



Improving Resiliency of Indigenous Youth Through the Use of a Culturally Sensitive Art Program

Suzanne McWilliams, Shaylynn Shuler, Vesna Pepić, Heather Williamson, Aaron Secakuku



NACA
Pathways Youth Program

We partnered with:

- Native Americans for Community Action (NACA) Pathways program
- Institute for Translational Research Education in Adolescent Drug Abuse at University of South Florida
- Northern Arizona University





Pathways Program at Native Americans for Community Action (NACA)



NACA
Pathways Youth Program

- NACA Pathways Youth Program is a program tailored for at-risk Native American youth in the Flagstaff community.
- Provides information and education on cultivating healthy lifestyles for youth and their families.
- Culturally competent and age-appropriate
- Pathways offers after-school and weekend activities that promote self-esteem, educational enrichment, physical fitness, traditional practices and cultural values.
- Program is free of charge to eligible youth



Previous Cohort

The previous NAU ITRE cohort completed a needs assessment.

The results informed our project to address issues of stress and resiliency for students who attend Pathways after-school program.



Background



Indigenous populations experience the highest mental health, physical health, and substance use disparities of any other racial/ethnic group in the United States.



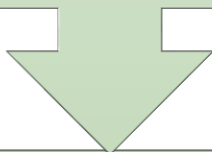
Indigenous youth have higher rates of drug and alcohol abuse than the national average



Increased prevalence rates of depression, anxiety, ADHD, school problems, grade failures, and need for medication and counseling for Indigenous children

Possible Explanations for these Trends

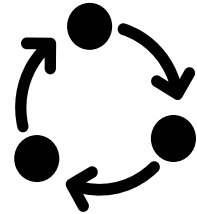
1. Historical trauma due to the colonization and perpetual overthrow and oppression of Northern American indigenous people.



2. Failure of state-led economic programs efforts to provide resources and support

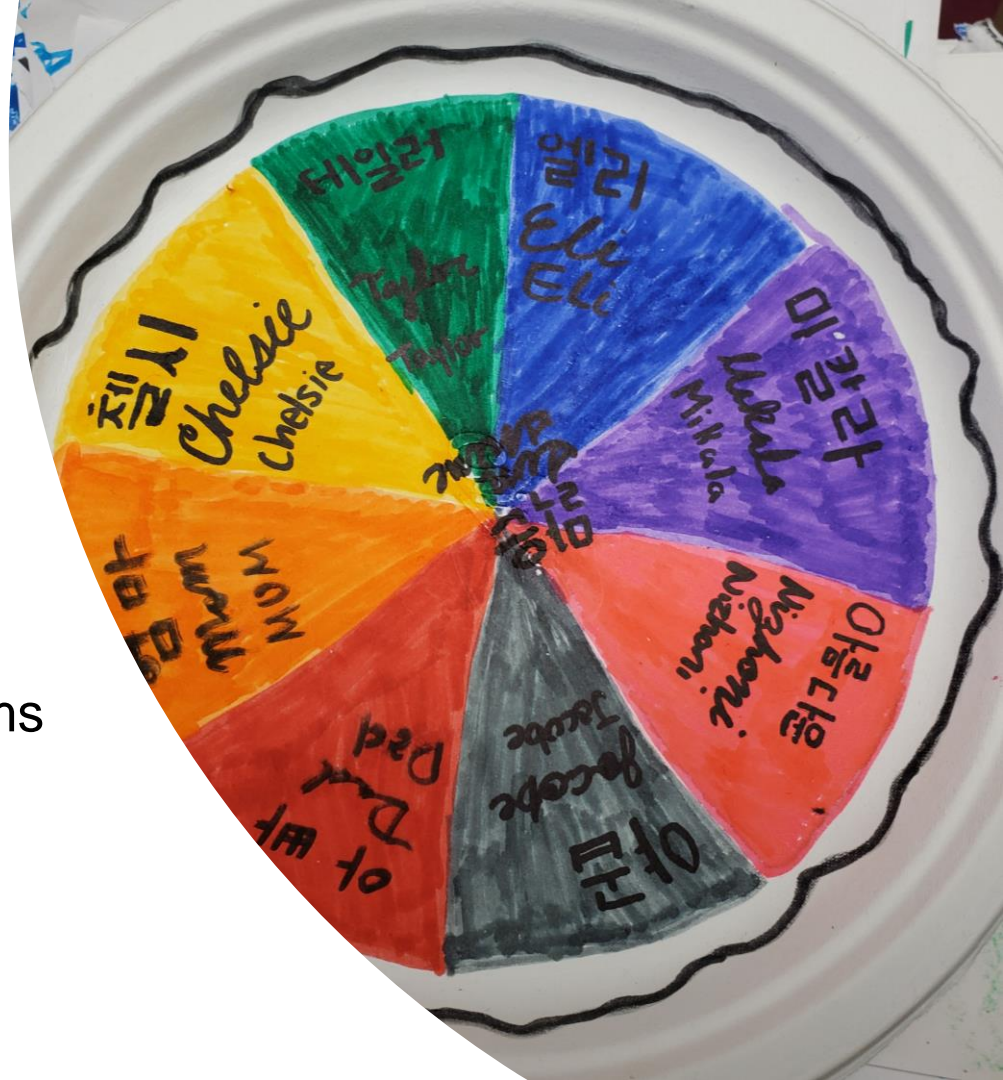
Historical Trauma

- United States Indigenous populations have experienced.
 - immense loss of life
 - forced deculturalization
 - suppression of their traditions and culture.
- Transmission of trauma and a perception of discrimination over generations that have perpetuated the *trauma cycle*.
- Many Indigenous people view themselves existing collectively with the energy, spirit, and history of their people.
- Therefore, the trauma of their ancestors can significantly impact the present lives of their families.



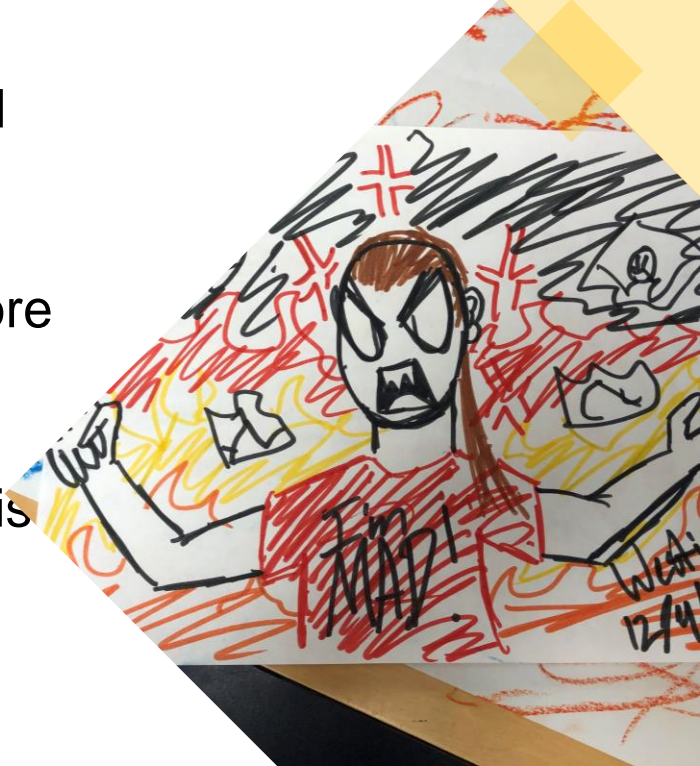
Positive Assets and Strengths of Indigenous Peoples

- In the past indigenous communities were very connected to the land, culture, and spirituality before colonization.
- Sources of strengths and mechanisms of resilience for indigenous youth are culture, familial support, spirituality/religion, and community connectedness.



Building Resiliency

- Resiliency is the ability to recover and overcome obstacles
 - essential protective factor for children exposed to trauma or neglect.
- Adverse effects of trauma can be reversed by teaching children how to self soothe and have more adaptive coping mechanisms.
- Teaching children essential skills such as self-observation, social skills, and emotion regulation is an evidence-based means of building a child's resiliency.



Wellness Afterschool Programs

- After-school programs provide structured environment for youth to gain social, emotional, and academic skills.
- Incorporate principles such as sharing, generosity, healing, and humility, which are the basis of many Indigenous values.
- Participation leads to improved mental health, decreased risk behaviors, and higher academic achievement.



Present Study and Research Design

- Determine the impact of an afterschool art-based culturally sensitive program we completed:
 - Single group
 - concurrent embedded mixed methods
 - pre-post-test
 - within-subjects design



Research Question 1:

What is the impact
of a culturally
sensitive art-based
afterschool program
on:

Resiliency

Perceived
Stress

Mood

Research Question 2:

What are the experiences of the participants as they engaged in the intervention?

Participant engagement

Integrity of intervention

Observable changes in mood

Data Collection

Pre/Post Intervention
Survey

Validated Tools

- Perceived Stress Scale
 - Child & Youth Resilience Measure-Revised
- Collected in Qualtrics

- Mood Scale -Likert Scale
 - Pre and Post every week after intervention

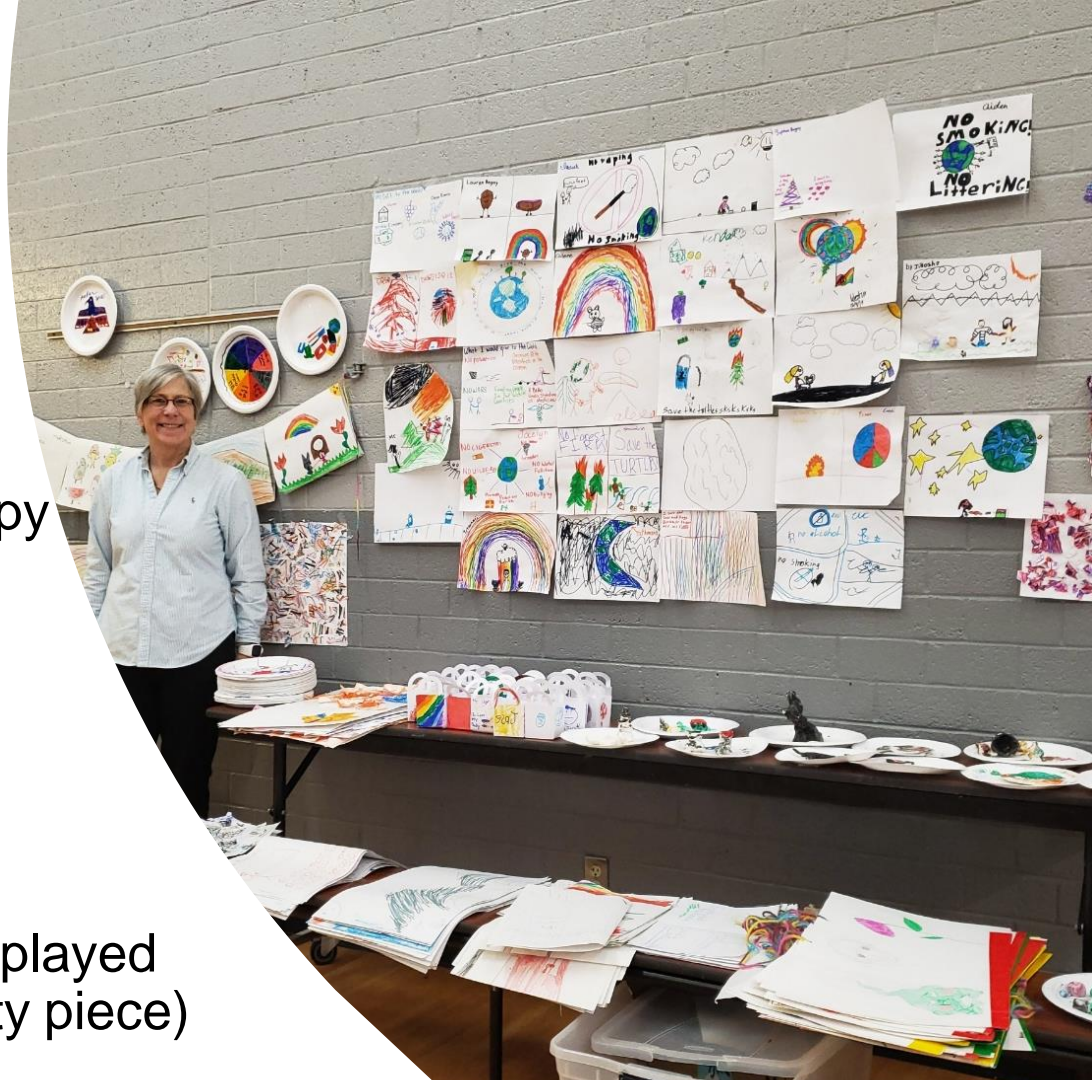
- Fieldnotes collected on Qualtrics



Intervention

Evidenced Based Art Intervention

- Start Up! Indigenous Art Therapy
- 15 weeks, two-hour time block
- Meditation
- Bilateral Scribble/Drawing
- Culturally Salient Art
- Group Discussions
- Art Show: Students art was displayed at a family gathering (community piece)



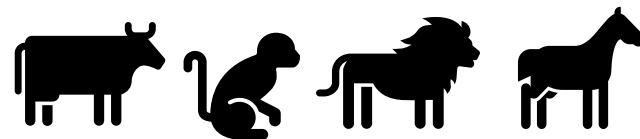
Participants

Table 1

Age/Gender of Participants

	Frequency	Percent
5-7	14	38.9
8-10	18	50
11-13	4	11.1
Total	36	100
Male	19	52.8
Female	17	47.2

- IRB Approved
- Parents & Guardian Consent
- Student Assent
- Deidentified students with animal symbols



Data Analysis

- Data Preparation
 - All variables were examined for accuracy of meeting standard parametric assumptions.
 - Conducted with SPSS version 26.0 (SPSS Inc., Chicago, IL). Comparisons are significant at $p < 0.05$.
 - Missing data was excluded case wise
- Inferential Statistics
 - Quantitative
 - Paired Samples *t*-test
- Content Analysis
 - Analyzed emerging patterns

Results

Table 2

Perceived Stress Scores by Category

	Frequency	Percent
Low Stress	3	8.1
Moderate Stress	32	86.5
High Stress	1	2.7
Total	37	100

Table 3

CYRM and Subscale Mean Scores by Gender

Mean	Personal Resilience Subscale	Caregiver/Relational Resilience Subscale	Overall Score
<i>Males</i>	24.79	16	40.68
<i>Females</i>	26.59	16	42.59
<i>Total Sample</i>	25.64	16	41.58

Results

Table 5
Paired Samples t-Test Perceived Stress Scale











	Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference		<i>t</i>	df	Sig. (2-tailed)
				Lower	Upper			
Pre/Post	3.68	5.18588	1.03718	1.53937	5.82063	3.548	24	0.002

Effect Size: Cohen's D = 0.709

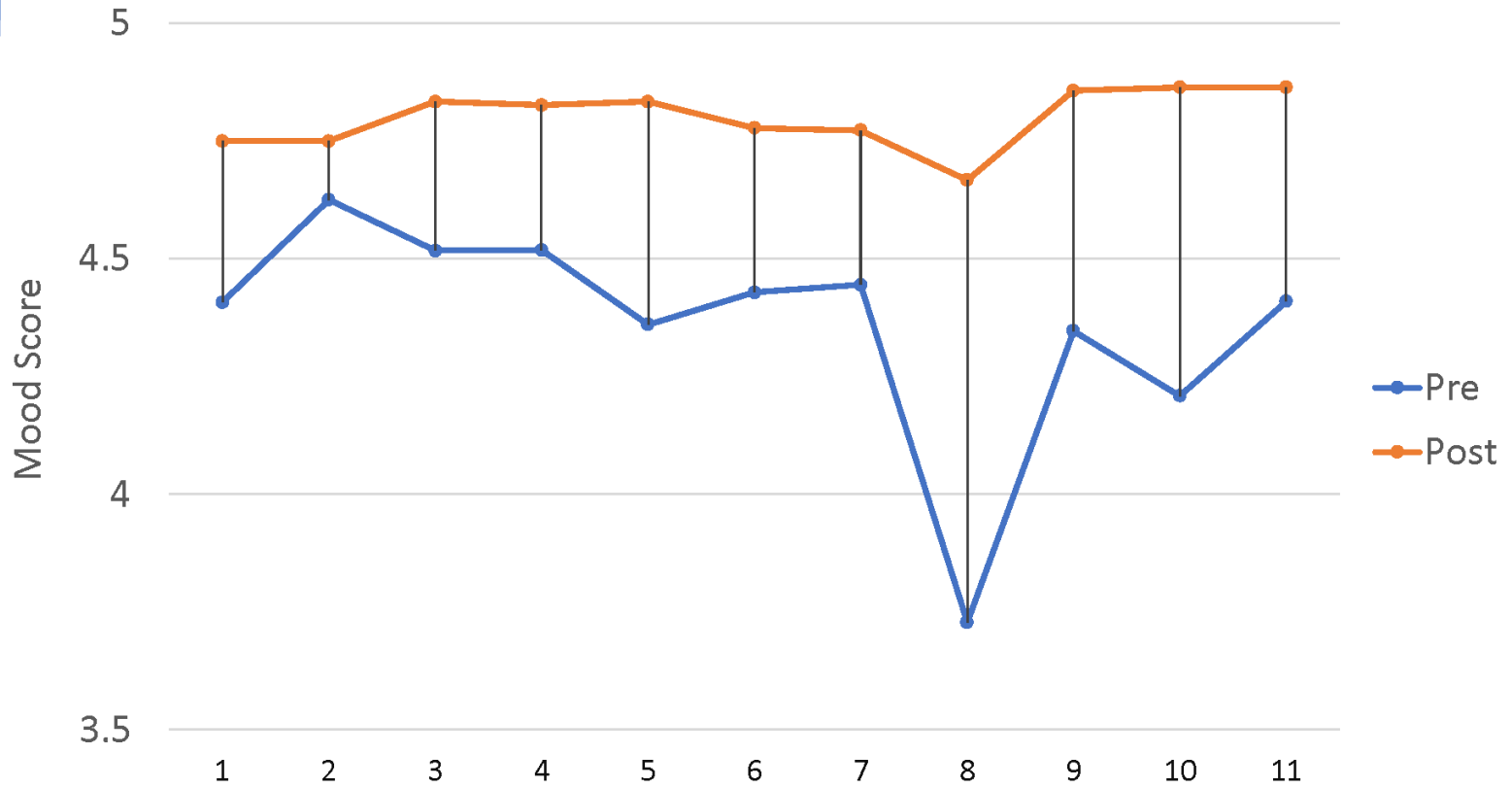
Results

Table 2

Paired Samples t-test

	Mean	Std. Deviation	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
			Lower	Upper			
Week 1	-0.32	0.69	-0.605	-0.035	-2.317	24	0.029* 
Week 2	-0.172	0.889	-0.511	0.166	-1.044	28	0.305
Week 3	-0.417	0.654	-0.693	-0.141	-3.122	23	0.005* 
Week 4	-0.417	0.881	-0.788	-0.045	-2.318	23	0.03* 
Week 5	-0.44	0.651	-0.709	-0.171	-3.381	24	0.002* 
Week 6	-0.357	0.731	-0.641	-0.074	-2.585	27	0.015* 
Week 7	-0.455	0.739	-0.782	-0.127	-2.887	21	0.009* 
Week 8	-0.818	0.958	-1.243	-0.393	-4.006	21	0.001* 
Week 9	-0.5	0.673	-0.798	-0.202	-3.487	21	0.002* 
Week 10	-0.583	0.776	-0.911	-0.256	-3.685	23	0.001* 
Week 11	-0.435	0.728	-0.749	-0.12	-2.865	22	0.009* 

Mean Mood Scores



Strengths and Limitations

Strengths

- Research Design
- Cultural salience
- Interdisciplinary team

Limitations

- Smiley-face scale
- Non-indigenous intervention instructors
- Attrition
- Info SES of participants

Implications for Research and Practice

- The after-school program offers these students a sense of belongingness.
- StartUp! can be can utilized to teach children better coping strategies.
- Use of culturally salient art projects improved mood and stress over time.
- Reduced stress can be a preventive measure for potential substance use disorders and other risk factors.

Recommendations/Future Directions

- Recommendations
 - Full program of curriculum
 - Teach emotional literacy
 - Continued funding of the Pathways program at NACA is important for this population as evidenced by our data
 - Implement a Control Group
- Future Directions
 - National Endowment for the Arts grant
 - Potentially applying for near the end of the semester/beginning of summer
 - Fund the StartUp curriculum for a year at Pathways

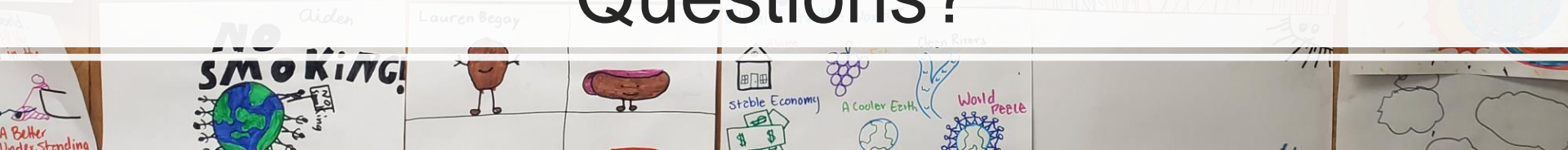
Acknowledgements

We would like to thank:

- Our community partner, Native Americans for Community Action (NACA).
- The Institute for Translational Research Education in Adolescent Drug Abuse at University of South Florida.
- Our research partners Heather Williamson and Aaron Secakuku and the NACA volunteers who made this research project possible!



Questions?



Curriculum Reference

- Start UP!: A School-Based Arts Curriculum for Native American Youth
- Authors: by Carey MacCarthy, MA, ATR-LPCC, Linda Chapman, MA, ATR-BC.
- Edition: 1
- Published: 2017

Neurodevelopmental Art Therapy (NDAT) four stage evidence-based chronic trauma treatment model

- Specific art interventions for treating acute traumatic episodes and persistent exposure to stress and trauma using directive and non-directive art therapy techniques.
- Use of art can facilitate exposure to traumatic cues in a non-threatening manner, allowing for desensitization of anxiety, articulation of affective states, and more detailed and emotional narratives.
- Traumatic material is stored in the right hemisphere (RH)
 - Bilateral activity (drawing, painting) activates the RH

