



Attitudes towards Evidence-Based Practice in Addiction Programs serving Native American Indians

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We thank the communities, agencies, supervisors, and service providers that made these studies possible.

The background features a light blue gradient with several large, semi-transparent arrows in shades of orange, red, and purple pointing in various directions. In the center, there is a faint, light blue silhouette of a person with their arms raised in a celebratory gesture.

Increasing pressure to implement evidence-based practices (EBPs) as a requirement to receiving government funding

Pillars of EBP



**Research
Evidence**



**Clinical
Expertise**

(judgement & experience)



**Client
preferences**

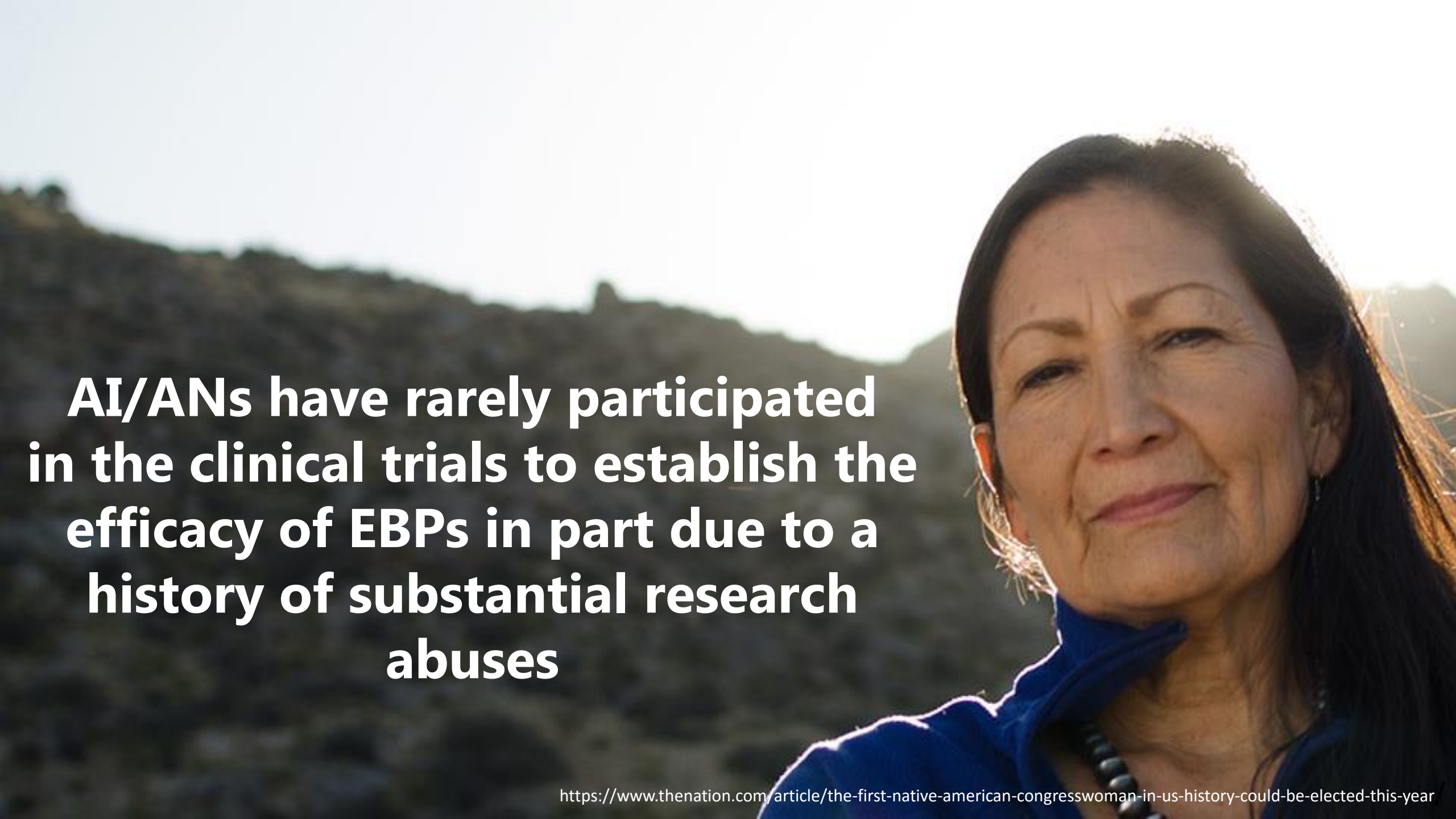
(beliefs & values)

- **From the onset, EBP has had its critics¹**
- **Concern excessive emphasis is placed on scientific evidence²**
 - Rigid application of evidence, rather than a skilled interpretation and adaptation in a contextually and clinically appropriate manner.
- **Potential to marginalize indigenous and non-Western populations³**
 - Research that meets modern experimental samples have largely been conducted with samples drawn from Western populations.

1. Evidence Based Medicine Working Group. *The Journal of the American Medical Association*. 1992; 268: 2420-2425

2. Greenhalgh T, Howick J, Maskrey N. *British Medical Journal* 2014; 348: g3725.

3. Novins DK, Aarons GA, Conti SG, et al. *Implementation Science*. 2011; 6(1): 63.



**AI/ANs have rarely participated
in the clinical trials to establish the
efficacy of EBPs in part due to a
history of substantial research
abuses**



Lack of evidence in AIAN populations



12 step method

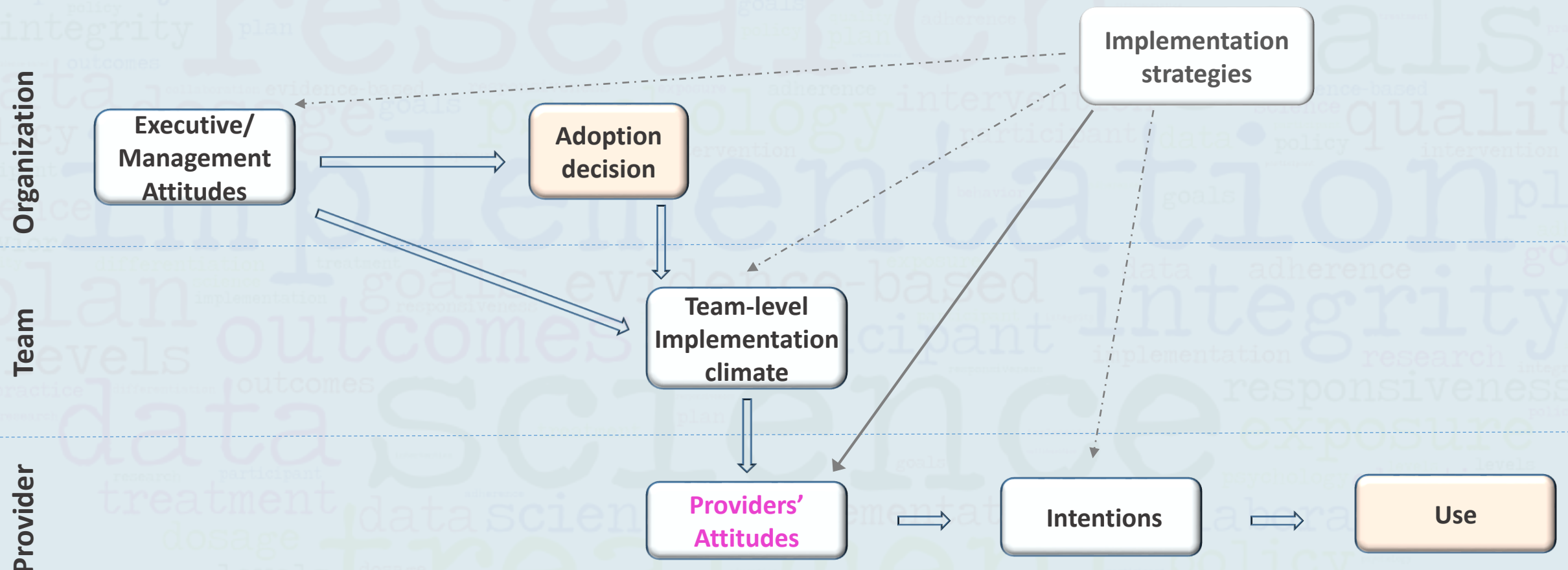


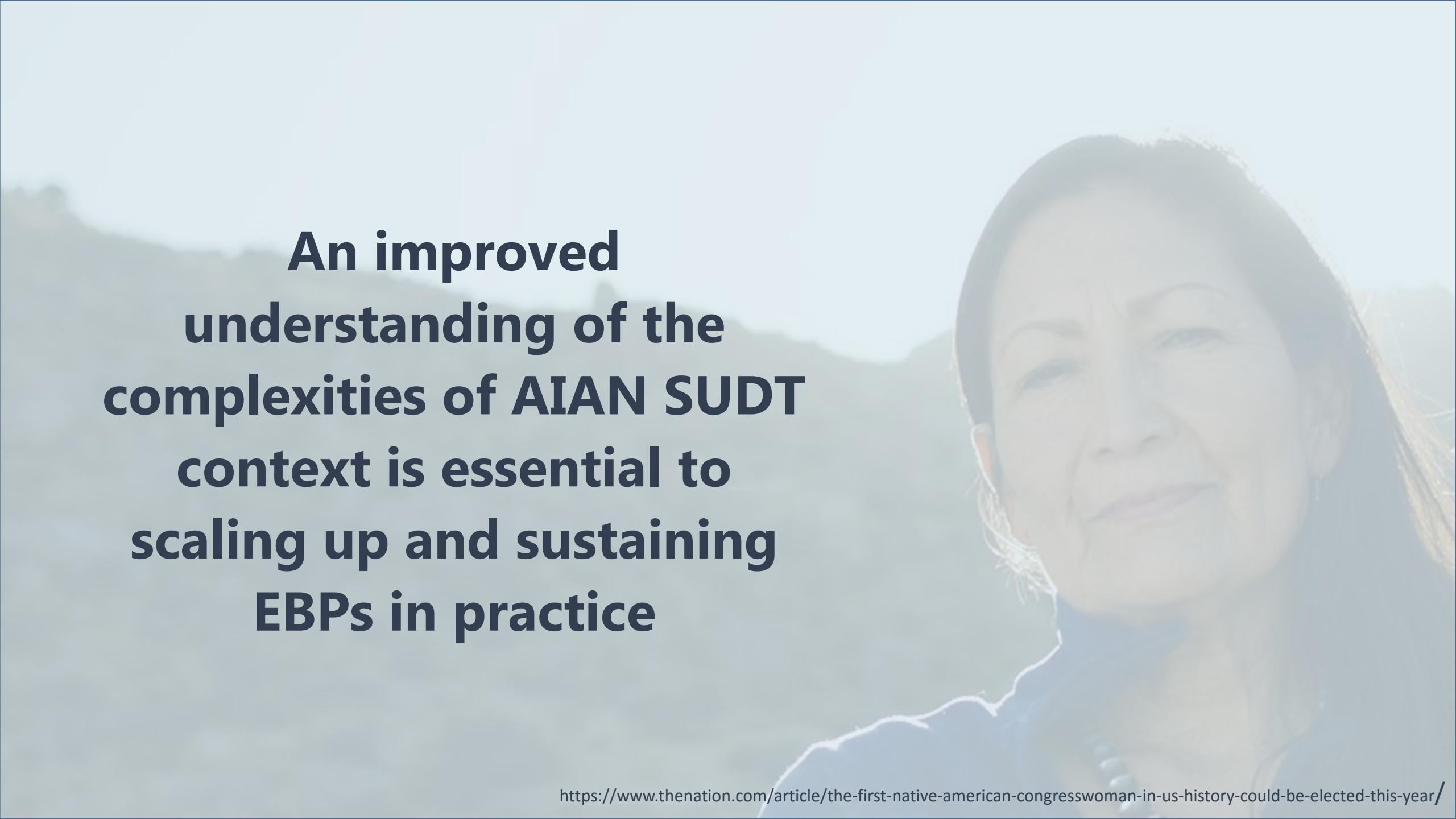
Traditional healing

Objective

To compare attitudes toward EBP of SUDT centre employees' serving AIAN populations to those serving non-AIAN populations.

Providers' attitudes towards EBP may mediate implementation process and as such could be a target for implementation strategies





**An improved
understanding of the
complexities of AIAN SUDT
context is essential to
scaling up and sustaining
EBPs in practice**

Hypothesized that providers' of SUD programs serving American Indian and Alaskan Native (AIAN) populations will be less open to EBP and feel there is greater divergence in EBP from their current practice than those programs serving non-AIAN populations

Methods

1. Survey data on the openness and divergence subscales of the Evidence-Based Practice Attitude Scale (EBPAS) were collected and analysed.
2. The EBPAS sub-scales were included as part of wider data collection procedures.
3. Secondary analysis of data collected from two different studies.

Attitudes towards EBP

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graph TD; A([Attitudes towards EBP]) --> B((1 Requirements)); A --> C((2 Appeal)); A --> D((3 Openness)); A --> E((4 Divergence));
```

1

Requirements

2

Appeal

3

Openness

4

Divergence



Openness

1. I like to use new types of therapy/interventions to help my clients.
2. I am willing to try new types of therapy/interventions even if I have to follow a treatment manual.
3. I know better than academic researchers how to care for my clients.
4. I am willing to use new and different types of therapy/ interventions developed by researchers.



Divergence

1. Research based treatments/ interventions are not clinically useful.
2. Clinical experience is more important than using manualized therapy/ interventions.
3. I would not use manualized therapy/ interventions.
4. I would try a new therapy/ intervention even if it were very different from what I am used to doing.

Respondent Characteristics

	AIAN Data		National (non-AIAN) Data			
	N or mean \pm sd	% or sd	N or mean \pm sd	% or sd	X ² or t-test	P
AIAN	97	50.52%	5	1.57%	(1,N=510)=179.27	<.0001
Sex (n=519): % female	116	60.42%	208	63.61%	(1,N=519) = .5255	.4685
Education (n=510)	4.44	0.97	3.82	0.99	1.04 (DF=317)	<.0001
Tenure at present agency (n=518)	7.17	6.07	4.16	4.81	5.87 (DF=332)	<.0001
Tenure working in mental health services (n=516)	13.69	6.41	8.09	7.30	8.84 (DF=514)	<.0001
Employee location (Rural) (n=542)	142	73.96%	40	11.43%	(1,N=542)=217.35	<.0001

Analyses

1. For each subscale, independent samples T-tests were performed three times, for all respondents, supervisors only, and counsellors only, comparing the programs serving AIAN to those serving non-AIAN populations.
2. Multiple linear regression analyses were conducted to examine associations between EBPAS Openness and Divergence scores and respondent characteristics.

Results

- Respondents serving AIANs were:
 - Less open ($M=2.260$) than those serving non-AIAN clients ($M=2.828$), $t(516)=8.64$, $p<.005$
 - Had higher divergence scores ($M=1.466$) (i.e., seeing EBP as diverging to a greater extent from their current practice) than those serving non-AIAN clients ($M=1.280$), $t(516)=2.88$, $p<.005$.
 - The variation in divergence scores was only statistically different for supervisors and not for counselors.

This study suggests that employees of SUDT centers serving AIAN population hold less positive attitudes towards the adoption and use of EBP than non-AIAN.

Openness

	n	Mean	95% CL mean		Std Dev	t-test method	Variances	DF	t-value	P
Counselors										
AI/AN	22	2.318	2.051	2.586	0.604					
non-AI/AN	275	2.800	2.716	2.885	0.710					
Diff (g1-g2)		-0.482	-0.789	-0.176	0.703	Pooled	Equal	295	-3.10	0.0126
Supervisors										
AI/AN	170	2.253	2.134	2.372	0.788					
non-AI/AN	51	2.976	2.813	3.138	0.577					
Diff (g1-g2)		-0.723	-0.923	-0.523	-0.745	Satterthwaite	Unequal	111.29	-7.16	0.0006
Combined										
AI/AN	192	2.260	2.151	2.370	0.768					
non-AI/AN	326	2.828	2.752	2.903	0.692					
Diff (g1-g2)		-0.567	-0.696	-0.438	0.722	Pooled	Equal	516	-8.64	0.0006

Divergence

	n	Mean	95% CL mean		Std Dev	t-test method	Variances	DF	t-value	P
Counselors										
AI/AN (g1)	22	1.239	0.950	1.528	0.652					
non-AI/AN (g2)	275	1.303	1.220	1.387	0.706					
Diff (g1-g2)		-0.065	-0.371	0.242	0.702	Pooled	Equal	295	-0.42	0.6778
Supervisors										
AI/AN	170	1.496	1.386	1.605	0.725					
non-AI/AN	51	1.152	0.952	1.352	0.713					
Diff (g1-g2)		0.344	0.116	0.571	0.723	Pooled	Equal	219	2.98	0.0192
Combined										
AI/AN	192	1.466	1.364	1.569	0.721					
non-AI/AN	326	1.280	1.203	1.357	0.708					
Diff (g1-g2)		0.1865	0.0591	0.314	0.713	Pooled	Equal	516	2.88	0.0252

Openness: multiple linear regression trimmed model



Education



Openness

Divergence: multiple linear regression trimmed model

Covariate	Est	SE	P
Years in Mental Health Service	0.0110	0.0045	0.0140



Tenure



Divergence

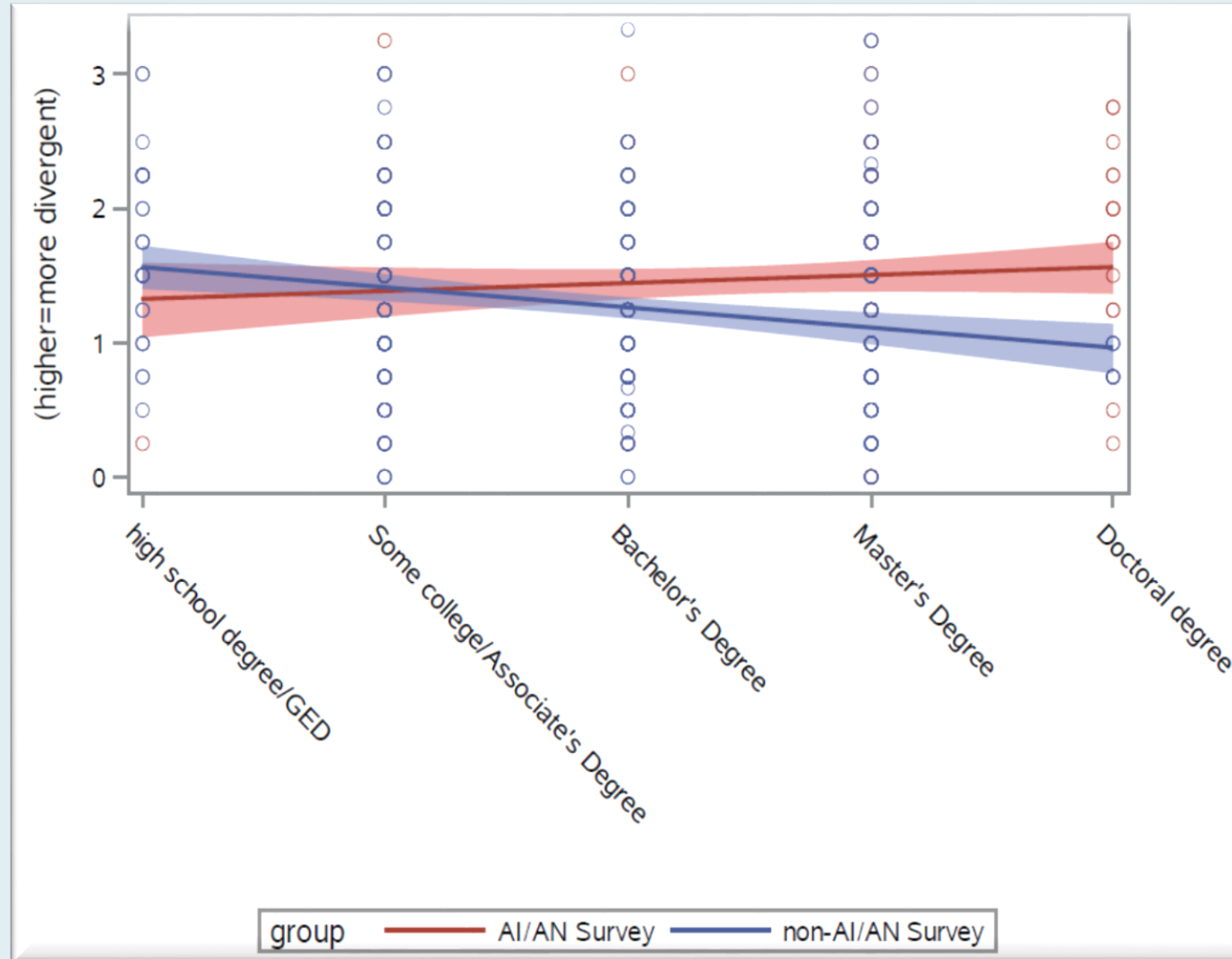
Data source * Education

-0.2201

0.0654

0.0008

Divergence: Interaction between data source and education level



Practical implications

Most EBPs are not developed with AIAN cultural norms and preferences



Need to improve the relevance, fit, and quality of EBPs and subsequently provider attitudes towards EBP to meet all pillars of EBP



Should evaluate the determinants of attitudes towards EBP across cultures and settings



Conduct initiatives that foster more culturally sensitive policy, utilize interventions and EBP adaptation methods , and tailor implementation strategies

Next steps...

- Use of implementation science principles in combination with innovation/intervention development methodologies
 - Implementable EBPs : Relevant, Acceptable, Adaptable innovations
- Engage stakeholders
 - Community-academic partnerships, participatory research, pragmatic designs
- Employ hybrid design methods that include studying both intervention effectiveness, and the influences and/or effectiveness of implementation
 - Tailor implementation strategies based on baseline data on implementation influences e.g. attitudes



Thank you

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