



A Longitudinal Analysis of an Out- of-School-Time Program Serving Native American Youth

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Out-of-school-time (OST) as developmental context

We now that quality structured OST experiences, like summer camp, can have a powerful short and long term benefits for youth

- Enhanced socioemotional skills, academic performance, physical health, career readiness, relationships

Guiding
Question(s):
How do youth
grow/change
over time in an
OST program

In the broader OST literature and that focused in camp, conventional wisdom suggests “more” is typically “better” for the achievement of outcomes.

How much “more” is especially important given increasingly limited resources

If we know how much is enough, we can potentially serve more youth, or serve youth better



Components of OST Participation: It's Messy!

Historically, participation was measured as quantity

- Breadth: total number of activities
- Intensity: frequency of participation over a fixed period of time
- Duration: number of years

Quality of participation was seemingly missing

- Engagement
 - Satisfaction, relationships with staff, relevance

Research and evaluation remains underdeveloped among Ethnic minority and high poverty youth

- **Especially among Native youth**

This is what
systematic
racism looks
like when it
wins...

In the US, Native youth rank among the **highest** for suicide, self-harm, substance use, sexual violence, depression, hopelessness and physical violence

This population generally ranks among the **lowest** for educational attainment, lifetime income, physical health, and life expectancy

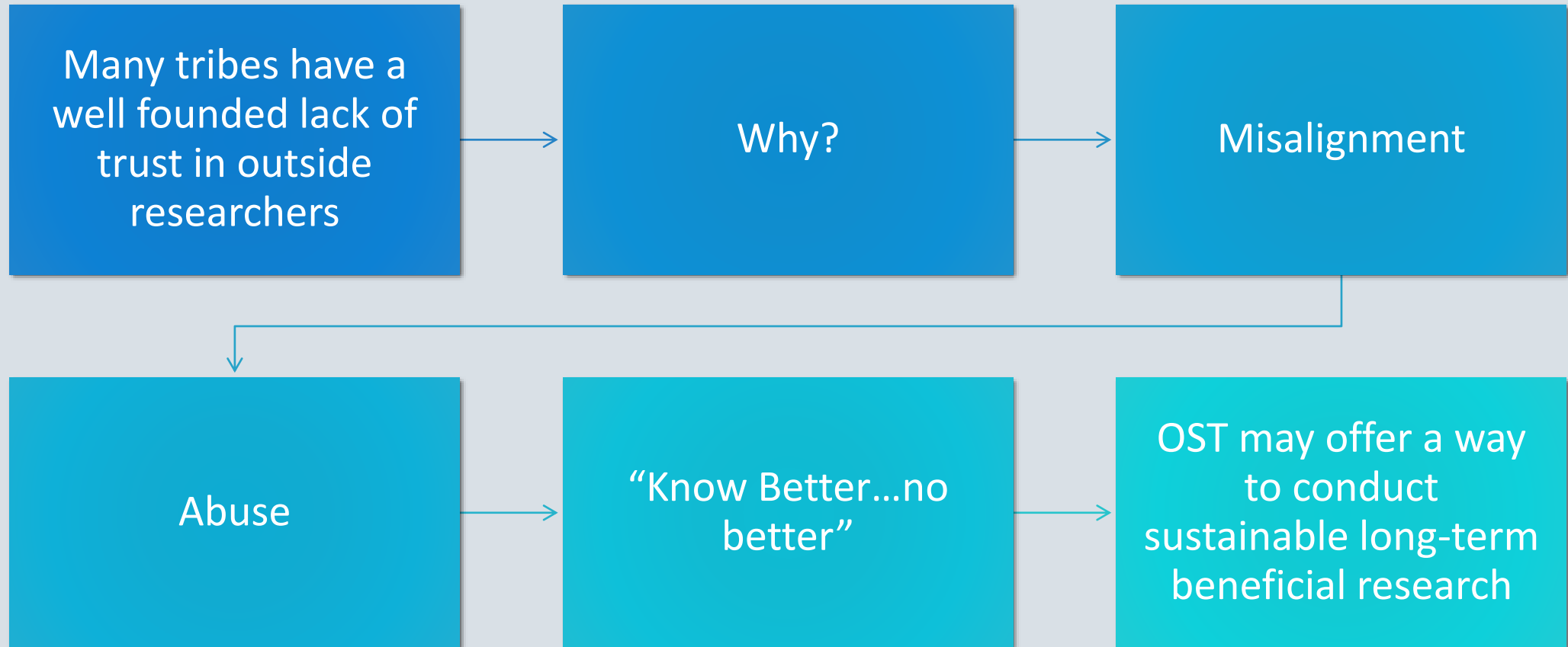
- In our partner tribe, the average life expectancy for a male is 47 years
- The US average is currently 78

Census ACES scores average = 8.1! (2017 data)



Cheyenne River Reservation

OST as Research Context Among Native Youth





Our 2018 – 2023 Partnership: Why and What?

Can we do a study with YMCA of the Seven Council Fires?

- Developing Evaluation/Funding Capacity
- Cultivate Partnerships
- Learn with and from each other

Our “basic” research question

- How does the OST program community shape Native Youth socioemotional development?



What is your First and Last Name? (Fill-In) _____

What is your age in years? (Fill-In) _____

Including this year, how many years have you attended Camp Marrowbone total (Fill-in) _____ ☐

What gender do you identify with? (Circle One)

Female

Male

Non-Binary

Please Fill-In

How much have you have embodied our values over the past week? Please rate each statement by circling the best choice for each item.

		Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
Wówačhantognake (Generosity)	I provided generosity without expecting anything in return	1	2	3	4	5
Wóohitike (Courage)	I risked what I value for a higher purpose	1	2	3	4	5
Wóyuonihañ (Respect)	I had respect for myself, my higher power, my community, and all life	1	2	3	4	5
Wówañunšila (Compassion)	I was caring and compassionate for others	1	2	3	4	5
Wóksape (Wisdom)	I looked for and developed wisdom and knowledge	1	2	3	4	5
Wóuñšiičiye (Humility)	I am equal with <u>others</u> , I am no better or less	1	2	3	4	5
Wówačhinthanka (Patience)	I was persistent and tolerant in the face of challenges	1	2	3	4	5

Here we'd like to know more about how you may have grown as a result of Camp Marrowbone. Please rate each statement by circling the best choice for each item.

	Strongly Disagree	Somewhat Disagree	Neutral	Somewhat Agree	Strongly Agree
I feel a sense of choice and freedom in the things I undertake	1	2	3	4	5
I feel that the people I care about also care about me	1	2	3	4	5
I feel confident that I can do things well	1	2	3	4	5
I make choices based on what I really want	1	2	3	4	5
I feel connected to the people who care for me, and whom I care for	1	2	3	4	5
I feel capable to accomplish the things I try	1	2	3	4	5
I feel close and connected with other people who are important to me.	1	2	3	4	5
I feel competent to achieve my goals	1	2	3	4	5
I feel I have been doing what really interests me	1	2	3	4	5
I experience a warm feeling with the people I spend time with	1	2	3	4	5
I can successfully do hard things	1	2	3	4	5
I feel my choices express who I really am	1	2	3	4	5

Our Measures

Basic Psychological Need Satisfaction (Chen et al., 2015)

- **Autonomy, Competence, Relatedness** → Antecedents of youth thriving
 - *I feel I have been doing what really interests me*

Tiffany-Eckenrode Program Participation Scale (Tiffany et al., 2012; 2013)

- **Personal development** (e.g., *The camp activities are challenging and interesting*)
- **Voice/influence** (e.g., *I have a lot of voice/power to influence decisions about camp*)
- **Safety/support** (e.g., *I usually feel safe when I am involved in camp activities*)

7 Values of Lakota Life (Designed in Concert with Tribal Stakeholders)

Sample(s) & Procedures

$N = 93$

48.4% Female Identifying (Male = 44%; Non-Binary = 7.7%)

Average 12.2 years of Age (Range = 11-17)

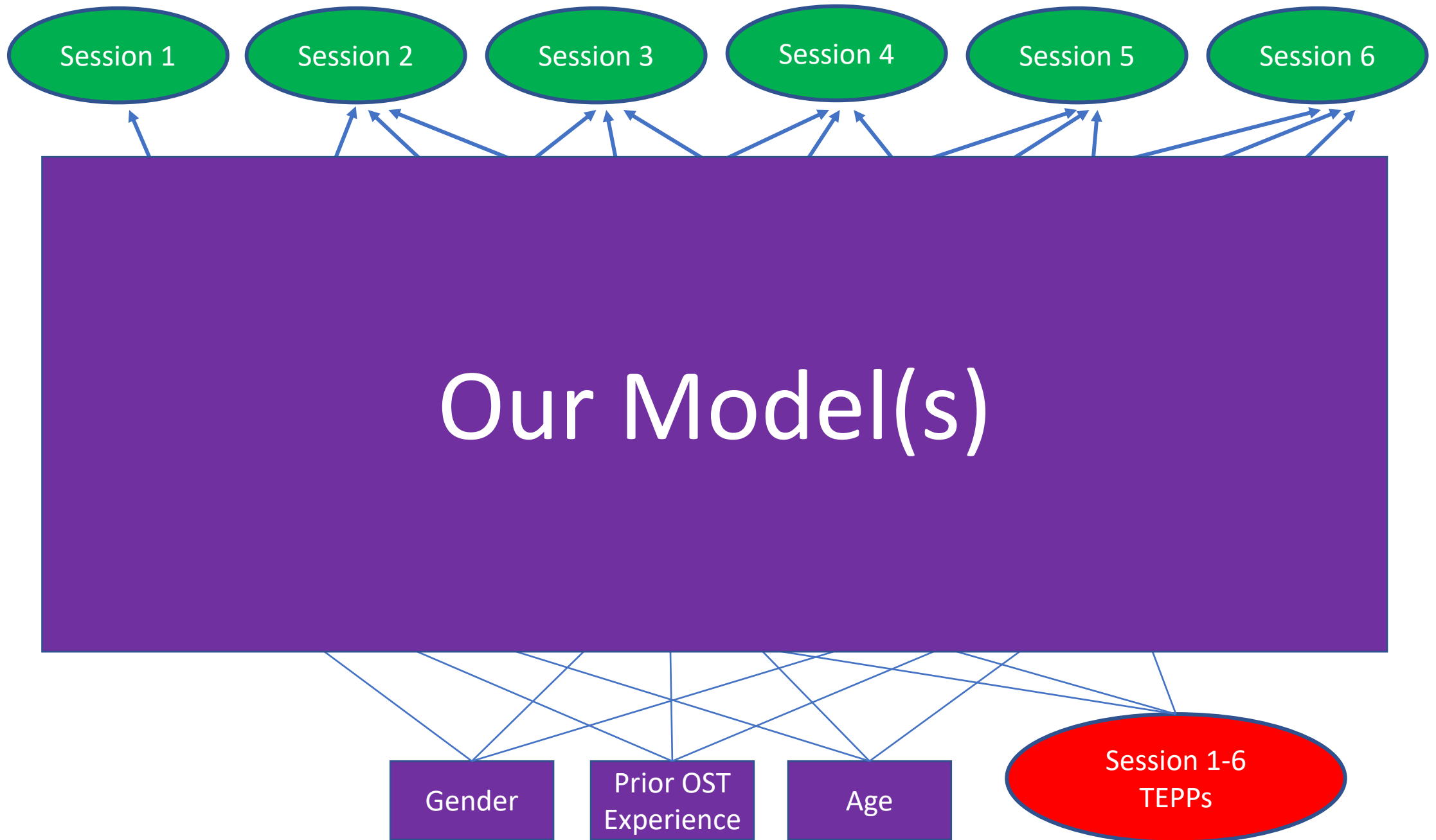
Average 2.45 prior sessions at site

Data collected at the end of each of six sessions

Program focused towards the enhancement and/or realization of youth thriving and the 7 values of Lakota life (tribally centered)

Site reflects a “normative” residential summer camp experience





But Ryan, can you do SEM with
an $N < 100$, non-normal data,
and high levels of missingness?

NFI = .963, CFI = .969, RMSEA = .042 (90%,

Methods & Measures

Longitudinal Structural
Equation Model (SEM) to
examine 2 groups of
hypotheses

Fitting latent growth models with small sample sizes and non-normal missing data

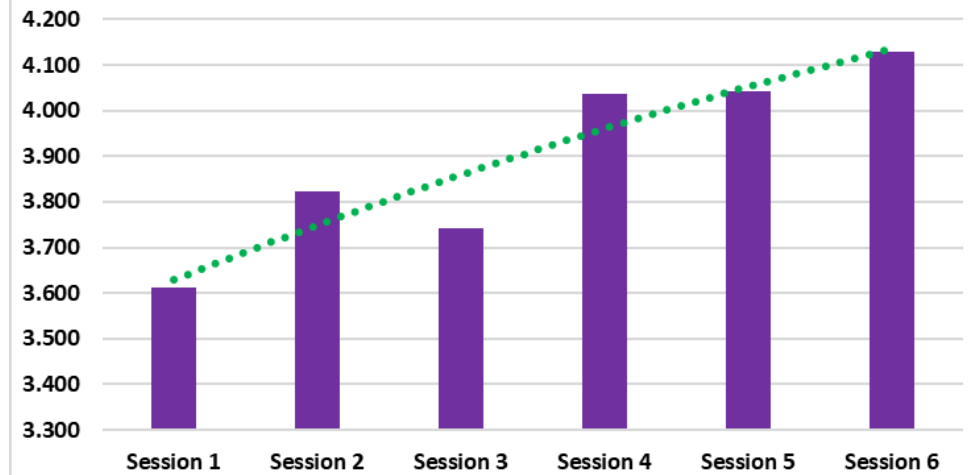
**Dexin Shi,¹  Christine DiStefano,¹ Xiaying Zheng,²
Ren Liu,³ and Zhehan Jiang⁴**

Results

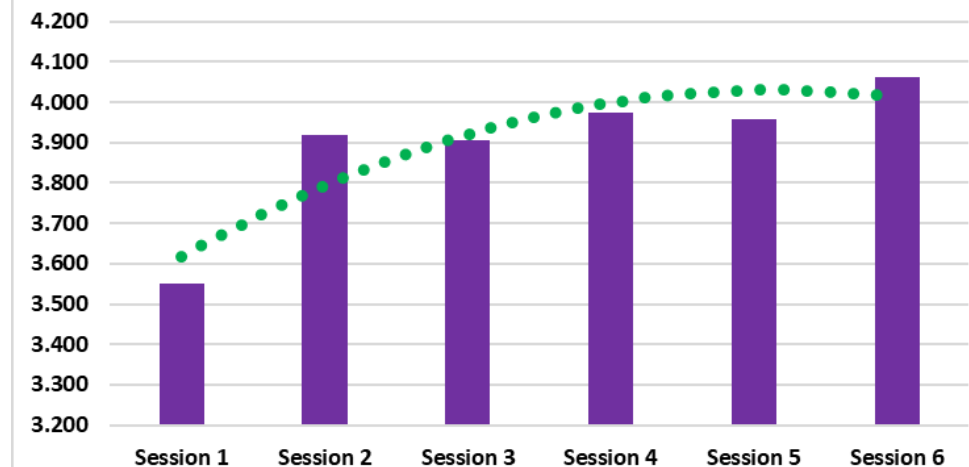
Some effect of quality of participation on need satisfaction

Quadratic Effects

7 Values of Lakota Life Latent Change



Competence Satisfaction Latent Change





So what?...Research

Greater rates of participant personal development (e.g., The camp activities are challenging) led to greater rates of Basic Psychological Need Satisfaction (e.g., I feel I can successfully complete difficult tasks)

No effect of quantity of participation on outcomes

Score stability over time could indicate growth





So what?...Research with Native Youth

Seeming conventional myth making about challenges with Native youth samples wasn't the case in our study

- Albeit we have an N of 1

OST may provide a context (an “in”) to partner with organizations serving Native Youth

Importantly, OST often opens a door for collaboration that others may not

A group of approximately 15 children are sitting in a circle on a grassy field. In the background, there is a white teepee and a body of water under a cloudy sky. The text "Thoughts & Questions?" is overlaid in white.

Thoughts & Questions?



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