



# Culture as Diabetes Intervention

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# Collaborative Team (1)



# Collaborative Team (2)



# Objectives

1. Describe the meaning and methods of measuring “culture” in indigenous contexts
2. Provide examples of empirical evidence linking cultural factors to better health outcomes for indigenous people living with diabetes
3. Articulate and speculate causes for the “mixed state” of the literature with regards to culture and health

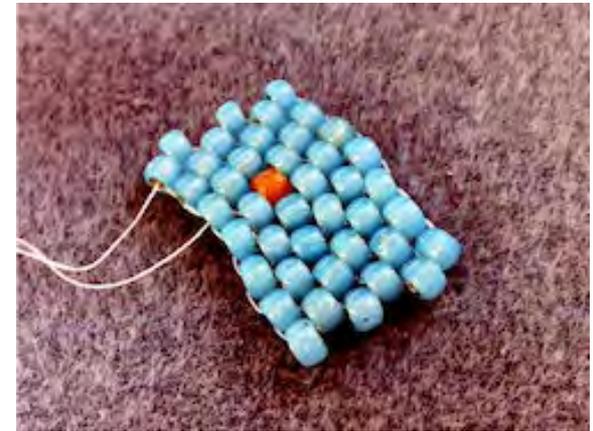
# Symptoms

*“These are just symptoms of our main problems. We try to solve alcohol problems, and the fighting families, you know ... Those are just symptoms to me ... Like residential schools, that’s where we lost pretty well everything.”*

– First Nations service provider and elder

# Humility

## Dabasendizowin



- Whose culture? When? How?
- Tireless, heart-led community groups, programs, unsung heroes, elders, helpers doing the hard work every single day

# Centering “Culture”

- J.P. Gone, P.E. Looking. “American Indian culture as substance abuse treatment: pursuing evidence for a local intervention.” *J Psychoactive Drugs*. 2011, Oct–Dec; 43 (4): 291–6.
  - <https://www.ncbi.nlm.nih.gov/pubmed/22400459>
- D. Bassett, U. Tsosie, S. Nannauck. “‘Our Culture is Medicine’: Perspectives of Native Healers on Posttrauma Recovery Among American Indian and Alaska Native Patients.” *Perm J*, 2012. Winter, 16 (1), 19–27.
  - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3327107/>

# Conceptualizing and Measuring Culture in Research

- “Culture” means something particular in indigenous contexts
- No single, monolithic construct of “culture” to measure
- We can potentially isolate specific dimensions of culture
- Humans are multicultural beings
- Ecological conundrum intertwines AIAN culture with historical, political and environmental factors
- Contemporary meaning of a measure also depends on these contexts
- Tensions and Opportunities: Generalizability and Specificity

## Credits:

American Indian and Alaska Native Culture: Measurement Think Tank Meeting Outcomes  
May 26, 2015, Washington, DC, Healing Pathways and Gathering for Health Teams

Walls, Melissa, Les Whitbeck & Brian Armenta. “A Cautionary Tale: Examining the Interplay of Culturally Specific Risk and Resilience Factors in Indigenous Communities.” *Clinical Psychological Science*, 2016 4 (4): 732–743.

# Culturally Rooted Protective Factors

How engaged or embedded one is in their (Native) culture.



**Enculturation**

**Knowledge**

(e.g., Language Fluency)

**Identity**

**Practices**

(Traditional)  
(Spiritual)

**Sense of Belonging  
& Purpose**

**Multidimensional  
Mastery**

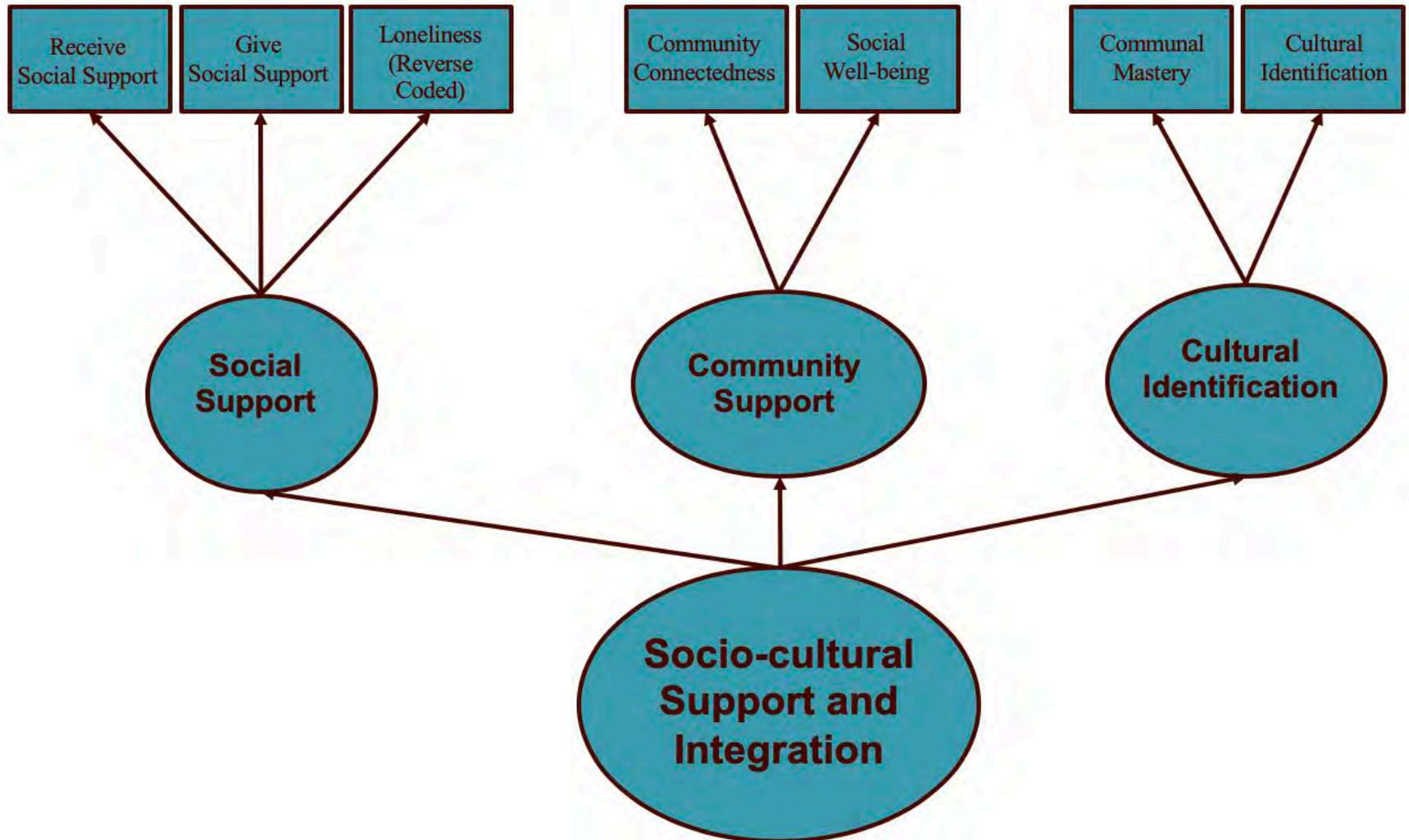
**Values & Worldview**

**Extended Kinship  
Networks**

# Empirical Examples: Culture & Health

1. Direct Associations
2. Indirect (Mediating) Effects – Stress or Risk Reduction
3. Moderating/Mediating Effects – “Bumping Up” Other Protective Factors

# Culture and Community (1)



## Culture and Community (2)

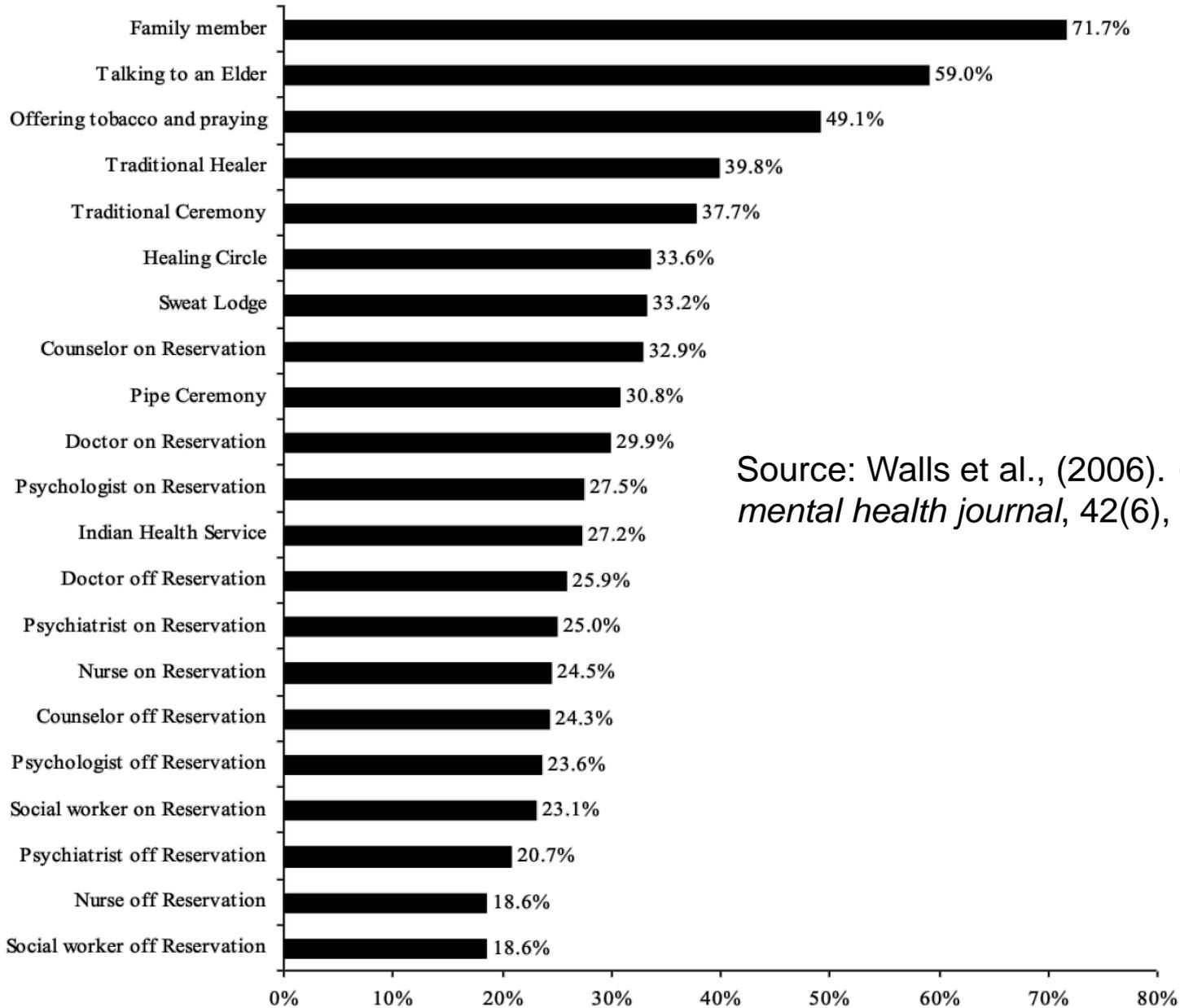
- This higher-order “socio-cultural support and integration” measure was more strongly and consistently associated with positive health outcomes than the individual factors — the whole is greater than the sum of its parts
- Indigenous language knowledge rate related to lower prevalence of diabetes among 31 First Nations communities in Canada (Oster et al., 2014)
- Positive relationship between Indigenous spirituality and weight loss in a sample of American Indian respondents living with diabetes (Dill et al., 2016)

# Stress-Buffering Effects: Culture and Community

- Communal Mastery Mediates the Negative Impact of Food Money Shortage on Diabetes Empowerment
- Diabetes Support Mediates the Harmful Impacts of Role Strains on Diet and Diabetes Empowerment
- Cultural Spiritual Activities and Social Support Moderate Associations between ACEs and Physical and Mental Health

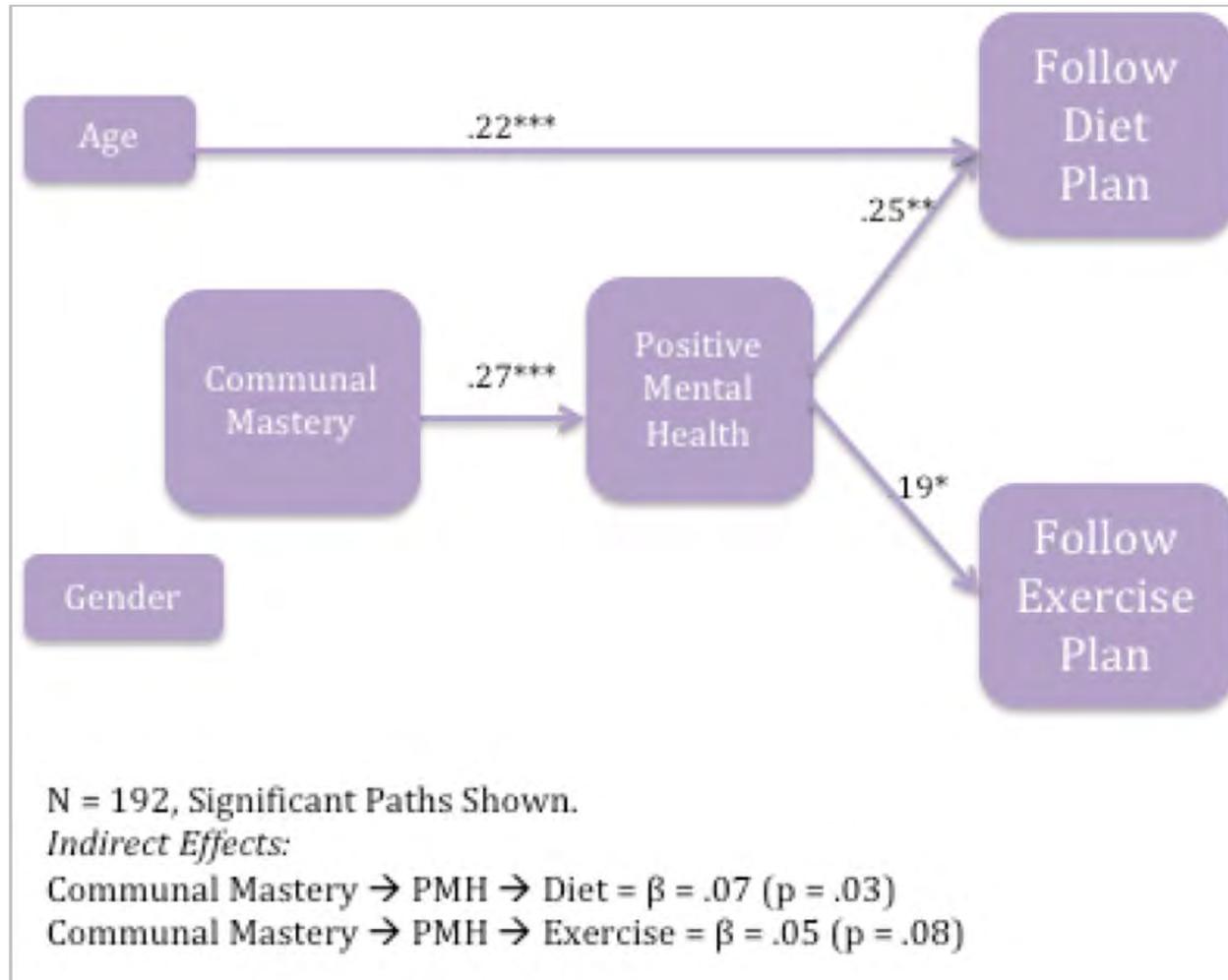


# Percent Indicating Source of Care Was Extremely or Very Effective

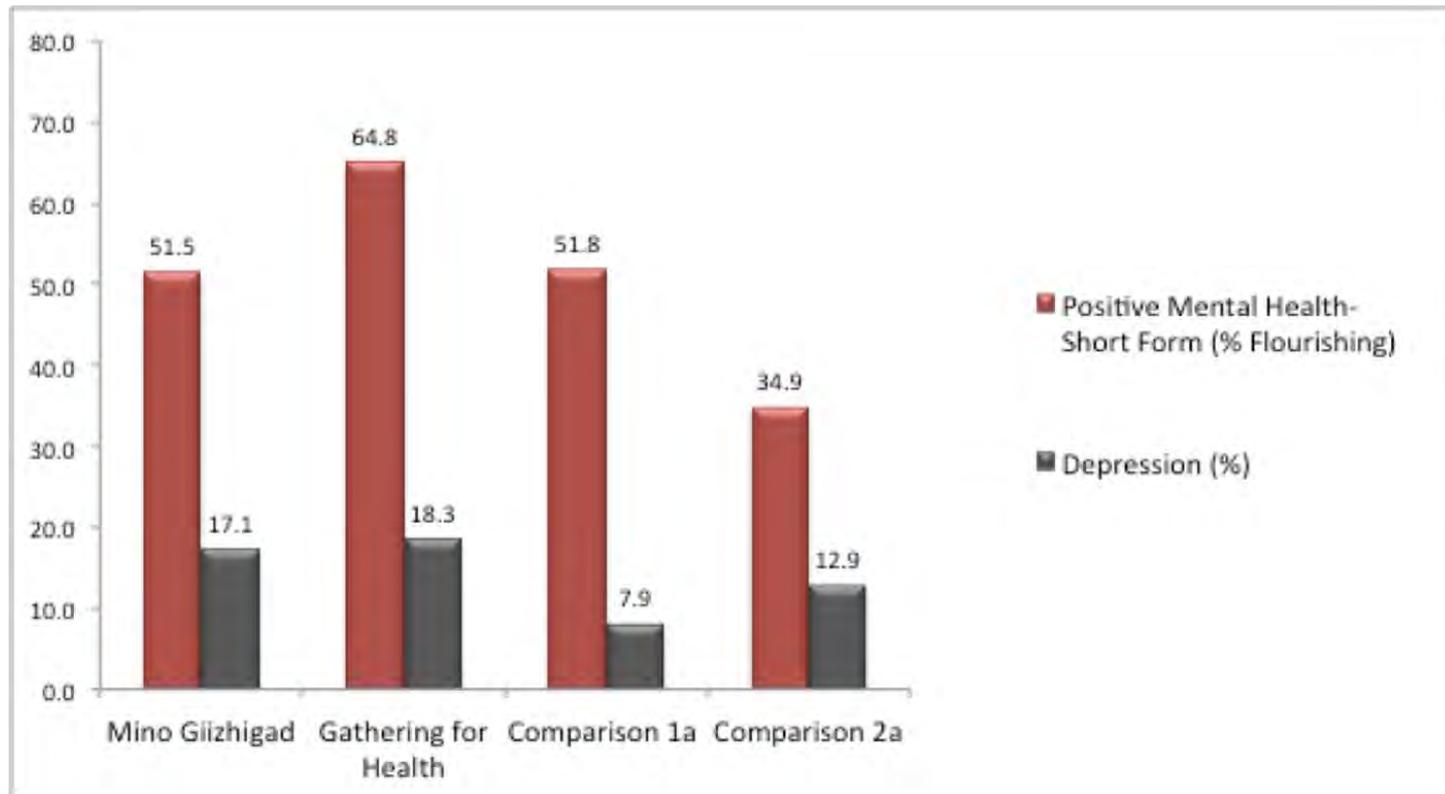


Source: Walls et al., (2006). *Community mental health journal*, 42(6), 521–535

# Communal Mastery Related to Positive Mental Health and Diabetes Outcomes



# Positive Mental Health and Depressive Symptoms



- Note: Depression rates are rough estimates due to measurement variability across studies.
- MHC-SF: Mental Health Continuum Short Form (Keyes, 2009). Operationalizes mental health as a syndrome of positive feelings and functioning.
- Presence of mental health described as “flourishing,” absence described as “languishing.”

# The Wrench?



- **Null Findings: Identity and Mental Health**
  - (Whitesell et al., 2014; Whitesell, Mitchell, and Spice, 2009; Bates, Beauvais, & Trimble, 1997; Paradies & Cunningham)
- One dimension of identity (centrality) linked to depressive symptoms; another (positive affect) linked to fewer symptoms
  - (Matheson and Anisman, 2011)
- Native American Spirituality Scale (NASS) dual factor structure – only one dimension associated with lower substance use; neither factor related to mental health
  - (Greenfield, et al., 2015)

# Where does the wrench come from?

## Speculation...

- Accounting for Historical Assaults, Ongoing Impacts of Colonization
  - Community Examples:
    - Spirituality and hunting; cultural norms and food
- Diversity of opinions on what culture is and is not
  - And how to measure it!
- Contexts of strength sometimes co-exist with known health risk factors

# We Can Be “Explorers Together” (Blacksher et al., 2016)

These stories are not finished.

“The U.S. Senate ratified more than 370 Indian treaties. About 250 more executive orders and acts of Congress took the form of treaties. Nearly every part of the country outside the original thirteen colonies is affected by a treaty made by the United States.”

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The contents of this presentation do not necessarily represent the official views of the NIH.

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