



HEALING  
OPPORTUNITIES IN  
LAND  
LOVE AND  
ORIGINAL INSTRUCTIONS/HOLLO:

CONSIDERATIONS IN  
LAND-BASED HEALING AND MULTILEVEL  
RESEARCH METHODS AMONG  
INDIGENOUS YOUTH

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## Relations Acknowledgement

- *As we gather here today, we acknowledge the Indigenous ancestors and their homeland. We pay respect to the ancestors of this place and reaffirm our relationship with one another and our ancestors and place.*

Choctaw/Chahta  
Ancestors/Alba Oma  
Mountain/ Talihina  
Nanih  
River/Bok Yannush  
Okla Hannali

- **Choctaw**

Community Engaged  
Collaborator  
First generation  
Highschool graduate  
trained in human  
development and  
youth focused therapy

- **Full Professor**
- **Indigenous  
Health  
Psychologist**

Love of my  
ancestors  
Future ancestors  
Land-based  
Narrative  
transformation  
therapy

- **Storyteller**



A person is shown from the waist up, holding a long, dark staff vertically. At the top of the staff, they hold a large, glowing, spherical object that emits a bright, warm light, resembling a sun or a fireball. The background is a soft, hazy sky with a gradient from light blue to pale yellow, suggesting a sunset or sunrise. The overall mood is serene and spiritual.

## Wellbeing Frameworks

## Indigenous Wellbeing Framework

- Ancestors' instructions flow through land-based activities and stories
- Ancestral K around love and dealing with trauma
- Interrelationships human /non-human kin and balance = wellness
- Mother earth and women respected/sacred
- Focus on building future healthy ancestors

## Western Colonial Framework

- Ancestors have diseases that they passed onto you
- Illness arises from negative individual experiences with pathogens or vulnerabilities
- Individual healing can occur void of context
- Distinction between mind, body spirit, nature
- Women and hollo/love are not sacred
- Feminizing love and rendering this “unscientific” “unmeasurable”

# Transforming Trauma Relational Restoration

## Oh Chash!

To identify reclaiming, revitalizing  
and reinventing approaches  
drawing from ancestral practices  
and embracing love and land

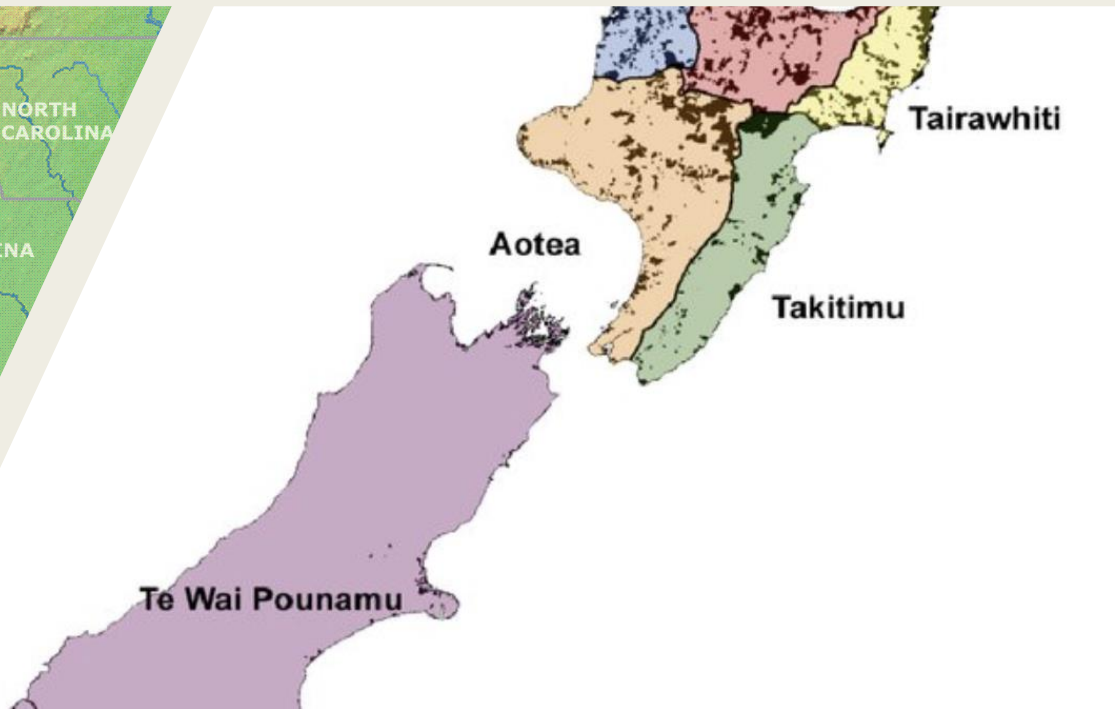
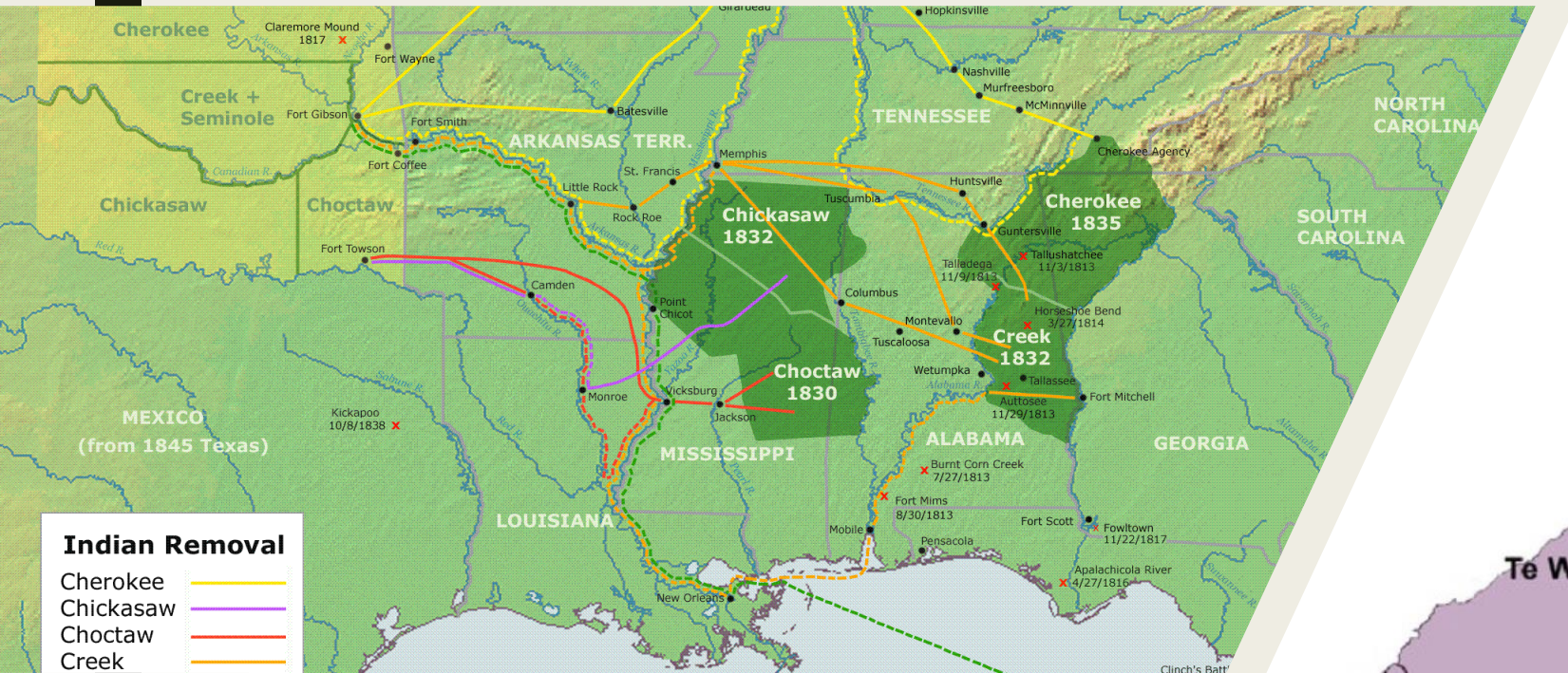
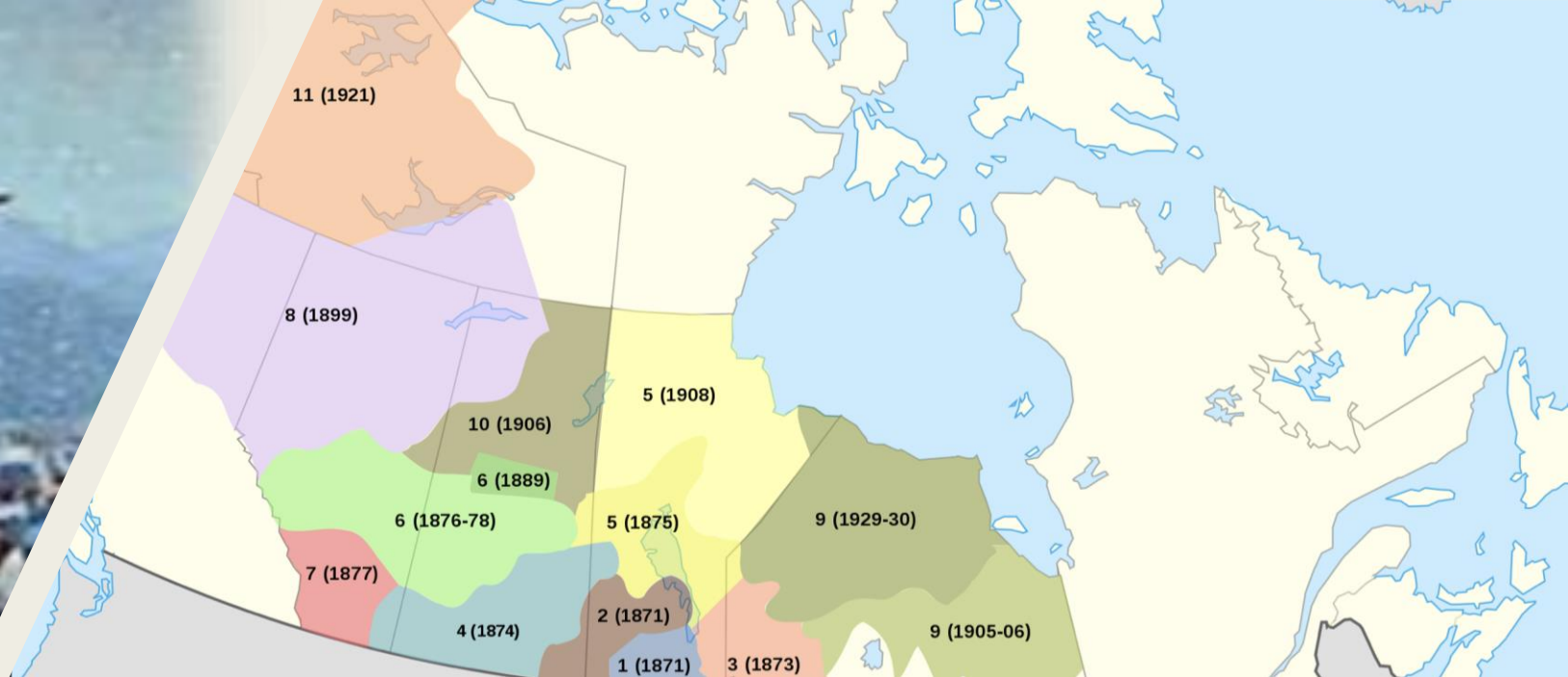




# Land-Based Healing

- ❖ *(re) connecting to the land and centering the land in order to conduct healing, or a health intervention (Johnson-Jennings, Billiot, Walters, 2019. Returning to our Roots, Genealogy.)*





**Indian Removal**

- Cherokee
- Chickasaw
- Choctaw
- Creek

# Trauma and Love

- Both enduring for generations
- Both felt deeply and can affect our health, wellbeing and cells
- Both affected by past, current and future generations



# Loving Research methods

- critical research pedagogy, engage the world as “an object of critical analysis” and as a place of “hopeful transformation” (p. 14. Giroux, 2011).
- Loving ethics to “working for a collective good” (Hooks, 2000)



## Returning to the land leads to:

- Healing
- Opportunities
- Land
- Love
- Original instructions

“I cannot be healthy unless my waters and land are healthy”

– *Jennings, Johnson-Jennings, & Little, 2018. Tribal obesity sovereignty*



# Scientific Benefits of Land-based Cultural Interventions



Removes one from daily stressor



Increases mild altering chemicals within the brain/mental health; increases immunity, decreases blood, glucose levels, and decreases cortisol



More likely to have a long-term change of behavior



Gets back in touch with mother earth/original instructions; Keeps grounded



Remember ancestral ways of healing



# Reclaiming narratives to decolonize and Indigenize research methods ?

- While **indigenizing** is building up from our Indigenous knowledge, worldviews, and practices,
- **decolonizing** is simultaneously dismantling internalized colonization that permeates everyday living and infiltrates thought ways and practices.
- This includes decolonizing the mind, body, spirit, and heart (e.g., thoughts, behaviors, feelings) while concurrently revitalizing healthy cultural traditions and creating new traditions to thrive.
- **Indigenous communities MUST be in control**

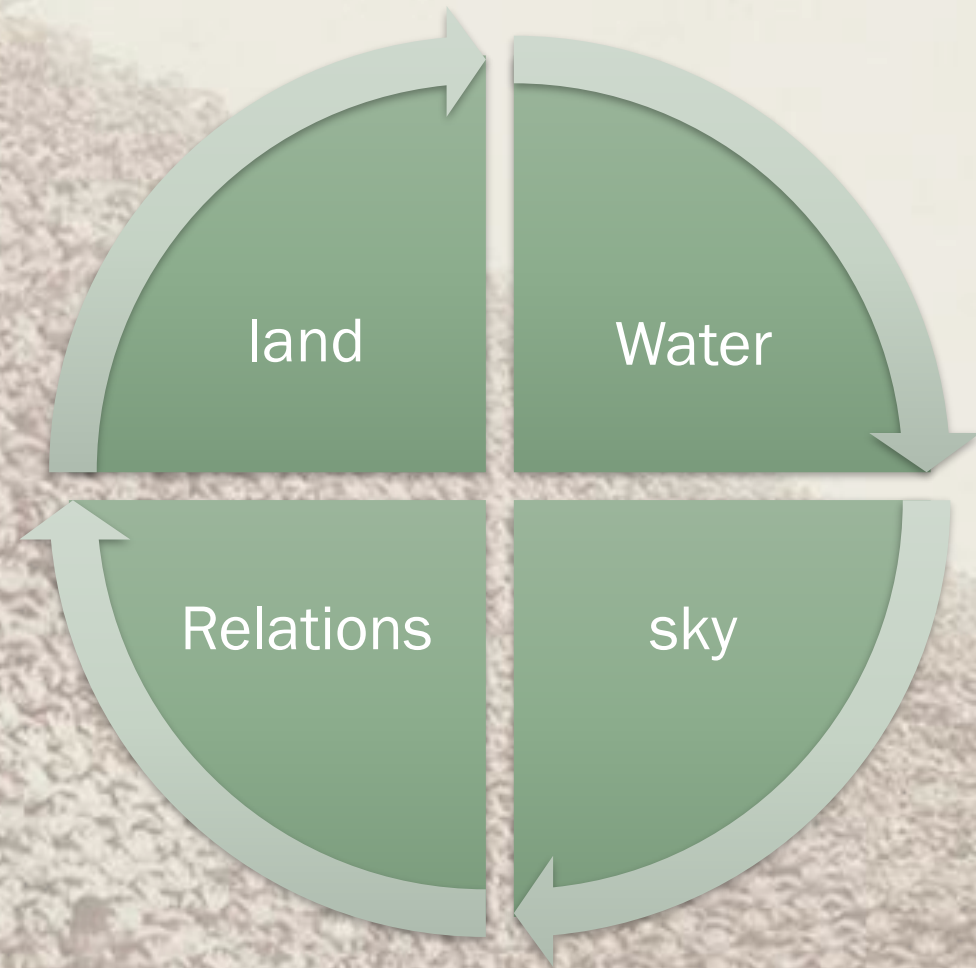
(Walters, Johnson-Jennings et al., 2018)

# Health Research Loving Steps For Indigenous communities: DIRT is needed First!



“Thriving grows from ancestral knowledges and wisdoms, which then actuates healthful practices and well-being (Johnson-Jennings et al., 2019; Johnson-Jennings, Billiot, & Walters, 2019; Walters Johnson-Jennings, et al., 2020).” Walters & Johnson-Jennings, in press..

# Land Trauma









## Systematic disconnect from land and ancestral strengths

- Multiple spheres of influence on Indigenous child health that span generations, environments and worlds
- SDOH influence on youth extends beyond parental unit and peers, includes multigenerational household, grandparents and this has an affect on health behavior
- Many research methods do not account for this in the research design

# National Institute on Minority Health and Health Disparities Research Framework

		Levels of Influence*			
		Individual	Interpersonal	Community	Societal
Domains of Influence <i>(Over the Lifecourse)</i>	Biological	Biological Vulnerability and Mechanisms	Caregiver–Child Interaction Family Microbiome	Community Illness Exposure Herd Immunity	Sanitation Immunization Pathogen Exposure
	Behavioral	Health Behaviors Coping Strategies	Family Functioning School/Work Functioning	Community Functioning	Policies and Laws
	Physical/Built Environment	Personal Environment	Household Environment School/Work Environment	Community Environment Community Resources	Societal Structure
	Sociocultural Environment	Sociodemographics Limited English Cultural Identity Response to Discrimination	Social Networks Family/Peer Norms Interpersonal Discrimination	Community Norms Local Structural Discrimination	Social Norms Societal Structural Discrimination
	Health Care System	Insurance Coverage Health Literacy Treatment Preferences	Patient–Clinician Relationship Medical Decision-Making	Availability of Services Safety Net Services	Quality of Care Health Care Policies
Health Outcomes		 Individual Health	 Family/ Organizational Health	 Community Health	 Population Health

## Multilevel interventions

- Novel,
- Examining health inequities through intersecting social determinants of health
- multi-level factors interact to impact these outcomes
- Require targeting multiple areas and measuring their outcomes
- can target and intervene between multiple risks and/or protective factors for health at multiple levels within the human ecology





Community  
engagement key to  
garner their perspective

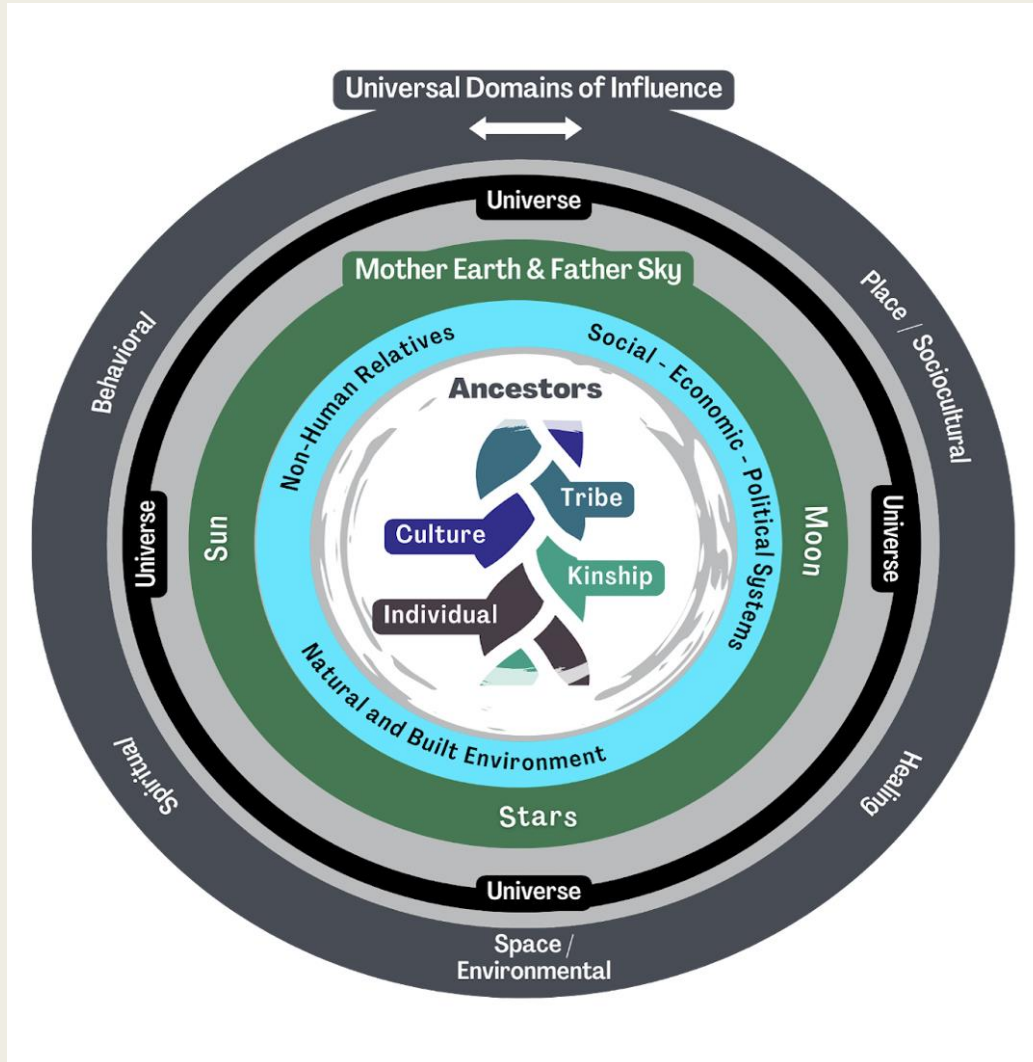
- Indigenous Elder scientific advisory council
- Youth advisory council
- Indigenous knowledge keepers/elder council

What is  
needed to  
conduct a  
multi-level  
framework  
among  
Indigenous  
youth?

- Must spend much time not only in **community engagement** but in **codeveloping** the design
  - *Must consider which levels of influence are most important to measure?*
  - *What are culturally appropriate ways to measure*
- Must develop rigorous methods which cross systems of influence
- Must define and consider proper sdoh of influence

1. What kind of ancestor did my ancestors envision me to be?
2. What kind of ancestor do I want to be?
3. What kind of ancestor do I want or envision future generations to be?

# Indigenous Multi-level interventions



- Considers individual as braided within
- Connection to natural world is interwoven with health outcomes
- We are connected and influenced by the greater universe- across generations forward and back
- Need multilevel intervention methods such as measuring holistic land-health metrics (i.e., measuring blood pressure and water health for instance)
- Healing occurs across these domains and more....

Johnson-Jennings, Rink, Stotz, Magarati, Moore, 2023. All Systems are Interrelated

# Land-based healing as a research method

## Facilitators

- ❖ Culturally appropriate
- ❖ Valid
- ❖ inclusive
- ❖ multi-level focused
  - ❖ *Ex. Little Earth Johnson-Jennings et al., 2021*
- ❖ Has significant influence on wellness among Indigenous youth
- ❖ Sustainable
- ❖ Can measure change in biopsychosocial arenas

## Barriers

- ❖ Access to land/outdoors
- ❖ Planning/weather
- ❖ Startup costs
- ❖ Requires rigorous assessment tools
- ❖ Ethics of youth on land (safety)
- ❖ Staff training
- ❖ New field of study
- ❖ Dosage and response varies
- ❖ How do we measure bidirectional healing?



## NIH R01 Yappalli

Ancestral and nature  
connectedness and key PA  
= sustained behavioral  
changes post walk

### NIH r01 Wakaya: Rising Up for Choctaw Youth Health Land-based multilevel study

- Measures:
  - moderate to vigorous physical activity and sedentary behaviors
  - food activities
  - ATOD use and outcomes
  - psychosocial functioning
  - PYLD-related outcomes
  - AI-specific cultural protective factors
- Community Ripple effect mapping- focus groups



Painting:. M. Johnson-Jennings

## Take away

- It's about creating a new place of research embedded within Indigenous culture... while disrupting the colonial lens and creating space for indigenous frameworks



Yakoke/Thank you!