (CBPR), where community adaptation and flexibility are core values but may lead to variation in implementation. Additionally, multiple overlapping factors such as participants' prior experiences, varying levels of engagement, and external stressors

make it difficult to isolate the specific effects of the intervention from broader social determinants of health.

The evaluation was further impacted by operational constraints. The final report for Cycles 1–5 was incomplete due to staff turnover, and some measures, such as the Discrimination Scale, were not analyzed. These gaps reduced the continuity of findings across program cycles. Lastly, while the intervention was designed for urban AI/AN communities in Los Angeles, the unique context limits the ability to generalize results to AI/AN populations in other urban areas.

Future Directions

Looking ahead, several important implications emerge from this evaluation that can guide future programming, policy, and research. First, cultural identity should be prioritized as a core outcome of intervention efforts, not only as a measure of cultural engagement but as a critical pathway to healing and resilience in AI/AN communities. Emphasizing the connection between cultural identity and mental health can strengthen outcomes, particularly when paired with more immersive, culturally grounded activities that affirm community values and traditions.

Expanding mental health education and support remains a critical need. Future interventions should explore the impact of social determinants of health such as housing instability, food insecurity, and limited access to care as key barriers to mental health improvement. Integrating education around these factors within program curricula can enhance participant understanding and support systemic change.

On a broader scale, the use of Community-Defined Evidence Practices (CDEPs) is already influencing policy. These practices have contributed to two major state-level policy shifts, including the passage of Proposition 35, which enables medical reimbursements for traditional healing practices. This policy is currently being piloted in California, Arizona, New Mexico, and Oregon, with Medi-Cal reimbursements for CDEPs anticipated as early as July 1, 2026. Additionally, Proposition 1, the Behavioral Health Services Program and Bond Measure, provides funding to sustain culturally rooted programs and supports reimbursement pathways for CDEPs. These developments signify the growing recognition of Indigenous-led practices in formal healthcare systems and open the potential for broader integration and funding sustainability in the future.

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