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Attitudes Toward Evidence-Based Practices for Trauma-Impacted American Indian/Alaska Native Populations: Does the Role of Culture Even Matter?

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Cover Page Footnote

Beyond the foundation of any research paper lie the intricate pieces that make it become what it truly is, and those are the participations, or in this case, our national practitioners providing mental health services to underserved AI/AN communities. This paper would be nothing without your voices and it is my deepest hope that they finally become heard within the realm of evidence-based care. Our time has come.

Attitudes Toward Evidence-Based Practices for Trauma-Impacted American Indian/Alaska Native Populations: Does the Role of Culture Even Matter?

In a given day, 7-8% of the U.S. general population meets diagnostic criteria for posttraumatic stress disorder (PTSD; U.S. Department of Veterans Affairs, 2019). For American Indian/Alaska Native (AI/AN) populations, this rate is twice as high (Thayer et al., 2016). Trauma produces undeniable short-and long-term effects on functioning for any cultural group (Lewis et al., 2016). For AI/AN communities, however, effects are compounded and exacerbated by extensive historical trauma and subsequent environmental and economic adversities.

To address this, the American Psychological Association (APA, 2017) recommends four trauma-based treatments: cognitive behavioral therapy (CBT; Monson & Shnaider, 2014), cognitive processing therapy (CPT; Resick et al., 2017), cognitive therapy (CT; Ehlers et al., 2014), and prolonged exposure (PE; Ehlers et al., 2014). While a substantial number of randomized controlled trials demonstrate their efficacy (Asmundson et al., 2019; Ehlers et al., 2013; Kar, 2011; Powers et al., 2010), concerns remain if outcomes can not only appropriately generalize to AI/AN populations, but ethically if they should be applied given concerns of *cultural fit* based on adherence to Westernized culture. Psychology has long been criticized for its ethnocentrism where results are thought to generalize across a wide range of populations (U.S. Commission on

Civil Rights, 2004). The problem with this approach is that research continues to target largely middle-class, educated, European American majority samples, and AI/AN communities are represented in the ambiguous "1% other." This perpetuates the ethnocentric cycle that first began in the 1880's, when indigenous people were coercively made to adhere to dominant society by changing the dress, customs, language, religion, and philosophy of AI/ANs to Westernized culture (Utter, 2001). To effectively heal a Tribal community, practitioners and researchers have been urged to bridge the gap between evidence-based practice (EBP) and cultural-sensitivity (APA, Presidential Task Force on Evidence-Based Practice, 2006; U.S. Department of Health and Human Services, 2002).

It is for these reasons that this study, a survey distributed to mental health practitioners working directly with AI/AN trauma-impacted populations, examined existing EBPs' ability to appropriately address culturally-based attitudes, values, and behaviors essential to create treatment buy-in and clinically/culturally significant healing within AI/AN populations.

Method

Practitioners were identified and recruited to complete a brief online survey using three primary strategies: 1) regional Indian Health Services (IHS) across the U.S., 2) the Society of Indian Psychologists (SIP) online listserv, and 3) practitioners receiving the survey were asked to forward it to any other relevant providers who they thought might be interested in participating, such as non-

Tribal healthcare organizations that also may be serving Native populations. Composite statistics provided by these organizations suggested an overall potential sample size of 500+ practitioners. Of these potential respondents, 103 surveys were completed (20.6% participation rate). See Table 1 for detailed demographic and contextual factors information.

Table 1
Practitioner Demographic and Contextual Factors

Variable	***N***	**%**	**Variable**	***N***	**%**
Age Range			**Geographical Region**		
25-29	26	25.2%	Pacific	33	32%
30-39	34	33%	Mountain	27	26.2%
40-49	26	25.2%	West North Central	17	16.5%
50-59	13	12.6%	West South Central	15	14.6%
			East North Central	5	4.9%
Gender			South Atlantic	2	1.9%
Female	66	64.1%	Mid-Atlantic	1	1%
Male	34	33%			
Non-binary	3	2.9%	**Role**		
			Clinician	81	78.6%
Ethnicity			Supervisor	28	27.2%
European American	78	75.7%	Other	28	27.2%
AI/AN	43	41.7%	Researcher	19	18.4%
Pacific Islander	5	4.9%	Professor	9	8.7%
Black/African American	4	3.9%			
Hispanic	3	2.9%	**Clinical Experience**		
Asian	3	2.9%	<5	32	31.5%
Other	1	1%	5-10	7	6.8%
			11-15	11	10.7%
Education			16-20	21	20.4%
Bachelors	8	7.8%	21-25	21	20.4%
Entry-level masters	6	5.8%	26-30	6	5.8%
Advanced masters	54	52.4%	30+	5	4.9%
Doctorate	35	34%			

Theoretical Orientation			**Treated Developmental Groups**		
Cognitive behavioral	29	28.2%	Early adulthood	98	95.1%
Eclectic	21	20.4%	Middle adulthood	83	80.6%
Behavioral	17	16.5%	Adolescence	77	74.8%
Family systems	10	9.7%	Late Adulthood	63	61.2%
Mindfulness-based	8	7.8%	Early adolescence	58	56.3%
Humanistic	8	7.8%	Middle childhood	33	32%
Other	6	5.8%	Early childhood	2	1.9%

Note. *N* = 103; % = percentage; AI/AN = American Indian/Alaska Native.

Practitioner Survey

Personal experiences. In addition to collecting demographic information, supplemental questions were included to obtain information on various experiences with use of EBPs and culturally-informed care for AI/AN populations, including EBP-specific questions (e.g., types used, confidence in delivering), treating AI/AN trauma population-specific questions (e.g., types of trauma observed, confidence in treating), and providing culturally-informed care-specific questions (e.g., use of culturally-informed treatment planning, personal incorporation of traditional healing in treatment, frequency of referrals to community-based resources for culturally-informed healing, confidence in implementing culturally-informed care). Providers were asked to rate to what degree they implement each item from 0 ("*Never*") to 4 ("*Always*"). See Table 2 for descriptive distributions.

Table 2
Use of Trauma-Informed EBPs and Culturally-Informed Care

Variable	**Mean**	***SD***	***N***	**%**
Trauma Types			***N***	**%**
Sexual abuse			103	100%
Physical abuse			103	100%
Emotional abuse			99	96.1%
Neglect			98	95.1%
Domestic violence			88	85.4%
Community violence			79	76.7%
Traumatic grief			62	60.2%
Bullying			52	50.5%
Medical			34	33%
Combat			33	32%
Disasters			22	21.4%
EBPs Used	**Mean**	***SD***	***N***	**%**
Standardized EBP	3.25	0.56		
Eclectic	2.41	0.73		
Non-EBP approach	1.01	0.69		
CT			44	42.7%
CPT			43	41.7%
TF-CBT			28	27.2%
Other			98	25.2%
PE			10	9.7%
EMDR			4	3.9%
None			4	3.9%
Patient Traditional Identification			***N***	**%**
11-25%			6	5.8%
26-50%			30	29.1%
51.75%			38	36.9%
>75%			29	28.2%
Degree of Treatment Influence			***N***	**%**
Never			0	0%
Seldom			6	5.8%
About half the time			19	18.4%
Usually			22	21.4%
Always			56	54.4%

Degree of Cultural Inclusion	***N***	**%**
Never	15	14.6%
Seldom	26	25.2%
About half the time	24	23.3%
Usually	12	11.7%
Always	26	25.2%
Cultural Approaches Used	***N***	**%**
Values	81	78.6%
Prayer	51	49.5%
Smudging	48	46.6%
Drumming	35	34%
Crafting	31	30.1%
Language	29	28.2%
Sweat Lodge Ceremony	26	25.2%
Dancing	22	21.4%
Other	16	15.5%
None	22	21.4%
Utilizing Community Resources	***N***	**%**
Never	23	22.3%
Seldom	23	22.3%
About half the time	28	27.2%
Usually	9	8.7%
Always	20	19.4%

Note. *SD* = standard deviation; *N* = 103; % = percentage; EBP = evidence-based practice; CT = cognitive therapy; CPT = cognitive processing therapy; TF-CBT = trauma-focused cognitive behavioral therapy; PE = prolonged exposure; EMDR = eye movement desensitization and reprocessing.

The Evidence-Based Practice Attitude Scale. The Evidence-Based Practice Attitude Scale (EBPAS; Aarons, 2004), provides a comprehensive set of attitude dimensions regarding existing models of evidence-based care. The EBPAS assesses 12 dimensions of attitudes including Requirements, Appeal, Openness, Divergence, Limitations, Fit, Monitoring, Balance, Burden, Job Security, Support, and Feedback. The current study included eight of these domains: Appeal, Requirements, Fit, Support, Burden, Limitations, Openness, and Divergence. Participants were asked to rate their agreement with each item from 0 ("*Strongly disagree*") to 4 ("*Strongly agree*"). Three domains were reverse coded (i.e., Divergence, Limitations, and Burden) with higher scores indicating more positive attitudes.

***Specialized administration of the EBPAS*.** Specific items were added to the Limitations and Fit subscales to increase suitableness of properly assessing attitudes towards the *cultural fit* of existing EBPs for AI/AN populations. The Limitations scale included six additional items (e.g., "Overall, currently available EBP treatments for AI/AN patients who have experienced trauma are effective," "I believe that there is a lack of EBP treatments for AI/AN patients who have experienced trauma that are inclusive of traditional forms of healing."). The Fit subscale included two additional questions that acknowledged the collectivistic nature of indigenous culture (e.g., "How likely would you be to adopt a new model if the AI/AN community wanted it?").

Results

Preliminary Analyses

Preliminary analyses were conducted to check for any differences in EBP attitudes based on demographic and contextual variables. There were no significant differences based on clinical experience, clinical setting, or theoretical orientation. For education level, significant differences were found: practitioners who had an advanced master's (non-terminal) and doctorate degrees reported lower levels of satisfaction with current standards of care. Additionally, significant differences were found surrounding ethnicity, with practitioners identifying as AI/AN and Pacific Islander having significantly lower levels of satisfaction. Due to these differences, variables were split with practitioners who held an advanced master's and doctorate degrees being grouped together and practitioners who identified as AI/AN and Pacific Islander also being grouped together.

Aim One: Exploring Attitudes Toward Existing EBPs

The first goal of this study was to determine if providers' training characteristics (i.e., education, years of experience, EBP confidence), clinical setting, and cultural factors (i.e., identification with Western/indigenous values) significantly predicted attitudes toward current standards of care. Hierarchical linear analyses conducted found training characteristics significantly predicted attitude levels: providers who had 5+ years of experience reported significantly

poorer attitudes. Additionally, those who reported higher confidence in using existing EBPs reported poor attitudes toward those EBPs. Clinical setting did not affect attitude scores. Ethnicity and alignment with Westernized values were found to significantly relate to attitudes, with AI/AN and Pacific Islander providers endorsing less favorable attitudes toward existing models, and those with higher alignment with Western values reporting higher satisfaction.

Aim Two: Exploring the Need for Culturally-Informed Care

The second goal of this study examined the need to make existing models of care more culturally-informed. To assess this, a hierarchical linear regression (Table 3) was conducted using the Limitations subscale. Results demonstrated the lack of inclusivity of culturally-informed approaches within current EBPs significantly predicted overall attitudes: 88% of providers voiced a need for change.

Table 3
Summary of Hierarchical Regression Analyses for Variables Predicting Attitudes Toward Current Standards of Care

Variable	***B***	**SE *B***	**β**	**ΔR^2**
Training experience (*N* = 103)				
Step 1				.21
Education level	7.31	2.52	.26**	
Ethnicity	10.31	2.59	.36***	
Step 2				.06
Education level	8.57	2.48	.30***	
Ethnicity	10.33	2.51	.36***	
Clinical experience	-1.84	.66	-.25**	
Step 3				.08
Education level	9.13	2.36	.32***	
Ethnicity	11.23	2.39	.39***	
Clinical experience	-3.62	.80	-.49***	
EBP use confidence	4.61	1.32	.37***	
Clinical setting (*N* = 103)				
Step 1				.21
Education level	7.31	2.52	.26**	
Ethnicity	10.31	2.59	.36***	
Step 2				.02
Education level	7.64	2.51	.27**	
Ethnicity	9.37	2.66	.32***	
Clinical setting	-.71	.49	-.13	

Cultural characteristics (*N* = 103)				
Step 1				.21
Education level	7.31	2.52	.26**	
Ethnicity	10.31	2.59	.36***	
Step 2				.17
Education level	6.83	2.25	.24**	
Ethnicity	1.59	2.88	.06	
Western values identification	7.60	1.49	.51***	
Step 3				.01
Education level	7.18	2.25	.26**	
Ethnicity	-2.06	3.78	-.07	
Western values identification	6.44	1.68	.43***	
Traditional values identification	-2.32	1.57	-.22	
EBP cultural fit (*N* = 103)				.21
Step 1				
Education level	7.31	2.16	.26**	
Ethnicity	10.31	2.59	.36***	
Step 2				.50
Education level	3.25	1.58	.12*	
Ethnicity	1.97	1.72	.07	
Limitations subscale	15.99	1.24	.78***	

Note. EBP = evidence-based practice; *$p < .05$, **$p < .01$, ***$p < .001$

Discussion

Existing trauma-informed treatments for AI/AN populations are based in Westernized models of care that meet the needs of majority groups rather than marginalized communities. Questions have been raised regarding their ability to appropriately address culturally-based attitudes, values, and behaviors central to core AI/AN ways of life. Given this, the primary goal of the current study was to explore practitioners' attitudes toward existing trauma-based EBPs for AI/AN populations, and examine the potential impact of training characteristics, clinical setting, and cultural factors on attitude levels. Practitioners with advanced master's and doctoral level education, those who had 5 or more years of experience, and those who had higher confidence levels in using current standards reported reduced satisfaction with existing EBPs. Such findings are consistent with the growing emphasis of diversity and inclusivity within clinical training and advancement of patient-centered care (Aarons et al., 2012; Sholomskas et al., 2005). Furthermore, such findings reinforce the lack of culturally-informed care, and highlight the impatience of practitioners who have been in the field longer. As the field of psychology has progressed, there has been an increased call for more appropriate standards of care that meet the unique approaches to healing embedded within cultural groups. The lack of development observed within trauma-informed EBP's may explain why more experienced providers are the ones endorsing markedly reduced satisfaction. In contrast to prior research and

common stereotypes (Kunze et al., 2013; Reding et al., 2014; Smith-Boydston & Nelson, 2008), more years of experience and working in community-based outpatient settings has no correlation to resistance to change in the field.

With regard to cultural characteristics, significant differences were found surrounding ethnicity, with practitioners identifying as AI/AN and/or Pacific Islander reporting drastically lower levels of EBP satisfaction. Moreover, practitioners who reported higher identification with Western values endorsed markedly higher satisfaction rates with existing EBPs. Given this study focused on working with AI/AN patients, it may have been more personal and painful to indigenous providers who have experienced such attitudes. Despite historical efforts to assimilate into Western value systems, many Tribal peoples continue to rebuild and strengthen traditional ways of life. The relationship between identification with Western values and feelings toward existing models of care is consistent with previous literature demonstrating EBPs perpetuate Western sensibilities (Duran, 2006; Gone, 2010). These findings illustrate the continued sense of comfort for Westernized clinical practice within the field of psychology and the unfortunate need for marginalized groups to continue to serve as the primary voice for appropriate and tailored care.

Implications for Future Training, Research, and Dissemination of Culturally Responsive Plans of Action

This study significantly contributes to the scientific literature regarding appropriate treatment for AI/AN patients with PTSD in three main ways. First, with regard to clinical training, this study highlights the importance of embedding the concept of *culturally-informed care* throughout the training process. Practitioners in the current study acknowledged a lack of attention to models of training that center on specific methods for doing this. This was in part due to the lack of available literature, but also based on a tendency to make culture invisible, including an absence of embedded, influenced, and related standards of care that reflect the culture to which they are being applied.

Second, research within the field has long been criticized for its ethnocentrism in which outcomes from empirical studies are thought to generalize across a wide range of populations. For AI/AN communities, the findings from this study indicate that despite calls for more culturally-inclusive research, Natives continue to be captured in the ambiguous "1% other" within research samples. For the treatment of PTSD specifically, there is a lack of available data that speaks directly to the needs and concerns of AI/AN people (BigFoot & Schmidt, 2010). To improve practitioner attitudes, researchers must address the concerns and needs voiced by and for AI/AN communities. Clinical research efforts must assess ways to make protocols more culturally-informed.

Furthermore, conducting research with AI/AN populations must involve forging partnerships with Tribal members themselves to ensure collaboration and transparency through full partnerships that involve local buy-in, coordination, and collaboration (Oetzel et al., 2015). Historically, indigenous populations have been victimized by research misuse and abandonment. Research teams come to the reservation, conduct their study, and leave with results to publish. This harmful process disregards not only the voice of the AI/AN people, but also leaves us without long-standing sustainable and culturally-appropriate programs (Proulx et al. 2017).

Finally, these findings are important with regard to disseminating concerns surrounding current standards of care and how this should influence future practice. In particular, there is a disconnect between honoring fidelity to empirically-driven approaches often aligned with mainstream methodology, and honoring the culture of the population receiving treatment. Matters are further complicated by institutional openness to alternative models that lack initial rigorous empirical support. Findings from the current study are consistent with other research that has highlighted the nature of disseminating AI/AN-driven research (Proulx et al., 2017). Proper facilitation of culturally-informed EBPs within treatment institutions that hold the power to determine practitioners ability to use such approaches is absolutely necessary. Not only is preliminary data surrounding the effectiveness of culturally-informed PTSD treatments needed, but

support from key structural leaders (e.g., organizational, Tribal) is also critical to foster the development and integration within clinical practice that will ensure lasting sustainability and refinement. Researchers, practitioners, and administrators are encouraged to build upon this work and develop culturally-informed adaptations to existing EBP models for the treatment of PTSD that directly addresses culturally-based attitudes, values, and behaviors necessary to promote change and recovery within AI/AN communities. As many providers in this study expressed, the time is now and we cannot afford to continue to wait.

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