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*Abstract: American Indians/Alaska Natives (AI/ANs) are subject to widespread cultural misrepresentations ranging from intrusive questions about ethnic identity to Native-themed sports team mascots. Racial microaggressions are linked to negative physical health, mental health, and academic consequences for AI/ANs. This study examines microaggressions experienced by AI/AN post-secondary students in New Mexico and Oklahoma. Microaggression prevalence ratings and associated distress were compared across region, gender, income, age, and cultural involvement. Results showed microaggressions were highly prevalent among AI/AN students in New Mexico and Oklahoma and varied by demographic and cultural factors. Increased AI/AN microaggressions research is needed to bring awareness, education, and solutions.*

"All too often we are still seen as objects or as a people trapped in the past-tense. We are twenty first century people, and must be seen as such in order to deal with the serious issues that face us today." Charlene Teters (Spokane)

## INTRODUCTION

Although many middle school textbooks erroneously teach that U.S. history began in 1492, American Indian/Alaska Native (AI/AN) communities have origin stories and histories far predating European contact (Calloway, 2012). Post-contact, tribal communities were introduced to foreign diseases, models of recreational alcohol use, warfare, and intentional genocidal and assimilation tactics (e.g., forced removal, militaristic-style boarding schools, termination, urban relocation, continual treaty violations; Calloway, 2012; Nabakov, 1999; Thornton, 1987). These broad historical and current events impacted (and continue to impact via intergenerational trauma, see Brave Heart & DeBruyn, 1998) myriad Indigenous peoples throughout North America. Such

events have had devastating consequences, including the dehumanization of peoples, cultures, and ways of life and represent a form of discrimination felt by AI/ANs in the United States, as well as by First Nations, Inuit, and Métis communities in Canada and Indigenous peoples throughout the world. Despite these events, Indigenous peoples remain resilient and continue to adapt while carrying on cultural traditions.

Historic and current racial discrimination results in the invalidation of several aspects of AI/AN life (Sue, 2010). AI/ANs are subject to numerous cultural misrepresentations derived from academic textbooks, media, and tourist attractions (Mihesuah, 1996). These cultural misrepresentations are subsumed under the larger category of discrimination and known as racial microaggressions. Racial microaggressions are “brief, everyday exchanges that send denigrating messages to people of color because they belong to a racial minority group” (Sue et al., 2007, p. 273). Recently, the microaggressions construct and research methods used to measure these experiences (e.g., subjective self-report) have been questioned (Lilienfeld, 2017). Despite critiques surrounding the operational definition and scientific rigor of microaggressions research, there is a simultaneous acknowledgement that “the existence of such indignities is undeniable” and that continued research on daily, subtle forms of discrimination is needed (Lilienfeld, 2017, p. 141). Examples of microaggressions targeting Indigenous peoples include sports team mascots with Native-themed names/caricatures (e.g., Chief Illiniwek; Cleveland Indians; Chae & Walters, 2009; Clark, Spanierman, Reed, Soble, & Cabana, 2011; Sue, 2010), dismissing Indigenous peoples’ lived experiences (e.g., minimizing the importance of culture; Jones & Galliher, 2015; Walls, Gonzalez, Gladney, & Onello, 2015), questioning racial/ethnic identity (e.g., non-Indigenous strangers making disparaging comments/questions about racial/ethnic identity; Clark, Kleinman, Spanierman, Isaac, & Poolokasingham, 2014), historical misrepresentations of contemporary experiences (e.g., assuming Indigenous peoples live in teepees; Clark et al., 2014), and physical or symbolical invisibility (e.g., absence of Indigenous peoples on campus or omission from textbooks/curricula; Clark et al., 2014).

### **American Indian/Alaska Native Microaggressions Research**

Recent empirical research demonstrates negative health impacts associated with microaggressions. Among AI adults with type 2 diabetes, microaggressions experienced while seeking health care were related to past year heart attack history and hospitalization after controlling for demographic and clinic factors (Walls et al., 2015). In another study, racial

microaggressions were associated with physical pain among two-spirit AI/ANs (Chae & Walters, 2009). Microaggressions have also been associated with lower self-esteem and feeling less value in community (Fryberg, Markus, Oyserman, & Stone, 2008), depression symptoms (Walls et al., 2015), and feeling upset by these occurrences (Jones & Galliher, 2015) among Indigenous youth and adults.

The racial discrimination that students experience extends a historical aim to assimilate Indigenous peoples to mainstream society vis-à-vis educational settings (e.g., boarding/residential schools; Cerecer, 2013). According to Grande (2004), “Indian education was never simply about the desire to ‘civilize’ or even deculturalize a people, but rather, from its very inception, it was a project designed to colonize Indian minds as a means of gaining access to Indian labor, land, and resources” (p. 23). Unfortunately, AI/AN students continue to experience pervasive racism (including microaggressions) in their day-to-day lives (e.g., Cerecer, 2013). One study found nearly all Indigenous adults, many of whom were college students, reported experiencing a racial microaggression (Jones & Galliher, 2015). Clark and colleagues (2014) qualitatively examined racial microaggression themes experienced by Canadian Indigenous undergraduate students. Nearly all students encountered individuals who assumed Indigenous life was encapsulated in a historical past and conflicted with mainstream society.

To date, research has not compared microaggression experiences by tribe or geographic region. This is an oversight given the vast diversity of the 573 federally recognized tribes (U.S. Department of the Interior, 2018), state recognized tribes, and tribes without federal/state recognition in the United States, all with distinct histories, cultures, and contemporary contexts (Calloway, 2012). The current study compares the microaggression experiences of AI/AN students residing in New Mexico (NM) and Oklahoma (OK). These two studies were conducted separately by the authors; however, these regions are significant in that OK is ranked second and NM fourth in states with largest populations of self-identified AI/ANs (Norris, Vines, & Hoeffel, 2012). In addition, historical context is vital to understand the current impact of racism against Indigenous peoples (Robertson, 2015). NM and OK are located in geographic regions with distinct histories influencing current social environments and cultural contexts. Historical events associated with intergenerational trauma differ by tribal community, though a commonality exists in shared suffering related to attempted physical and cultural genocide (Evans-Campbell, 2008). Many of the 38 tribes currently in OK (National Conference of State Legislatures, 2016) were forcibly removed to “Indian Territory” (Strickland, 1980). The birth of the Native American Church

occurred in this area (Calloway, 2012) and continues to thrive in several communities in addition to tribal ceremonies and cultural activities (e.g., pow wows, stomp dances). Furthermore, OK colleges' and universities' enrollment of Native students ranges from approximately less than 1% to 33% (for non-Tribal Colleges and Universities; The Chronicle of Higher Education, 2016). OK is home to two Tribal Colleges and Universities (TCUs), which allow for postsecondary education in tribal communities and foster a culturally-engaged environment for students (U.S. Dept. of Education, 2018). In NM, Spanish settlers' interactions with AI communities played a distinct role. In the late 1500s and early 1600s, tribes residing in NM encountered Spanish conquistadors who enslaved AIs, abused AI women, and punished those who did not convert to Catholicism or Christianity (Calloway, 2012). Despite a painful history of colonization, the 23 federally recognized tribal communities in NM (National Conference of State Legislatures, 2016) are strong nations. Tribal ceremonies (e.g., feast days; Indian Pueblo Cultural Center, 2016), languages, tribal oral histories, and cultural activities have survived and persisted in NM (Johnson, 2013). Similar to educational opportunities available for AI/AN students in OK, NM has three TCUs (U.S. Dept. of Education, 2018) and other universities (non-TCUs) with enrollment of AI/AN students ranging from less than 1% to 77.5% (The Chronicle of Higher Education, 2016).

### **Study Aims**

Beyond institutional-level racism that can exist and is often unseen by individuals, the research question presented was how common are microaggressions, and what type are experienced by AI/AN students in their day-to-day lives? This study provides the prevalence of nine different categories of microaggressions among 504 AI/AN students attending post-secondary institutions in NM and OK. It also examines the degree to which these microaggressions bothered students. Finally, prevalence and bothered ratings are compared across region, gender, income, age, and cultural involvement to provide a nuanced picture of factors that may impact microaggression experiences.

## **METHOD**

### **Participants**

The NM sample included 347 AI/AN students attending two post-secondary institutions in a large city where they comprised approximately 6% of students. Eligibility criteria included: (a)

enrolled part-time or more at the four-year public university or community college, (b) 18 years or older, (c) enrolled tribal citizen or self-identify as at least ¼ AI/AN,<sup>1</sup> and (d) completed the survey while in the city. Graduate students at the university were not eligible to participate.

The OK sample included 157 AI students attending three universities throughout the state where they comprised approximately 4%, 5%, and 22% of students. These three universities have been identified as top institutions from which AI students graduate with bachelor's degrees. Eligibility criteria included: (a) undergraduate or graduate student at one of three four-year public universities, (b) 18 years or older, and (c) specified a tribe they identified with and self-identified as AI/AN or biracial/more than one race selected. Eleven participants identified as another race/ethnicity or had missing data; they were excluded from analyses.

## **Procedure**

Both studies were approved by Institutional Review Boards at the respective institutions. Recruitment for the NM sample occurred in February to July of 2013 and for OK, between December 2011 and December 2012. The survey was completed online, informed consent was obtained, and participants were entered into a gift card raffle following completion.

Participants were recruited for both studies via posted flyers and email announcements sent to listservs specific to AI/AN students. In addition, participants in NM were recruited via e-mail invitations sent out to registered students who listed AI/AN as their race/ethnicity, as well as through flyers, in-person presentations at AI/AN student organizations, Facebook, and through word of mouth from community advisory board members. Additional methods for the OK sample included classroom announcements, word-of-mouth at AI/AN campus groups/events, and e-mail invitations sent through AI/AN campus organizations. The majority of participants (93%) across both studies heard about the studies via email, and this figure did not differ significantly by study.

The OK sample was part of a larger study with a focus on suicide prevention. Community engagement as part of the overall study included the researchers having a vendor table at one of the university's local pow wows to provide suicide prevention information and resources, publications by the research team, water and snacks, and to allow time for any community members to share their thoughts and stories related to suicide prevention. Community engagement also included seeking consultation from an OK AI researcher who reviewed/edited this manuscript.

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<sup>1</sup>This eligibility criterion was used to match that of the Honor Project (Chae & Walters, 2009), the study that originally used the Microaggressions Distress Scale.



Consistent with community-based participatory research principles, the NM research was guided by input from a community advisory board consisting of AI/AN faculty, staff, and students from the participating institutions. The board assisted in all aspects of the study, including the addition of relevant measures, participant recruitment, interpretation and dissemination of findings, and review of this manuscript.

## Measures

### Microaggressions Scale

The Microaggressions Distress Scale (MDS; Walters, 2005) includes 10 questions that inquire about past-year overt and subtle forms of discrimination (e.g., “told by non-Natives how ‘lucky’ you are to be Indian,” “hit or physically attacked because you are Native”). Due to researcher error, one item was missing in the OK sample (“told by non-Natives that they felt a spiritual connection to Indians”). Therefore, only nine MDS items were included in these analyses. The MDS was developed specifically for AI/ANs; an earlier version of this measure demonstrated good internal reliability ( $\alpha = 0.97$ ; Chae & Walters, 2009).

Each MDS item had two parts. The first asked whether a particular microaggression occurred in the past year. Response options included (0) No, (1) I’m not sure but I think so, and (2) Yes. Options (1) and (2) were collapsed to create dichotomous response categories of (0) No and (1) Yes/not sure but think so. The responses to these items were summed for the MDS Total, which had a range of 0 to 9 and represented the number of microaggressions participants experienced in the past year. The second part of each MDS item asked how much participants were bothered by each microaggression. This was only presented if participants responded “Yes” or “I’m not sure but I think so” to the first part of each MDS item. Response options to this second part included (0) Not at all, (1) A little, (2) Some, (3) A lot, and (4) Extremely; we report average bothered levels for participants that experienced the microaggression.

### American Indian/Alaska Native Cultural Involvement

Three yes/no questions inquired about whether participants (a) spoke their tribal language, (b) participated in their tribe’s traditional ceremonies/dances, and (c) made cultural arts. The wording for each sample was slightly different but overall comparable. An additional question (Whitbeck, Chen, Hoyt, & Adams, 2004) inquired about the importance of traditional spiritual beliefs/values and response options included “Not at all,” “Somewhat,” or “Very important.”

## **Statistical Analyses**

All analyses were conducted in SPSS version 24 (IBM Corporation, 2016). Basic demographic differences between the two samples were computed using independent samples *t*-tests and Pearson's chi-square tests. The percentage of students endorsing each of the nine microaggressions is reported for the sample overall and also by location (NM vs. OK), gender (male vs. female), age (18-25 years, 26-39 years, and 40-65 years), annual household income (\$0-9,999; \$10,000-29,999; \$30,000-49,999; \$50,000-79,999; \$80,000 and above), and the three cultural variables (speak tribe's language; make cultural arts; participate in traditional ceremonies/dances). The total score on the MDS is reported for the sample overall and for each subgroup, and average bothered ratings on the MDS are provided for the total sample and each subgroup. Differences between the groups listed above were computed using independent samples *t*-tests, Pearson's chi-square tests, and one-way analysis of variance. Significance levels were set to  $p < .01$  to control for multiple comparisons.

## **RESULTS**

### **Sample Demographics**

The overall sample included 504 students (31% male) ages 18 to 65 years, with an average age of 27 years (Table 1). Most students identified as AI/AN only (89%), and 93% were from tribes in the same geographic region as their respective universities. Sixty percent had an annual family income of less than \$30,000 ( $n = 299$ ). Compared to OK, students in NM were significantly older and more likely to be male, identify an additional race/ethnicity, have lower income, and be from a tribe from a region outside of their university (Table 1). About half spoke their tribal language (55%), 43% participated in traditional ceremonies/dances, 41% said traditional spiritual values were very important to how they lived their lives, and 38% engaged in cultural arts. Language knowledge did not differ between NM and OK students. However, students from NM were significantly more likely to participate in traditional ceremonies/dances, make cultural arts, and rate traditional spiritual beliefs as important (Table 1).

**Table 1**  
**Participant Characteristics and Differences by Geographic Region**

	Overall sample	New Mexico	Oklahoma	p-value
Age, years ( <i>M, SD</i> )	26.85 (9.55)	28.45 (9.97)	23.32 (7.44)	<.001
Community college: years working on degree	n/a	2.15 (2.32)	n/a	
University: academic status				
Freshman	42 (16.0)	11 (10.1)	31 (20.1)	<.001
Sophomore	59 (22.4)	26 (23.9)	33 (21.4)	
Junior	60 (22.8)	26 (23.9)	34 (22.1)	
Senior	86 (32.7)	46 (42.2)	40 (26.0)	
Graduate Student	16 (6.1)	0 (0.0)	16 (10.4)	
Self-identified race				
Native American only	448 (88.9)	297 (85.6)	151 (96.2)	<.001
Biracial/more than race selected	56 (11.1)	50 (14.4)	6 (3.8)	
Gender				
Male	156 (31)	119 (34.4)	37 (23.6)	0.017
Female	347 (69)	227 (65.6)	120 (76.4)	
Annual household income				
\$0-9,999	158 (31.8)	147 (42.7)	11 (7.2)	<.001
\$10,000-29,999	141 (28.4)	104 (30.2)	37 (24.2)	
\$30,000-49,999	80 (16.1)	44 (12.8)	36 (23.5)	
\$50,000-79,999	66 (13.3)	27 (7.8)	39 (25.5)	
\$80,000+	52 (10.5)	22 (6.4)	30 (19.6)	
Location of home tribal nation				
Same region as university	466 (92.5)	313 (90.2)	153 (97.5)	0.002
Different region than university	37 (7.3)	34 (9.8)	3 (1.9)	
Speak tribe's language				
Yes	274 (54.5)	179 (51.7)	95 (60.5)	0.082
No	229 (45.4)	167 (48.3)	62 (39.5)	
Participate in traditional ceremonies or dances				
Yes	217 (43.1)	196 (56.5)	21 (13.5)	<.001
No	286 (56.9)	151 (43.5)	135 (86.5)	
Make cultural arts				
Yes	191 (38.0)	155 (44.9)	36 (22.9)	<.001
No	311 (62.0)	190 (55.1)	121 (77.1)	
Importance of traditional spiritual values/beliefs				
Not at all	120 (24.7)	79 (23.8)	41 (26.6)	<.001
Somewhat	166 (34.2)	82 (24.7)	84 (54.5)	
Very	200 (41.2)	171 (51.5)	29 (18.8)	

*Note.* Community college includes New Mexico participants only. Outside of age and years working on degree, data presented begins with *N* and then the percentage is presented in parentheses.

## Microaggressions Prevalence

### Overall Sample

In the past year, almost all students experienced at least one microaggression (93%;  $n = 466$ ). The average number of past-year microaggressions was 3.12 ( $SD = 1.99$ ; range 0 – 9). The two most common were being told the participant was “lucky” to be Indian (61.4%;  $n = 309$ ) and being mistaken as a racial group other than Native (60.2%;  $n = 303$ ; Table 2). The least commonly experienced microaggression was a racially-related physical attack (2.2%;  $n = 11$ ).

### Region

There was no significant difference in number of total past-year microaggressions experienced by students in NM versus OK (Table 2). However, item-level differences existed. Significantly more students in NM than OK endorsed being mistaken as a different racial group (65% vs. 50%), told the speaker was an Indian in a past life or had a grandmother who was a Cherokee princess (55% vs. 29%), followed in a store (32% vs. 12%), and treated unfairly by the police (22% vs. 8%). Conversely, significantly more students in OK than NM were told they were “lucky” to be Indian (76% vs. 55%) and asked to prove their authenticity as Native (45% vs. 25%; Table 2).

### Gender

Male and female participants experienced a similar number of past-year microaggressions. More females than males were told they were “lucky” to be Indian (65% vs. 52%). For the remaining eight microaggressions, there were no significant differences by gender in past-year prevalence (Table 2).

### Age

Participants aged 40 to 65 years old experienced significantly fewer past year microaggressions than those 39 and younger. This group reported two microaggressions on average, compared to three microaggressions for those 39 years and below. For individual microaggressions, those ages 18 to 25 had the highest rates of being told they were “lucky” to be Indian and being asked if they were a “real Indian.” Those ages 26 to 39 years had the highest rates of being told the speaker was an Indian in a past life or had a grandmother who was a Cherokee princess, called a racist name, and experiencing unfair police treatment (Table 2).

**Income**

Microaggression experiences differed significantly by income, although the total number experienced was not significantly different by income (see Table 2). Participants with household incomes of \$0 to \$9,999 were most likely to be followed in a store and treated unfairly by the police. For example, 29% were followed in a store, compared to 8% of participants with an income of \$80,000 or more. Participants with household incomes of \$10,000 to \$29,999 had the highest rates of being told the speaker was an Indian in a past life or had a Cherokee princess grandmother. Finally, those with the highest incomes – \$80,000 per year and above – were most likely to be questioned about their authenticity. There were no significant differences by income for the other microaggressions (Table 2).

**Table 2**  
**Past-Year Prevalence of Microaggressions Distress Scale (MDS) Items, Overall and by Demographic Variables**

Microaggressions Distress Scale Item	Overall	Location		Gender		Age			Income				
		NM (n=347)	OK (n=157)	Male (n=156)	Female (n=347)	18-25 (n=309)	26-39 (n=137)	40-65 (n=58)	0-10k (n=158)	10-30k (n=141)	30-50k (n=80)	50-80k (n=66)	80k+ (n=52)
Lucky to be Indian	61.4	54.9**	75.8**	52.3*	65.4*	69.3**	54.7**	35.1**	64.3	54.6	57.5	68.2	65.4
Mistaken as non-Native	60.2	64.7*	50.3*	59	60.7	62.7	59.9	48.3	62.4	68.1	53.8	43.9	61.5
Indian in past life/ Cherokee princess grandmother	46.8	55.1**	28.7**	47.4	46.4	42.4*	58.4*	42.9*	49.4*	57.9*	41.3*	36.9*	32.7*
Asked if real Indian	45.0	42.7	50.3	41.0	47.0	51.5**	38.7**	25.9**	46.8	48.2	40.0	37.9	48.1
Prove authenticity	31.0	24.9**	44.6**	32.1	30.6	35.6	25.0	20.7	24.2*	27.7*	33.8*	39.4*	48.1*
Followed in store	25.8	32.4**	11.5**	28.2	24.9	21.7	31.4	35.1	40.8**	27.0**	13.8**	12.1**	17.3**
Racist name	22.1	22.3	21.7	21.3	22.5	20.8*	29.9*	10.5*	26.1	24.1	19.0	9.1	26.9
Unfair police treatment	17.7	21.9**	8.3**	23.7	15.0	13.6*	27.0*	17.2*	29.1**	13.5**	17.5**	9.1**	7.7**
Physical attack	2.2	2.9	0.6	3.2	1.7	1.3	5.2	0	5.1	0.7	1.3	1.5	0
MDS Total (M, SD)	3.12 (1.99)	3.22 (1.99)	2.92 (1.96)	3.08 (2.01)	3.14 (1.98)	3.19 (1.86)*	3.31 (2.16)*	2.34 (2.06)*	3.48 (2.17)	3.22 (1.90)	2.78 (2.01)	2.58 (1.77)	3.08 (1.78)

Note. MDS = Microaggressions Distress Scale; M = mean; SD = standard deviation. For income, k = thousand (e.g., 30k = \$30,000). Numbers presented for each MDS item represent the percentage of participants endorsing experiencing that item in the past year. Comparisons are conducted using chi-square tests, independent sample t-tests, and one-way ANOVA. The significance level was set to  $p < .01$  to control for multiple comparisons.  
 \* $p < .01$ . \*\* $p < .001$ .

### Cultural Involvement

The total number of past-year microaggressions did not differ by cultural involvement. At the item-level, tribal language speakers were more likely to be treated unfairly by the police (22% vs. 12%) than language non-speakers. Those who made traditional cultural arts were more likely than those who did not to be told the speaker was an Indian in a past life or had a Cherokee princess grandmother (58% vs. 40%). Those who participated in traditional dances/ceremonies were more likely than those who did not to be told the speaker was an Indian in a past life or had a Cherokee princess grandmother (57% vs. 39%) and followed in a store (32% vs. 21%). In the reverse direction, those who endorsed *not* participating in traditional ceremonies/dances had a higher prevalence of being told they were “lucky” to be Indian (67% vs. 54%). All other item-level prevalence differences were non-significant (Table 3).

**Table 3**  
**Past-Year Prevalence of Microaggressions Distress Scale (MDS) Items, Overall and by Cultural Variables**

Microaggressions Distress Scale Item	Overall	Speak Native language		Make cultural arts		Participate in traditional ceremonies/dances	
		Yes (n=274)	No (n=229)	Yes (n=191)	No (n=311)	Yes (n=217)	No (n=192)
Lucky to be Indian	61.4	66.1	55.7	58.6	63.2	54.2*	67.1*
Mistaken as non-Native	60.2	61.3	58.8	64.4	57.7	61.3	59.3
Indian in past life/ Cherokee princess grandmother	46.8	49.1	44.3	58.1**	39.8**	56.9**	39.3**
Asked if real Indian	45.0	45.6	44.5	46.6	44.1	41.0	48.3
Prove authenticity	31.0	30.8	31.4	31.4	31.0	25.9	35.0
Followed in store	25.8	28.6	22.7	28.4	24.4	31.9*	21.3*
Racist name	22.1	26.5	17.0	26.8	19.0	25.6	19.6
Unfair police treatment	17.7	22.3*	12.2*	22.0	15.1	22.1	14.3
Physical attack	2.2	2.2	2.2	2.1	2.3	1.9	2.5
MDS Total (M, SD)	3.12 (1.99)	3.32 (2.11)	2.89 (1.81)	3.39 (2.06)	2.97 (1.92)	3.20 (2.02)	3.07 (1.96)

Note. MDS = Microaggressions Distress Scale; M = mean; SD = standard deviation. Numbers presented for each MDS item represent the percentage of participants endorsing experiencing that item in the past year. Comparisons by the three cultural variables are conducted using chi-square tests. The significance level was set to  $p < .01$  to control for multiple comparisons.

\* $p < .01$ . \*\* $p < .001$ .

**Microaggressions Bothered Ratings**

The most common microaggressions were not necessarily the most bothersome: participants were most bothered by being physically attacked, treated unfairly by the police, and being followed in a store (Table 4). Ratings for these items corresponded to a bothered level between “some” and “a lot.” Comparatively, the least bothersome microaggression was being told they were “lucky” to be Indian, which corresponded to “a little” bothered.

There were few group-level differences in bothered ratings. Unfair police treatment bothered students 40 to 65 years more than those 18 to 25 years old ( $M = 3.80$  vs.  $2.68$ ,  $p = .009$ ) and being asked whether they were a “real Indian” bothered women more than men ( $M = 2.10$  vs.  $1.53$ ,  $p = .007$ ). All other differences in bothered ratings for individual microaggressions were non-significant.

**Table 4**  
**Average Bothered Rating for Items on the Microaggressions Distress Scale**

<b>Microaggressions Distress Scale Item</b>	<b>Bothered Rating <i>M (SD)</i></b>
Physical attack ( $n=11$ )	2.82 (1.60)
Unfair police treatment ( $n=86$ )	2.87 (1.08)
Followed in store ( $n=127$ )	2.69 (1.24)
Racist name ( $n=111$ )	2.08 (1.34)
Indian in past life/Cherokee princess grandmother ( $n=234$ )	2.00 (1.55)
Asked if real Indian ( $n=227$ )	1.94 (1.45)
Prove authenticity ( $n=156$ )	1.90 (1.48)
Mistaken as non-Native ( $n=303$ )	1.34 (1.37)
Lucky to be Indian ( $n=309$ )	1.28 (1.47)

*Note.* For each item, bothered ratings are included only for those participants who endorsed experiencing that particular microaggression in the past year. The rating scale ranged from 0 to 4, with 0 = not at all and 4 = extremely bothered. Items are presented in order of bothered ratings, from highest to lowest mean rating.

**DISCUSSION**

Nearly all (93%) of the AI/AN students in New Mexico and Oklahoma in this study reported experiencing at least one microaggression, with an average of three over the past year. High prevalence of microaggression experiences in this study is consistent with past research in which

98% of Indigenous young adults (Jones & Galliher, 2015) and 94% of AI youth (Johnston-Goodstar & VeLure Roholt, 2017) reported experiencing microaggressions. The degree to which individuals are affected by discrimination varies. AI/AN students in this study reported feeling “a little” to “a lot” bothered for each microaggression. Jones and Galliher (2015) found that participants rated the level of their microaggression-related distress between none and mild, although all possible levels of distress were endorsed. Walters (2010) found that approximately 10 to 15% of two-spirit AI/ANs were bothered “quite a bit” or “extremely” by microaggressions. However, it is important to note that microaggression prevalence rates among a two-spirit sample may be impacted by multiple minority status. Taken together, the current study and past research suggest widespread prevalence and varied distress levels endorsed when experiencing microaggressions. It is possible that variability in microaggression prevalence and bothersome ratings across this study and other studies relate to differences in microaggressions measures or point to the subjective, flexible boundaries within the definition of microaggressions (Lilienfeld, 2017).

Most commonly, NM and OK students reported being told they were lucky to be Native and being mistaken as another racial/ethnic group. Despite the commonplace experience of being told they were lucky to be AI/AN, students reported this was the least bothersome microaggression experienced. Underlying this microaggression may be the desire for non-Native individuals to be Indigenous due to romanticization and/or the false assumption that all AI/ANs receive educational/economic benefits (Clark et al., 2014; Mihesuah, 1996). Being mistaken for another race as a common microaggression is consistent with another study of Aboriginal university students who reported “unconstrained voyeurism” in which others intrusively inquired about their ethnic identity and based judgments on phenotypical characteristics (e.g., skin color; Clark et al., 2014). This microaggression may have serious implications. For example, in one study, AI adolescents and adults living in an urban area expressed concerns about being mistaken for another race, feeling invisible, and thus preventing access to appropriate suicide prevention resources (Burrage, Gone, & Momper, 2016).

The least common microaggression experienced by all participants in the current study was being physically attacked, although this was reported as most bothersome. Additionally, participants reported distress from being followed around in a store due to being AI/AN. It is not surprising that these two microaggressions are most troubling, as these fall under the category of “microassaults,” which most closely resemble overt racism intended to harm people of color (Sue et al., 2007). Future research should distinguish between microassaults and overt racism versus



microinsults and microinvalidations, and consider how they may differentially affect health, mental health, and academic outcomes. If certain microassaults are more prevalent in certain regions, systemic and institutional-level intervention and change may be necessary.

Related to geographic region, there were no differences between the OK and NM sample in how bothered students were by microaggressions. However, there were significant differences in specific type of microaggression reported by participants in the NM versus OK sample. It is possible that geographic region and/or university setting may be related to level of AI/AN inclusion and positive representations of AI/AN communities (or lack thereof) and may account for such differences. For example, in NM, AI students endorsed higher rates of being mistaken as another race than did those in OK; this may be due to the large percentage of Latino/a and Hispanic populations in NM as compared to OK. As another example, in OK, AI/AN students endorsed being asked to prove their ethnic identity; this may be due to public misperceptions that all Native peoples phenotypically look the same. Alternatively, this may be due to the stereotype that all AIs live on reservations (Mihsuah, 1996) and residence pattern mistakenly equates to Native identity. Most OK tribes do not have reservations (with the exception of one, the Osage Nation Reservation; U.S. Census Bureau, 1994, 2017) and are geographically dispersed across the state, possibly contributing to AI/AN individuals being questioned about their identity (Mihsuah, 1996).

Nadal and colleagues (2015) point to the importance of examining intersectional identities (e.g., race by gender) in the study of microaggressions. Current study results show there were differences in frequency and distress level for particular types of microaggressions experienced by AI/AN students. However, it is difficult to fully interpret all results due to intersectionality. Female participants in this study reported more distress related to their identity as AI/AN being questioned compared to males. Another study found that Indigenous females were significantly more upset by specific types of microaggressions compared to others (Jones & Galliher, 2015). The current study also found that microaggression experiences significantly varied by income level. Those with lower family incomes were more likely to be followed in a store and treated unfairly by the police compared to those with higher incomes. It is possible that students with lower income levels shop in economically disadvantaged neighborhoods with increased police presence. Students with higher income levels were more likely to have their AI/AN identity questioned, which may be motivated by stereotypes about AI/ANs and poverty and their presence in certain settings with economic advantages and less apparent visibility of AI/AN individuals. The intersection between income, race, and microaggressions is another important area of future study.

We found some significant differences in microaggression prevalence by cultural involvement, with those who spoke their tribal language or participated in traditional dances or made cultural arts more likely to experience microaggressions. It is possible that being active in traditional dances, making cultural arts, and speaking one's language signals to others that a person is AI/AN, and then they experience more microaggressions. Furthermore, AI/AN students who are active in cultural traditions and activities, related to ethnic/cultural identification, may exhibit increased awareness about how they are treated and more readily identify microaggressions they experience. Although ethnic/cultural identification was not measured in the current study, these findings may relate to past research showing stronger ethnic identification as AI/AN being associated with increased microaggression experiences (Jones & Galliher, 2015). Although we did not measure identity, engagement in cultural activities may serve as a proxy related to ethnic/cultural identification.

### **Limitations**

One limitation was that one item from the Microaggressions Distress Scale (Walters, 2005) was missing during data collection in the OK sample due to researcher error. Thus, this item was excluded from analyses. The overall total for the Microaggression Distress Scale here has a lower possible maximum than for studies that include all items; this should be taken into account in future research and comparisons. Given that we focused on differences in prevalence of individual items and still had nine items for comparison, this omission is a minor limitation. Another limitation includes study results not generalizing to other geographic regions and tribal groups given heterogeneity in history, culture, and contemporary contexts of the more than 500 tribes in the United States. Given that this was a college sample, results may not generalize to the microaggression experiences of non-college students, although the wide age range included does increase overall generalizability. In addition, the colleges and universities included in the current study had AI/AN student enrollment percentages ranging from 4% to 22%. It is possible that AI/AN students attending post-secondary institutions with lower Native student enrollment have different microaggression experiences in a culturally isolated setting. It would also be useful to look at microaggression experiences of AI/AN students attending tribal colleges compared to other post-secondary institutions, as these settings may be more culturally supportive.

## CONCLUSION AND FUTURE DIRECTIONS

To our knowledge, the current study is the first to compare microaggression prevalence and distress ratings among two AI/AN samples from different regions and by age, gender, income level, and cultural involvement. This study adds literature demonstrating widespread prevalence of discrimination against AI/ANs in two distinct regions of the United States. Microaggressions have negative implications in a variety of domains for Indigenous communities. Research on microaggressions with Indigenous communities is accumulating on associated negative health impacts, including cardiac health (Walls et al., 2015), physical pain (Chae & Walters, 2009), low self-esteem (Fryberg et al., 2008), depression symptoms (Walls et al., 2015), and an indirect relationship to suicide ideation (O’Keefe, Wingate, Cole, Hollingsworth, & Tucker, 2015). There are also significant academic implications of microaggressions for AI/AN students. Continued research is needed to understand the lived academic experiences of Indigenous students attending institutions with historical legacies of assimilation and colonization concurrently with daily discrimination inside and outside the classroom. Academic settings should be safe environments in which AI/AN students can focus on achieving goals; however, the manifestation of microaggressions may represent a form of trauma for AI/AN students (Johnston-Goodstar & VeLure Roholt, 2017) and impede success and possibly retention. Further, invisibility and stereotyped representations impact behavior (e.g., physical attack – “microassault”). One example includes initial lack of media (i.e., invisibility) and subsequent stereotyped portrayals of Indigenous peoples protecting sacred lands and fighting environmental injustice at the Dakota Access Pipeline site (DAPL; Fryberg & Eason 2017). According to Fryberg and Eason (2017, p. 554), “the DAPL protests demonstrate that bias toward Natives manifests in the minds and behaviors of individuals (e.g., the police and paramilitary forces who attacked Native protesters) and at the collective, representational levels (e.g., the media representations of Native protesters as violent warriors).”

Future research should continue to examine microaggression prevalence and distress across regions with diverse tribal representation using a culturally validated microaggressions scale to capture unique experiences of AI/AN peoples. Such research will provide important information about the unique microaggression experiences of AI/ANs and similarities/differences across geographically, historically, and culturally heterogeneous communities and also its relation to physical, mental, and spiritual health outcomes. Qualitative research is also imperative to augment quantitative results to better understand differences across individual and community level factors.

In addition, research might help identify ways in which microaggressions may be decreased from an institutional standpoint (e.g., training and evaluation for all students) or support systems that AI/AN students can utilize. For example, student organizations (at public, private, or tribal colleges) and local communities might find points of collaboration to support students who experience microaggressions. Many AI/AN student organizations hold meetings, campus events, and other gatherings that may foster a sense of belongingness, cultural connection, and social support. Overall, continued research is vital to support local grassroots and national organizations calling for an end to microaggressions and other forms of discrimination against AI/ANs and Indigenous peoples globally.

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Indigenous and non-Indigenous scholars of the United States each with 15-37 years of experience working with tribal communities (Burnette et al., 2014). Recommendations were gleaned through qualitative analysis, which then informed several studies that utilized this toolkit in framing and approaching culturally sensitive research with tribal communities.

**Table 1**  
**Toolkit of Strategies for Culturally Sensitive and Ethical Research with AI/AN Communities**

<b>Strategy for Researcher(s)</b>	<b>Description</b>
<b>Become Educated</b>	Read about both specific and broad AI/AN history. Learn from AI/AN communities, colleagues, and insiders.
<b>Work with a Cultural Insider</b>	This insider will lead the way to working within culturally appropriate protocols and nuances of the AI/AN community.
<b>Get Invited</b>	Collaborate with key insiders and become invited because of demonstrated skills and competence.
<b>Exhibit Cultural Humility</b>	Approach work with AI/AN communities with a positive intent, authenticity, and respect for the people.
<b>Be Transparent</b>	Be completely open and honest about research intentions and resources available to do this work.
<b>Spend Time in the Community</b>	Take the time to get to know AI/AN community members before beginning the study.
<b>Collaborate</b>	Become embedded in the community and develop a network of people who conduct culturally sound research.
<b>Listen</b>	Attend to AI/AN community members who are experts on their own community.
<b>Build a Positive Reputation</b>	Build a reputation for doing worthwhile research.
<b>Commit Long Term</b>	Work with AI/AN communities long term to foster lasting change and collaboration.
<b>Use a Memorandum of Understanding</b>	Outline important guidelines such as who owns the data, how research findings are published, how researchers will follow-up with the community, etc.
<b>Use a Cultural Reader</b>	A cultural reader reviews reports and prevents inadvertent harmful publishing.
<b>Go the Distance</b>	Travel to AI/AN communities, which might be a long distance away.
<b>Demonstrate Patience</b>	Understand that relationship, trust-building, and the research process take time.
<b>Enable Self-Determination</b>	Incorporate the tribe's input and participation throughout the research design and implementation.
<b>Use a Tribal Perspective</b>	Avoid imposing a Western perspective.
<b>Use Appropriate Methodology</b>	Use culturally congruent community-based, qualitative, or quantitative methods.
<b>Reinforce Cultural Strengths</b>	Build on the many strengths within AI/AN communities by using a community-based participatory method, and incorporating traditions in research such as storytelling, family, attention to land and the spirit, and other strengths already present.
<b>Honor Confidentiality</b>	Consider community, family, and individual confidentiality and how to ensure it, especially in tight-knit communities.

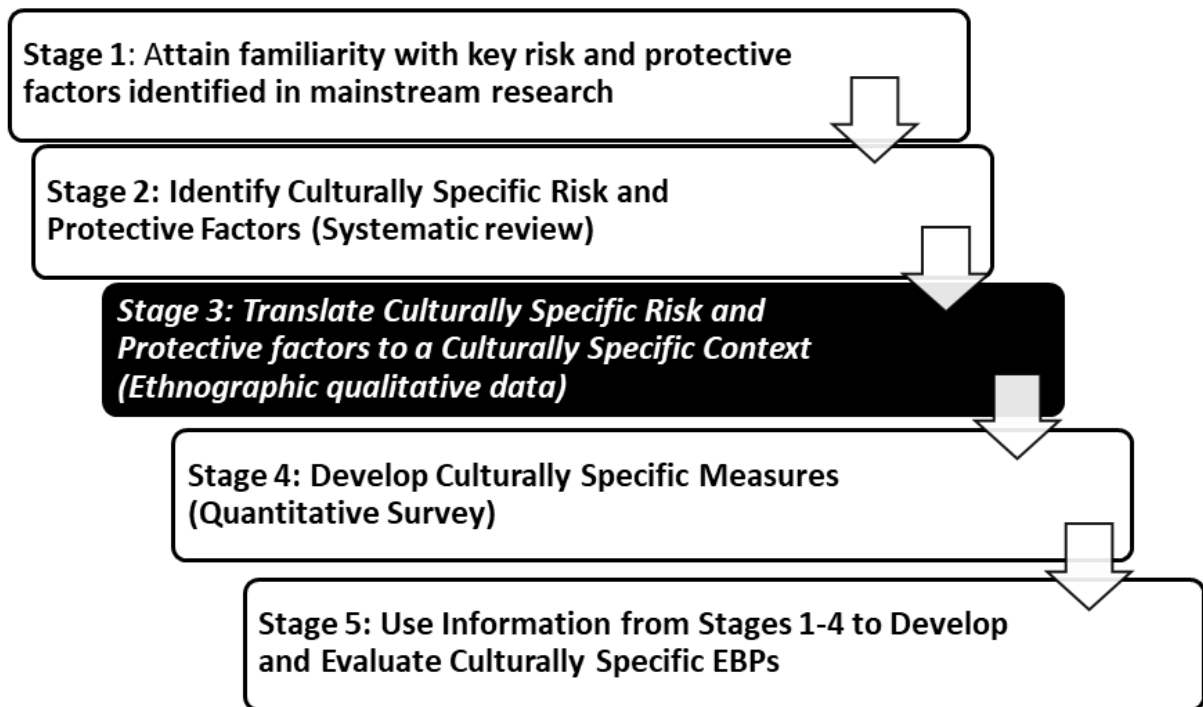
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**Table 1 Continued**  
**Toolkit of Strategies for Culturally Sensitive and Ethical Research with AI/AN Communities**

<b>Strategy for Researcher(s)</b>	<b>Description</b>
<b>Advocate</b>	Communicate the needs and rights of AI/AN peoples to decision-making bodies.
<b>Reciprocate and Give Back</b>	Develop programs, report results, provide compensation, and enable the AI/AN community to determine follow-up.
<b>Allow for Fluidity and Flexibility</b>	Balance rigor with culturally congruent research practices. Adapt the research process to honor the community's rhythm and traditions. Publishing institutions can support this flexibility as good research practice.
<b>Develop an Infrastructure</b>	Build a network with AI/AN and non-AI/AN researchers and community members to centralize and facilitate streamlined research that is useful for both AI/AN communities and academia.
<b>Invest Resources</b>	Funding sources can foster culturally congruent research by allowing for traditional customs, such as feeding participants or offering gifts to elders, through grants that can allocate funds to AI/AN communities, colleges, and infrastructure.

Note. Table has been reprinted with permission from Burnette et al. (2014). Strategy is listed in the first column, with the description of each strategy detailed on the second column.

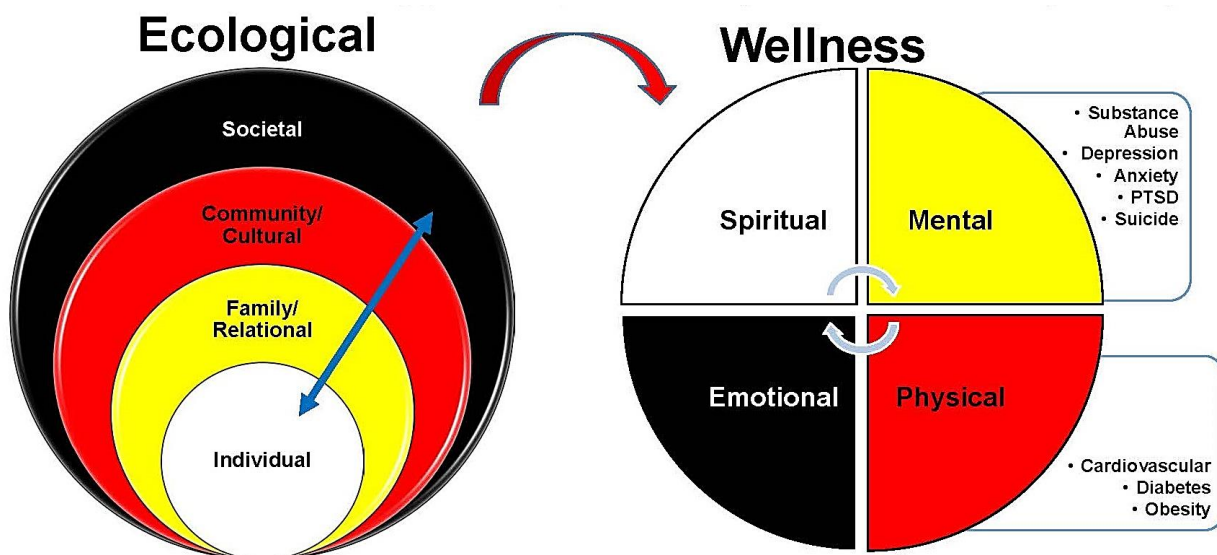
**Figure 1. The Five-Stage Process to Develop Culturally Specific EBPs with AI/AN peoples**



Note. Whitbeck's (2006) five stages are described with the focus of this article, Stage 3, emphasized.

This toolkit informed the studies that led to the development of a major theoretical contribution (the Framework of Historical Oppression, Resilience, and Transcendence [FHORT]), which helps explain the lived experiences of AI/ANs and approaches health equity in a culturally relevant way (Burnette et al., 2014; Burnette & Figley, 2017). The concept of *historical oppression* captures the chronic, pervasive, and intergenerational experiences of oppression that Indigenous peoples were exposed to throughout colonization and into the present, which, over time, may be normalised, imposed, and internalised into peoples' daily lives (including individuals, families, and communities; Burnette & Figley, 2017). It encompasses historical trauma and focuses on *both* historical *and* contemporary forms of oppression (i.e., proximal stressors) which tend to perpetuate oppression, such as higher levels of stress, lower incomes, and health disparities (Burnette & Figley, 2017). Figure 2 depicts this framework, which highlights interrelated risk and protective factors across ecological levels to predict wellness. The concept of wellness integrates social, mental, emotional, and physical health, and relates to disparities in behavioral and mental health (e.g., substance abuse, PTSD, and depression) and physical health (e.g., diabetes, obesity; Burnette & Figley, 2017). According to the FHORT, it is the interaction, accumulation, interconnections, and balance of risk factors (i.e., those that exacerbate problems) and protective factors (i.e., those that buffer negative outcomes or promote positive outcomes) across multiple levels (e.g., individual

**Figure 2. Framework of Historical Oppression, Resilience, and Transcendence**



*Note.* This research identified culturally relevant risk and protective factors related to substance abuse, violence, and associated mental health disparities. Yet, this framework may be applied to other aspects of wellness and health.

family/relational, community/cultural, societal) that explain whether a person experiences wellness (balance among the mind, body, spirit, and relations with others and the environment) after experiencing adversity. Resilience describes recovering well and bouncing back after adversity, whereas transcendence encompasses reaching new meaning and heightened quality of life (Burnette & Figley, 2017).

### **The Process of Culturally Adapting and Developing EBPs**

Whitbeck's (2006) five stage process for developing culturally relevant EBPs includes (Figure 1): 1) attaining familiarity with key risk and protective factors in mainstream research; 2) the identification of culturally specific risk and protective factors; 3) the translation of culturally specific risk and protective factors to a culturally specific context; 4) developing culturally specific measures; and 5) using information from Stages 1-4 to develop and evaluate culturally specific EBPs.

Because Stages 1 and 2 can be completed through systematic reviews of risk and protective factors in mainstream and AI/AN contexts, respectively, we focus this article specifically on Stage 3 of the process: The translation of culturally specific risk and protective factors to a culturally specific context. This stage involves synthesizing extant research and the specific risk and protective factors within a given context to address the key factors that may drive inequities or buffer against them. This stage is the first stage that may provide significant complexity for researchers along with variability in the research approaches to identify factors. Thus, we describe our approach to Stage 3: A critical ethnography that is grounded in the voices of AI/AN peoples and a culturally congruent theoretical framework. The focus of this article is on the process of this particular study, rather than the outcomes. To make this exemplar more concrete, we will also provide some content related to study outcomes. This approach can serve as a model for use by other researchers to develop the highly needed culturally relevant EBPs to address AI/AN social and health inequities. A lot of emphasis is placed on empirically-informed interventions, yet ways to operationalize the infusion of empirical information into clinical practice is less delineated. This works provides a tangible process of informing and infusing empirical research into clinical interventions. The focus now turns to our goal of identifying and translating the culturally specific risk and protective factors across ecological levels as they related to the primary health disparities of substance abuse, violence, and associated mental health disparities.

According to Whitbeck (2006), Stage 1 begins with attaining a familiarity with key risk and protective factors identified in the mainstream research. This can be completed by doing a literature or systematic review focused on the outcome(s) of interest. The second stage involves the identification of culturally specific risk and protective factors. For the purpose of this research, Stage 2 was completed through a systematic review of culturally relevant risk and protective factors for mental health disparities and substance abuse across ecological levels among AI/AN youth, using an ecological framework of wellness (Burnette & Figley, 2016). Stage 3 (the focus of this article) identifies and translates risk and protective factors to a specific cultural context (e.g., specific tribes) through community-engaged partnerships with AI/AN community members. For context, Stage 4 focuses on developing measures of risk and protective factors specific to one's culture. Although details of this stage are outside the scope of this article and are described elsewhere, this process resulted in using Stage 3 results to create the culturally grounded scales of Historical Oppression and The Family Resilience Inventory (Burnette et al., In Press; Burnette, Boel-Studt, et al., 2019), which are described elsewhere. Finally, Stage 5 uses information in Stages 1-4 to develop and evaluate a culturally specific EBP, which is currently underway.

We integrate Burnette et al.'s (2014) Toolkit for Culturally Sensitive and Ethical Research (Table 1) and apply Whitbeck's (2006) Five-Stage theoretical framework (Figure 1) to develop evidenced-based culturally specific intervention programs for AI/AN peoples (Whitbeck, 2006). In addition to the already described adaptation process, Whitbeck (2006) outlines guiding assumptions for research partnerships with AI/AN communities, indicating the importance of developing programs for distinct tribal nations (i.e., culturally specific). Whitbeck (2006) also affirms that AI/AN communities have all the knowledge needed to socialize healthy children and families and that cultural practices and knowledge must inform social science knowledge (Whitbeck, 2006). Finally, the core of developing programs is the identification of key culturally specific risk and protective factors, which operate independently and in interaction with the key risk and protective factors of the general population (Whitbeck, 2006).

Although the need to reduce substance use, mental health, and violence disparities among AI/AN populations is urgent, there is a critical gap in knowledge of culturally specific risk and protective factors that could be integrated into social work interventions. If risk and protective factors lack cultural relevancy, it is unlikely that they will lead to EBPs, because they may not be well-matched to the communities with whom they are used. Indeed, there is an absence of a localized understanding of culturally specific risk and protective factors relating to AI/AN



populations (Fletcher, 2010), especially those from the Southeast, in contrast to tribes residing in the Southwest or Northern Plains (Burnette & Figley, 2016). Research consistently documents variability in risk and protective factors, depending on a given culture and context (Burnette & Figley, 2016). Thus, the aim of this research was to identify culturally specific risk *and* protective factors that exacerbate and buffer against the aforementioned health disparities with particular focus on substance abuse and violence.

## METHODS

### **The Identification and Translation of Culturally Specific Factors (Stage 3)**

This research used a convergent mixed-methods design, which merges findings from both quantitative and qualitative data (Creswell, 2015). The quantitative component took the form of a survey created from preliminary qualitative research. An in-depth, critical ethnographic approach was used to uncover the essential risk and protective factors related to intimate partner violence (IPV) and substance use. A critical ethnographic inquiry incorporates critical theory in its investigation by attending to power relationships among dominant and marginalized groups (Carspecken, 1996). With an overriding goal of generating understanding and eliminating oppression experienced by marginalized groups, critical ethnographies are well-suited to eliminate violence and health disparities experienced by AI/AN populations (Carspecken, 1996). Moreover, critical ethnographies aim to highlight participants' human agency, resilience, and resistance to historical oppression and subjugation (Quantz, 1992), all of which are central to reducing AI/AN IPV and health disparities. Critical ethnographies triangulate many forms of data including interviews, existing data, and direct observation (Carspecken, 1996).

### **Research Design: Data Collection and Analysis**

Carspecken's (1996) five stage approach to critical ethnography served as a framework for data collection and analysis and has been found to be *a culturally appropriate methodology* (see Table 1), being used throughout the decade of preliminary research with the focal tribes (Burnette & Figley, 2017). In this method, data collection and analysis occur simultaneously with each informing the other; these components are therefore woven together and presented according to their respective research stage. Carspecken's (1996) approach to critical ethnography is rigorous (Levinson et al., 2015), particularly due to the validity requirements throughout all components of

research (see Table 2). Because the focus of this research is on the process rather than the specific methodology, which is described elsewhere (Burnette et al., 2014), we have streamlined the description of the method for the reader.

**Table 2**  
**Validity Requirements by Stage of Research**

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| 1. Members Checks  |
| 2. Peer Debriefings  |
| 3. Multiple Recording Devices                                    |
| 4. Prolonged Engagement  |
| 5. Low Inference Vocabulary                                      |
| 6. Flexible Observation Schedule                                 |
| 7. Negative Case Analysis  |
| 8. Expert Checking Coding  |
| 9. Checking Findings with Data                                   |
| 10. Use Data Analysis Software NVivo (Audit Trail)               |
| 11. Consistency Checks   |
| 12. Encourage Explanation By Participants                        |
| 13. Interview Repeated Times                                     |
| 14. Adhere to Method in Stages 1-3                               |
| 15. Close Match Between Reconstruction and Participant Responses |
| 16. Match of Results and Existing Research                       |

### Setting and Samples

This study gained verbal consent from participants (upon recommendation of cultural liaisons and tribal personnel) after IRB approval was obtained from the first author's university, along with tribal council approvals from each tribe for study activities. To enable an understanding of distinct aspects as well as universal themes across AI/AN populations, two tribes were included in this research process: one tribe is federally recognized and the other is not. Tribal recognition may substantially affect opportunities, needs, resources, outcomes, and community infrastructure. For the protection of community identities, the names of these tribes are kept confidential. Both tribes are located in the Southeastern United States and have enrolled tribal populations of over 10,000 members.

Tribe A is a federally recognized tribe inland from the Gulf of Mexico. It is characterized by economic development, with tribal schools, health care services, as well as law enforcement, emergency and land management, and social services facilities. Tribe B is a state recognized tribe located in proximity to water and the Gulf Coast. Tribe B has more constrained economic resources

and tribal infrastructure for its members. Tribe B offers employment, educational, and other individual programs for youth and tribal members. As indicated by the ethnographic methodology (Carspecken, 1996), this research included multiple forms of data (i.e., existing data, qualitative data, and quantitative survey). Each form of data is described in its respective section of the data collection and analysis phases with summary information depicted in.

### **Reflexivity**

Crucial to this methodology is the researcher's ability to be self-aware, forthright, and intentional about her/his position and motivation for doing the work (i.e., reflexivity). This is an important component of qualitative research, more generally (Carspecken, 1996). Toward this aim, the first author is a Caucasian female academic who has *committed long-term* (see Table 1) to working with the focal tribes and has grounded her work in a decade of commitments and relationships with the focal tribes (Burnette et al., 2014; Burnette & Figley, 2017). Prior to conducting research with AI/AN communities, she completed a study on how to conduct ethical and culturally sensitive research, which has guided all of the research in which she has been involved (Burnette et al., 2014). This process has helped her to understand her distinct positionality and its implications for work with AI/AN peoples. Since then, she has had the opportunity to present on this topic and *advocate* (Table 1) for culturally sensitive and community-engaged research with the National Congress of American Indians. She was initially *invited* (Table 1) by an AI/AN colleague to work with Tribe A on violence against women. After completing research on this topic, she *spent time in the communities* building long-term and *reciprocal* relationships and partnerships with both tribes (Table 1). The present study *reinforces cultural strengths* (Table 1) and arose out of findings from preliminary research showing that risk and protective factors are culturally specific and that family and cultural systems are important to recovery from and transcendence of historical oppression, concomitant violence, and substance use disparities (see Burnette & Figley, 2016 for a synthesis).

### **Data Collection and Analysis**

Carspecken's (1996) methodology begins with analyzing existing data that is collected prior to the researcher interacting with the participants through interviews. This enables the triangulation (comparing all forms of data to ensure they implicate the same results and

interpretations) of such data with more interactive, interview data that is collected later in the research process. Data sources included the first author's field notes with in-depth field and participant observations ( $n = 58$ ). It also included analysis of existing data records, such as behavioral health intake forms for Tribe A ( $n = 202$ ) and a needs assessment for Tribe B from tribal social service agencies ( $n = 293$ ).

Participant observation data collection varied by context and was *fluid and flexible* to be congruent with specific research contexts (Table 1; Burnette et al., 2014). For instance, in Tribe A's context, video-taped participant observation sessions of the batterer education program (BEP)—a program that is court-ordered for perpetrators of IPV—was conducted. These programs were not offered in Tribe B's context. The 11 BEP sessions that made up the participant observation lasted one to two hours.

Along with BEP sessions, field observations were recorded in the form of field notes ( $n = 58$ ) across both tribes. Field notes, or simple descriptions of informal conversations and interactions with key informants and community members, were provided to two colleagues for review and to ensure fidelity to the methodology. Debriefing with colleagues occurred throughout the data collection and analysis process. Because this was the first author's second study focusing on IPV with Tribe A, and participant observation had previously been collected, the sample for Tribe A's field observations was smaller (i.e.,  $n = 15$ , whereas 43 field observations were collected for Tribe B). Thus, more observations were collected with Tribe B to balance out the earlier BEP data of Tribe A and the prior research with that tribe.

The second part of this process involved gathering and analyzing existing data, which took the following two distinct, but related forms in each respective tribe. Tribe A provided access to secondary data in the form of psychosocial intake forms from the tribal behavioral health clinic. We made a concerted effort to *build a research infrastructure* and *reciprocate and give back* by training, *collaborating with*, and hiring tribal members (Table 1). A tribal member was hired to de-identify 202 randomly selected intake forms between the years 2001-2014. Under the supervision of the first author, three Masters of Social Work (MSW) students with strong interest in AI/AN communities assisted with creating a data set from Tribe A's existing records. This process involved students a) entering information into Microsoft Excel, b) creating a dataset and codebook of the data, c) entering the data into Excel, and d) importing the data-set into SPSS for analysis. Although Tribe B did not have existing data from agencies available, they conducted a needs assessment, which was sent out to all tribal members. A total of 293 tribal members

completed and returned the questionnaire, and the summary data were available for the purpose of this study. The primary record enabled the first author to gain awareness of what appeared to be the predominant challenges tribal members' experience (i.e., health disparities and violence).

Thematic analysis was utilized to analyze all qualitative data collected in this critical ethnography. All field notes, participant observation sessions, and interview data followed the same analysis process. This process includes: a) reading and listening to audio-recordings and transcriptions, two to four times, to understand the meaning holistically; b) line-by-line coding, from which a hierarchical scheme of codes and sub-codes were created; and c) in-depth identification of explicit and implicit meaning of data (for an in-depth description of this analysis, see Burnette et al., 2014).

Due to the breadth of data collected for this ethnography, *collaborative* (Table 1) team-based qualitative data analysis methods were utilized (Guest & MacQueen, 2008). Following Guest and MacQueen's (2008) recommendations, after all qualitative data (i.e., field notes/observations, interviews, observation sessions) was collected, the interviews were professionally transcribed and transferred to two separate NVivo<sup>1</sup> files—one for Tribe A and one for Tribe B. Data collection occurred concurrently, beginning with Tribe A and followed by Tribe B. As such, data analysis followed this same pattern. Once the data was transferred to NVivo, the first author created a codebook and analyzed a number of interview transcriptions to begin the open coding process and create an exhaustive list of preliminary codes with definitions. A hierarchical coding scheme was created, focusing on cultural, community, family, couple, and individual resilience with risk and protective factors listed within each code. All codes were organized within this overarching coding scheme.

Data analysis teams were composed of doctoral students, two of whom were AI/AN (one from each tribe) and two of whom were non-AI/AN. The tribal doctoral students each came from the tribal backgrounds under investigation—with one having resided on Tribe A's reservation and the other being a member of Tribe B. *Collaborating by including tribal members* in data collection and analysis increases cultural sensitivity and accurate interpretations of the data. The first author developed coding schemes in consultation with team members, and all team members reviewed coding schemes for cultural appropriateness. Any suggestions were integrated into the final coding scheme. As part of their training, each team member reviewed numerous background readings,

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<sup>1</sup> A qualitative data analysis software program.

underwent training in the use of the software NVivo (2012) from the first author, and training on the data analysis method itself. These trainings occurred in groups and were individualized based on the background and familiarity with the research method to ensure everyone had a solid understanding. Foci of the training included sharing examples of transcripts that had been coded by the first author, going through the examples and explaining why they were coded the way they were, answering questions, and explicating the data analysis framework in relation to the data. After each team member coded one to two transcripts, they were reviewed by the first author, who provided feedback and direction.

Team members completed analysis on a timeline in which multiple team members reviewed transcripts for increased trustworthiness of findings. Likewise, because at least two team members were coding simultaneously, they were able to utilize peer support for any questions. Each team member recorded any questions, codes added, and communication on a coding log that was shared among the team, which served as an audit trail. The analysis team met bi-weekly throughout data analysis to discuss interpretations, questions, and engage in dialogic discussion of results. Finally, Cohen's Kappa coefficients were calculated with each team member in NVivo to ensure interrater reliability (McHugh, 2012). This coefficient was examined at the start of data analysis and throughout the process to ensure consistent data analysis. If the coefficient was ever lower than what is considered strong or above (i.e., .80 or higher), a closer look at interrater reliability would have been made. However, the vast majority of statistics showed extremely high Kappa coefficients (.90 or above).

### **Qualitative Sampling**

In total, 436 participants were part of the qualitative portion of the study in the forms of individually focused interviews, family interviews, and focus groups, with 228 total participants from Tribe A and 208 participants from Tribe B. Some participants completed more than one type of interview, which adds to study rigor (Carspecken, 1996). A total of 254 participants completed individually-focused interviews ( $n = 145$  Tribe A;  $n = 109$  Tribe B), 217 participated in 27 focus groups ( $n = 113$  Tribe A participants across 14 focus groups;  $n = 104$  Tribe B participants across 13 focus groups), and 163 participants completed family interviews ( $n = 80$  Tribe A participants across 34 family interviews;  $n = 83$  Tribe B participants across 30 family interviews).

Because the aim was to identify culturally specific risk and protective factors that were *culturally relevant to all tribal members*, these broad samples were made up of subsamples of

elders, adults, professionals, and youth within each of the aforementioned types of interviews. Regarding the different categories of participants, 70 practitioners working with survivors of violence participated in the study ( $n = 47$  Tribe A;  $n = 23$  Tribe B), 105 elders<sup>2</sup> (aged 55 and above) participated ( $n = 44$  Tribe A;  $n = 61$  Tribe B), 147 adults (ages 24-54) participated ( $n = 76$  Tribe A;  $n = 71$  Tribe B), and 114 youth (ages 11-23) participated ( $n = 61$  Tribe A;  $n = 53$  Tribe B). The inclusion of subsamples ensures an accurate depiction of risk and protective factors across various cohorts of tribal participants.

Interview data involved in-depth focus groups, along with family and individually-focused interviews, all of which followed semi-structured interview guides (Carspecken, 1996). Recruitment included posting fliers on social media and tribal websites and in newsletters and tribal agencies. Word-of-mouth was a main recruitment method. Finally, focus groups provided the opportunity for participants to decide to participate in subsequent parts of the study (i.e., interviews), and this method resulted in many interview participants. Consistent with preliminary research with Tribe A (Burnette, 2015), to *give back* to tribal members (Table 1), participants received \$20 gift cards for participation in individual interviews and focus groups, whereas, families received a \$60 gift card for family interviews.

Focus groups and interviews followed a semi-structured guide to ascertain answers to research questions, which were derived from our research aim of identifying culturally specific risk and protective factors across ecological levels related to substance abuse, violence, and associated health and mental health disparities. Where participants consented, video and audio-recorded focus groups and interviews were transcribed by a professional transcription company. All except two participants agreed to audio-recording, and extensive notes documented these interviews. Because they are a *culturally sensitive methodology* (Table 1) recommended for use in critical methods (Carspecken, 1996), life history interviews made up individually-focused interviews. Practitioners who worked with survivors of violence could choose to participate in the life history component of the interviews. *To give back to participants*, a copy of their life history interview was given to participants. Wording targeted the fifth-grade comprehension level. On average, most interviews lasted about an hour; specifically, individual interviews were 63.49 minutes, family interviews were 69.69 minutes, and focus groups were 57.18 minutes. The total interview time for each participant (many participated in more than one) was 88.99 minutes.

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<sup>2</sup> We use the term “elders” to be culturally congruent with the terminology used by tribal members.

In the final stages of this methodology, results were compared to uncover universal and distinct themes, deepening the understanding of IPV, substance abuse, as well as risk and protective factors associated with mental health. This occurred qualitatively and quantitatively. First, qualitative themes were compared across tribes, identifying universal and context specific themes. To do this, the hierarchical coding schemes were exported to Excel where the number of sources (i.e., interviews) and times the themes were coded were examined across tribes. Next, a quantitative survey was created from the qualitative themes, using existing scales (where culturally appropriate and available) and creating scales based on qualitative findings. This was a systematic process and was documented using the Excel hierarchy of themes with respective scales measuring each overarching theme. Although the frequency with which overarching themes appeared varied across tribes, the overarching themes themselves were consistent, and thus, the same survey was used for comparison across tribes. Table 3 depicts a synthesis of the overarching themes across ecological levels that were uncovered. Culturally specific scales were created for this project, including the Family Resilience Inventory (Burnette, Renner, et al., 2019), The Historical Oppression Scale (Burnette et al., In Press), as well as items inquiring about community needs and services, and satisfaction with partner and parenting.

Participants in the qualitative portion of the study were invited to participate in the online survey, which was entered into the online survey program, Qualtrics (2014). The purpose of the follow up survey was to quantitatively examine the relationships identified between risk and protective factors. To *give back* and compensate people for their valuable time, participants were entered into a drawing for \$50 gift cards and approximately one in two ( $n = 70, 55\%$ ) participants received a gift card. Participants had the option to complete the anonymous survey online themselves, have someone assist them, complete the survey as a hard copy (i.e., mailed and returned in a self-addressed envelope), or have the survey read over the phone to them while a research team member entered their answers. All of these methods were employed. Based on the totality of results, similarities and differences among contextual factors and results were examined.

### **Quantitative Sampling**

A total of 127 participants from Tribe A and Tribe B completed the quantitative online survey. Participant names were only supplied for the purpose of participant compensation and kept separately from data. This survey was open to any Tribe A and Tribe B members over the age of 18; a total of 161 participants began the survey and 79% completed the survey ( $n = 127$ ). The final



sample of 127 had a total of 80 Tribe A and 47 Tribe B members. Research results and analysis from Tribe A were compared with those of Tribe B. Likewise, results were compared qualitatively across different samples, including professionals, community members (youth and adults), elders, and families. Because this paper focuses on the qualitative portion of the study, further details of the quantitative portion are beyond the scope of this article. As another means of *giving back* to tribal members (Table 1), a summary of results was presented on at least 10 occasions to the tribal chiefs, each tribal council, heads of key tribal agencies (e.g., domestic violence services and behavioral health), tribal community group(s), and to each participant of the study. A brochure and training has been developed to disseminate information in an applicable way for professionals and community members of the focal tribes and tribes in the Southeast, as well as cross-nationally.

**Table 3**  
**Emergent Risk and Protective Factors Across the Ecological Levels of the FHORT**

Community/Cultural Resilience		Family Resilience		Individual and Relational Resilience	
Protective Factors	Risk Factors	Protective Factors	Risk Factors	Protective Factors	Risk Factors
<b>Community Resilience</b>		<b>Family Resilience</b>		<b>Individual Resilience</b>	
Community resources	Organizational risk factors	Extended family support	Substance abuse	Healthy living	Substance use/mental health and physical health
Community-based initiatives	School risk factors	Accountability discipline	Lack of accountability and discipline	Determination, self-sufficiency, self-advocacy	Teenage pregnancy
Tight-knit communities	Poverty and unemployment	Boundaries	Poor boundaries	Talents/goals/aspirations	Low socioeconomic status
Pro-social activities	Community fragmentation	Closeness	Lack of closeness	Commitment to education/growth	Dysfunctional coping
<b>Cultural Resilience</b>		Commitment	Lack of commitment	Faith	Daily hassles
Enculturation	HO	Communication	Poor communication	Humor, pride, identity	Adverse childhood events
Healing through culture	Forms of HO	Nonviolent norms	Family violence	<b>Relational Resilience</b>	
Decolonization	Factors that perpetuate oppression	Members' working together	Fragmentation, conflict/discord	Commitment	Lack of relationships skills
Ethnic pride and identity	Consequences of HO: 1. Substance abuse/violence	Support/affection	Lack of affection	Constructive communication	Jealousy/infidelity
Traditions	2. Distrust/losses	Time together	Absent parents/lack of supervision	Mutual respect/partner support	Lack of suitable partners
Tribal values and beliefs	3. Internalized oppression	Instilling values	Instability	Relationship boundaries	IPV

Note. Emergent risk and protective factors informed the core components that were focal to the intervention development. HO=Historical Oppression; IPV=Intimate Partner Violence.

### **Rigor and Cultural Sensitivity for Qualitative Research**

The following standards of rigor are outlined by this specific methodology. Peer debriefing occurred weekly with a colleague during data analysis. Every step of creating the data-set from existing data was saved and documented, creating an audit trail, which is a qualitative term elucidating how and when decisions were made throughout data collection and analysis process. Multiple recording devices were used to create the primary record, including video, audio, and written transcription. The first author has also engaged in a decade of research with Tribe A, and six years with Tribe B—thus fulfilling the requirement of prolonged engagement in the field. A simple and understandable vocabulary was used for all field notes. Finally, a flexible observation schedule was used. Likewise, regarding cultural sensitivity, following Burnette et al.'s (2014) research recommendations, the first author worked with multiple *cultural insiders* from each tribe, including *hiring two tribal research assistants* from both Tribe A and Tribe B, who assisted with data collection and analysis (Table 1). Bi-weekly research team meetings included negative case analysis, which involved discussing and explicating why some data did not fit overarching interpretations. Likewise, one tribal member was collecting data concurrently with this project and had other experiences to triangulate with study participants. An outside expert familiar with the methodology reviewed all coding, including coding hierarchy, ensuring fidelity to the methodology.

Data results were compared with existing research for comparison. Finally, multiple coders analyzed the majority of data (74%). In fact, 66% of Tribe A's data and 86% of Tribe B's data was analyzed by two or more coders. Thus, resultant interpretations were triangulated across multiple expert coders, including those from the given tribe(s). For *cultural sensitivity*, a member of each tribe was on the data analysis team and member checks were completed with each available participant to ensure accurate interpretations. To ensure everyone was involved, numerous attempts were made to follow-up with participants. A protocol and script were created for member-checking to ensure consistency in the process. All participants were contacted by either phone or email or both. Among Tribe A's participants, attempts were made to contact the 165 participants with phone numbers on file and attempts were made to contact 132 participants by email. Among Tribe B's participants, attempts were made to contact the 208 participants with phone numbers on file and attempts were made to contact 90 participants by email. Attempts were made by each method at least twice.

Member check information included the results summary, with themes and explanations of themes, interview transcripts (for individual interviews), information about follow-up, and opportunities to discuss or change any information in the transcript or results. To protect confidentiality, group interview transcripts were not shared with participants, but the descriptive summary of results was. Some participants elaborated on findings, yet no participants disagreed with results or interpretations. Consistency checks were completed by the first author during the interviews. She encouraged participants' explanations of their perspectives. Finally, many participants were interviewed multiple times; specifically 72 members of Tribe A (31.6%) and 50 members of Tribe B (24%) were interviewed two to three times.

As stated, Stage 4 has been completed, which involved developing the culturally specific measures, the Family Resilience Inventory (Burnette, Renner, et al., 2019), and the Historical Oppression Scale (2018). We have also completed the development of the intervention through community-based participatory research and a community advisory board. The modified intervention is currently being piloted across two tribal communities. Thus, this method for intervention development has resulted in a precise and culturally relevant intervention that can be tested for efficacy, effectiveness, and broader dissemination and application.

## **DISCUSSION**

This research described community-engaged, culturally sensitive, and in-depth qualitative research, which informs culturally relevant intervention development to address health disparities and violence. Numerous aspects of this research process were critical in uncovering meaningful and culturally relevant outcomes. First, choosing a *culturally appropriate methodology* is crucial to gaining meaningful data and results (Table 1). The critical ethnography chosen was recommended and used with the tribes by the first author for many years. This methodology incorporated several aspects important to working with peoples who have been chronically oppressed, such as an attention to power dynamics. It also includes immersion in the field, which offsets tendencies to misinterpret information from groups which may differ from researchers'. Burnette et al.'s (2014) recommended tools for cultural sensitivity and community engagement in research were integrated throughout the study (Table 1). For example, research was flexible according to the tribal context, allowing data to emerge from culturally appropriate contexts, relying on key insiders to guide this process. The use of life history interviews was a culturally

congruent form of data collection, and interviews were held at times and places that were self-determined by participants, including office buildings, homes, and private conference rooms.

This research was inclusive of all community voices, with sampling from elders, adults, youth, and professionals. Likewise, multiple interview techniques were used to ensure the collection of credible data, depending on what participants preferred, including individual interviews, group interviews (e.g., focus groups), and whole family interviews. Whole family interviews were important to honor the primacy of the family unit, as self-determined by participants. Tribal members were involved and hired throughout the data collection and analysis process, not only receiving compensation for their valuable time, but also cultivating the skills to conduct research in their own communities and advance as future scholars.

### **Limitations**

Though we believe that the use of two tribal contexts allowed for a more nuanced ability to compare and contrast differences in risk and protective factors between tribes, we are limited in our ability to draw generalizations to other tribal populations. Future research should apply this approach to its additional specific tribal contexts. It is imperative that researchers follow tribal protocols for research, ensuring research is ethical and useful for tribes (Burnette et al., 2014). Moreover, research is subject to the ever-shifting political climate and localized context of each given tribe; sustaining the ability to engage, continue, and complete research projects is a delicate process. The real risk of not being able to conduct research and having the research process stalled or stopped altogether is ever present and must be considered before entering the field. Undoubtedly, many researchers will lack the capacity to engage in the level of rigorous data collection, analysis, and member checking that we believe is needed to respectfully and appropriately conduct research with AI/AN communities.

Due to cost and feasibility, interviews were conducted in English; in one interview with an elder who spoke limited English, a family member helped with interpretation. This may pose a limitation, as conducting interviews both in tribal language(s) and English may be the most culturally sensitive approach. This is particularly true given some words in tribal language(s) do not have a precise English translation. The research steps provided here are intended as a rubric with the understanding that they will be tailored according to local context. The importance of a sustained research method built on trust and the respect of tribal insiders cannot be emphasized

enough, but the details such as sample size, outreach, and follow up methods will differ by tribe. Long-term and prior relationships with each tribe are necessary to sustain this in-depth work.

### **CONCLUSIONS AND IMPLICATIONS**

This article provides a roadmap for developing culturally relevant interventions through a rigorous and community-engaged approach to research. When interventions are not culturally tailored or relevant, they tend to be ineffective and may exacerbate existing disparities. (Dixon et al., 2007; Gone & Trimble, 2012). This research *invested resources* (Table 1) into two tribal communities to identify and translate risk and protective factors from the ground up. Although this methodology is demanding in the time and resources it requires, we have found very promising results, which has led to the culturally grounded scales (i.e., the Historical Oppression Scale and the Family Resilience Scale) that have significantly predicted important outcomes, such as depressive symptoms (Burnette, Renner, & Figley, 2019). With this groundwork complete, future research could build from extant factors, using a smaller number of focus groups or interviews to culturally adapt it to specific contexts.

It is our hope that this example of community-engaged and culturally sensitive research will be used by other researchers to inform interventions that aim to eradicate disparities, as this approach was designed to do. We are currently infusing culturally specific content with an appropriate EBP, which has an AI/AN cultural overlay. However, without first identifying and translating the culturally specific risk and protective factors, the identification of an appropriate EBP to adapt or develop would not have been possible, or important culturally relevant factors might have been missed (Whitbeck, 2006). The culturally appropriate and community-engaged approach to identifying culturally relevant risk and protective factors across multiple levels is a promising way to eradicate highly concerning AI/AN health disparities.

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# **THE CULTURE IS PREVENTION PROJECT: ADAPTING THE CULTURAL CONNECTEDNESS SCALE FOR MULTI-TRIBAL COMMUNITIES**

Janet King, MSW, Paul Masotti, PhD, John Dennem, MA, CADC-II, Shir Hadani, MSc, Janice Linton, MLS, Bonnie Lockhart, MSW, and Jami Bartgis, PhD

*Abstract: The Culture is Prevention Project is a multi-phased community-based participatory research project that was initiated by six urban American Indian and Alaska Native (AI/AN) health organizations in northern California. Issues driving the project were: i) concerns about the lack of culturally informed or Indigenous methods of evaluating the positive health outcomes of culture-based programs to improve mental health and well-being; and ii) providing an approach that demonstrates the relationship between AI/AN culture and health. Most federal and state funding sources require interventions and subsequent measures focused on risk, harm, disease, and illness reduction, rather than on strength, health, healing, and wellness improvement. This creates significant challenges for AI/AN communities to measure the true impact of local strength and resiliency-based wellness programs. This paper focuses on the methods and results from Phase 3 of the Culture is Prevention Project where we adapted the 29-item Cultural Connectedness Scale (CCS), developed in Canada, to be appropriate for California's multi-tribal communities. The resulting new Cultural Connectivity Scale – California (CCS-CA) was developed by urban AI/AN people for urban AI/AN people. The process, instrument, how to adapt for your community, and implications are reviewed.*

## **INTRODUCTION**

For American Indians and Alaska Natives (AI/ANs), culture is a social determinant of health, in which loss is a risk factor; whereas, strengthening or re-connecting to culture are protective factors on multiple levels (Chandler & Lalonde, 1998; Menzies & Lavalley, 2014, Walters, Beltran, Huh, & Evans-Campbell, 2011). Health for Indigenous people has been negatively affected by hundreds of years of colonization and historical traumas (Ehlers, Gizer, Gilder, & Yehuda, 2013; Burton, Matthews, Leung, Kemp, & Takeuchi, 2011; Walters,

Mohammed, et al., 2011; Brave Heart & DeBruyn, 1998). One of the more recent federal assimilation policies impacting the communities in this study is the Relocation Act of 1956 which began moving large numbers of Indigenous peoples off reservations and into cities throughout the United States. San Francisco, Oakland, Los Angeles, San Jose, and Sacramento were among the cities in California that Indigenous peoples were removed to. The Relocation Act resulted in California becoming the home for many out-of-state tribes in addition to the many Indigenous tribes of California.<sup>1</sup>

The long term consequences of colonization and government relocation policies included the loss of land and disruption of the practice of culture (Snowshoe, Crooks, Tremblay, Craig, & Hinson, 2015; Stamm & Stamm, 1999; Brave Heart & DeBruyn, 1998). Other consequences included down-stream historical trauma and subsequent high rates of ill-health (e.g., physical, mental, and emotional) and poor social conditions (Evans & Davis, 2018; Snowshoe et al., 2015; Walters, Mohammed, et al., 2011; Brave Heart & DeBruyn, 1998). Supporting this assertion is that pre-dating colonization, Indigenous people maintained wellness for thousands of years through culturally-based practices where the environment, mind, body, and emotional health were known to be linked to collective human behavior, practices, wholeness, and hence, wellness (Brave Heart, Chase, Elkins, & Altschul, 2011; Walters, Beltran, et al., 2011). Health in AI/AN communities was known to be a result of living in the community; participating in traditional ceremonial practices which involved foods, medicines, songs, and dances; and revering the land and all of her inhabitants as relatives. For generations, Indigenous people have practiced what we now call “Population Health,” where traditional practices promoted health for all community members by increasing collective strengths and decreasing inequities (Menziez & Lavallee, 2014; Tucker, Wingate, & O’Keefe, 2016).

The traditional Indigenous holistic approach to health is much different compared to the Western individualistic approach to reducing risk or illness (Singer, 2009; Reading & Wien, 2009; Arquette et al., 2002). Despite the evidence that culture-based practices sustained Indigenous peoples’ health and community-wellness for many generations (Mooney, 1890; Reading & Wien, 2009), the dominant culture historically has demonstrated an unwillingness to understand, value, or learn from what Indigenous peoples have been practicing for centuries. Instead, the focus of health care has been on Western epistemology and the Western medical model with subsequently

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<sup>1</sup> In this paper we use Indigenous or American Indian/Alaska Native [AI/AN] interchangeably to represent the original peoples of North America prior to colonization.

different approaches than Indigenous people to decision-making, health, risk assessment, and evaluation (Bartgis, 2016; Ellerby, McKenzie, McKay, Gariépy, & Kaufert, 2000).

The Western medical model and government responses to the health and social disparities experienced by Indigenous peoples have not been effective at addressing health and, in many circumstances, have been poorly received and even harmful (Tucker et al., 2015; Walters, Mohammed, et al., 2011; McCormick, 1995). A result of the historical disrespect by the dominant culture was a poor understanding of the important determinants of health for Indigenous peoples such as the strong and interdependent relationships between health, cultural traditions (Powell & Gabel, 2018), spirituality, and the connection to traditional land, diets, language, and community (Wilson, 2003; Waldram, Herring, & Young, 2006; Lavalley & Poole, 2010; Levy, 2018). This has served to contribute to the ineffectiveness of many Western modalities in reducing health and social disparities for Indigenous communities (Lavalley & Poole, 2010; Bala & Joesph, 2007).

Another example of the difference, or “lack of understanding,” by the dominant culture regarding producing Indigenous health is reflected in the different approaches to measuring health or wellness. Indigenous peoples focus more on building strength, resiliency, relationships, and community capacity; whereas, the dominant culture focuses more on decreasing individual illness/disease or risky behaviors without or with little examination of the environment producing risky behaviors and ill health (Gone, 2013; Walters & Simoni, 2002; Walters, Beltran, et al., 2011; Walls & Whitbeck, 2011). This difference then creates a cultural worldview “clash” (Bartgis, 2016). Driving this clash is that historically Indigenous knowledge and traditional ways of knowing were rarely considered or valued as important in health and healing. Supporting this assertion is the 128-year old statement from Mooney: “The Native practices of healing and their healers have been regarded as lacking any more knowledge in the field of herbal healing or practice than an ordinary housewife in the late 19<sup>th</sup> Century” (1890, p.45).

More recent examples illustrating this include government funder requirements to use “evidence based practices” (EBPs) where: a) the practices and/or instruments were not developed by and for Indigenous persons; and b) the practices/instruments were not tested in multiple culturally different Indigenous communities. Thus, it was not well known if the EBPs were effective or harmful. In addition, and until recently (such as with the California Reducing Disparities project), the dominant culture also did not demonstrate much willingness to understand or consider community-defined evidence practices as being evidence-based and deriving from equally valid methods based upon hundreds of years and multi-generational observations

(California Department of Public Health, 2019; Larios, Wright, Jernstrom, Lebron, & Sorensen, 2016; Whitbeck, Walls, & Welch, 2012).

Indigenous and dominant cultural differences in evaluation also exist. For example, government project officers or university-based researchers typically find it difficult to accept that the community programs reduce substance abuse (and subsequently support mental health/well-being) without specifically measuring and demonstrating reductions in substance use. However, Indigenous communities, such as the partner communities in the *Culture is Prevention Project*, argue that programs that strengthen or reconnect to culture achieve those outcomes as a result of the strengthening of Indigenous culture and that the supporting evidence (in part) is that substance abuse was not an issue prior to colonization. We do know that both traditional knowledge and recent research has linked culture as a protective factor for better health and social outcomes for Indigenous peoples (Snowshoe et al., 2015; Garrouette et al., 2003; Gone, 2013; McIvor, Napoleon, & Dickie, 2009; Pu et al., 2013; Walter & Simoni, 2002; Whitbeck, Hoyt, Stubben, & LaFromboise, 2001). Given this, we argue that culture is a determinant of health and that strengthening or reconnecting to culture can then be considered both an important program objective and program outcome that then could be measured.

## **Background and Context**

The *Culture is Prevention Project* is a 6-phased project (See Table 1) that derived from a Substance Abuse and Mental Health Services Administration (SAMHSA) funded project intended to address youth alcohol and prescription drug abuse and in general, per the SAMHSA mission statement, the impact of substance abuse and mental health. The *Culture is Prevention Project* was initiated because of concerns expressed by the 30-person Community Advisory Workgroup comprised of staff and community members from the six participating urban AI/AN health organizations. Specifically, the workgroup members were concerned about the program evaluation questions required by SAMHSA. Workgroup members and the participating Indigenous health organizations understood that the purpose of the funding was to reduce alcohol and prescription drug abuse in youth. However, the programs being delivered by the organizations were broad in purpose, scope, and objectives and expected outcomes. All fit into the Center for Substance Abuse and Prevention (CSAP) strategy type *Alternative Drug Free Activities* (USDHHS, 2017), where the interventions were further described by the partnering health services organizations as *Alternative Drug Free Activities – Traditional Culture-Based Activity/Ceremony*. There were

concerns that some of the strengths and outcomes of interventions that were considered important by the providing communities were not of interest or being addressed by SAMHSA.

In addition, the evaluation questions required by SAMHSA do not identify or measure what make community-defined evidence practices work. For example, the required outcome measures addressed the use of alcohol and prescription drugs. Grantees were required to select one question from a list in each of the following three categories: i) consumption, ii) intervening variables, and iii) consequences. The Community Advisory Workgroup expressed concerns that the evaluation overly focused on alcohol and prescription drug use and did not place enough emphasis on Indigenous approaches and values. Specific concerns presented were that the measures/questions: 1) were not an appropriate method of evaluating if their programs improved health, resiliency, strength, and other positive outcomes in youth (i.e., they did not capture what was essential in culture-based alternative drug free activities programs); 2) were not aligned with traditional AI/AN strength-based approaches; and 3) that some questions were potentially harmful. For example, one of the required questions presented to the Community Advisory Workgroup that was considered potentially harmful came from the intervening variable list: “How do you think your parents would feel about you having one or two drinks of an alcoholic beverage nearly every day?” (USDHHS, 2017; Michigan Department of Health & Human Services, 2019). Concerns were expressed about the number of youth without one or both parents and also that introducing this question could induce a trauma response. As a result of the concerns expressed, the Community Advisory Workgroup directed the project staff to look for or develop more culturally appropriate evaluation tools: thus, the genesis of the *Culture is Prevention Project*.

**Table 1**  
**Culture is Prevention Project**

<b>Phase 1</b>	Consensus Generating Workshop
<b>Phase 2</b>	Literature Search & Knowledge Synthesis
<b>Phase 3</b>	Adapting the Snowshoe Cultural Connectedness Scale (CCS) for in Multi-Tribal Communities in California
<b>Phase 4</b>	Pilot Testing/Validation of the Cultural Connectedness Scale – California (CCS-CA) and Evaluation of the Relationship between Culture and Mental Health
<b>Phase 5</b>	Exploring the Predictive Properties of the CCS-CA
<b>Phase 6</b>	Cultural Connectivity, Integration, Health (Physical/Mental), & Health Services Utilization

A primary goal was to develop and implement a more culturally informed approach to demonstrating that the programs being delivered were achieving their objectives which included:

a) increasing and strengthening connection to AI/AN culture, values, history, teachings, and community; b) increasing skills; and c) building empowered, strong, and resilient youth. This community-based participatory research (CBPR) project is guided by a theory of change that the building and strengthening of Indigenous culture supports the development of youth to be resilient, emotionally and mentally healthy, and thus, less likely to engage in destructive behaviors such as alcohol/substance abuse and suicide.

**Phase 1 & Phase 2**

Overviews of Phases 1 and 2 are illustrated in Tables 2 and 3 below. A unique characteristic of the *Culture is Prevention Project* relates to the CBPR approach. The project started with direction from and continued involvement of the Community Advisory Workgroup. The results from Phase 1 logically supported the Workgroup’s decisions to develop and initiate Phase 2, where again the results from Phase 2 guided the initiation and methods for Phase 3, the focus of this paper.

**Table 2  
Phase 1 Consensus Generating Workshop**

<b>Participants</b>	Adult AI/ANs ( <i>n</i> = 33). Included members of the Community Advisory Workgroup and additional community members considered to be knowledgeable community leaders.								
<b>Research Questions</b>	1) What traditional Native American practices are associated with positive changes in youth and community? 2) What are the positive health-related changes that result from these practices?								
<b>Methods</b>	Trained facilitators provided by SAMHSA – Center for Application of Prevention Technologies. Participants were randomly assigned to workgroup tables. Data collection and analysis took place during the workshop. Small group and large group consensus were achieved using a modified group consultation approach based upon the Nominal Group Technique (Jones & Hunter, 1995; Lloyd-Jones, Fowel, & Bligh, 1999; Masotti et al., 2015).								
<b>Results</b>	<p>Our main interest was the results from the second question addressing health-related outcomes. The Workshop participants reached consensus that positive health-related changes that result from Native practices could be grouped into health-related outcomes in four categories:</p> <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top; width: 20%;">1) Cultural Identity</td> <td>Pride in being Native, reconnect to culture, revitalizing Native culture, knowledge of traditional practices and history, self-esteem, walking in two worlds (Native and non-Native), knowledge sharing</td> </tr> <tr> <td style="vertical-align: top;">2) Empowerment</td> <td>Interdependence, competence, confidence, independence, locus of control, leadership</td> </tr> <tr> <td style="vertical-align: top;">3) Resiliency</td> <td>Critical thinking, adapting in the face of adversity, trauma, tragedy, threats or significant sources of stress</td> </tr> <tr> <td style="vertical-align: top;">4) Generosity</td> <td>Sense of contribution vs. burden to the community, volunteering, mentorship, sense of being a productive community member, sense of citizenship, natural helper, advocacy work, chores, and desire to give back</td> </tr> </table>	1) Cultural Identity	Pride in being Native, reconnect to culture, revitalizing Native culture, knowledge of traditional practices and history, self-esteem, walking in two worlds (Native and non-Native), knowledge sharing	2) Empowerment	Interdependence, competence, confidence, independence, locus of control, leadership	3) Resiliency	Critical thinking, adapting in the face of adversity, trauma, tragedy, threats or significant sources of stress	4) Generosity	Sense of contribution vs. burden to the community, volunteering, mentorship, sense of being a productive community member, sense of citizenship, natural helper, advocacy work, chores, and desire to give back
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2) Empowerment	Interdependence, competence, confidence, independence, locus of control, leadership								
3) Resiliency	Critical thinking, adapting in the face of adversity, trauma, tragedy, threats or significant sources of stress								
4) Generosity	Sense of contribution vs. burden to the community, volunteering, mentorship, sense of being a productive community member, sense of citizenship, natural helper, advocacy work, chores, and desire to give back								

**Table 3**  
**Phase 2 Literature Search & Knowledge Synthesis**

<b>Research Questions</b>	What is known from the existing literature about instruments developed by Native Americans for Native Americans that measure: 1) cultural identity/connectedness, 2) empowerment, 3) resiliency, and 4) generosity?
<b>Methods</b>	<p>Developed by a medical librarian specializing in Indigenous health research, the literature search included publications between 1990-2015 and focused on countries with similar histories of colonization: Canada, United States, New Zealand, and Australia (Gracey &amp; King, 2009; Guimond, Lawrence, Mitrou, Cooke, &amp; Beauvon, 2007).</p> <p><b>Concept #1</b> (i.e., Indigenous people) – Keywords: "Native American*" OR "Alaska* native*" OR "native Alaska*" OR "first nations" OR Ojibwa* OR Cree OR aboriginal OR dene OR tribal OR Cherokee OR Dakota OR Lakota OR Navajo OR Zuni OR Maori</p> <p><b>Concept #2</b> (i.e., any type of survey or questionnaire used with the population or measure related to resiliency, strengths, assets, or indicators) – Keywords: Survey* OR questionnaire OR qualitative OR resilient* OR strength* OR asset* OR indicator*</p> <p><b>Concept #3</b> (i.e., literature that was focused on youth, or that was used to measure drug or alcohol use, even if some or all subjects in the population were older) – Keywords: youth* OR adolescent* OR drug* OR alcohol</p> <p>The literature search included Scopus (includes Medline/PubMed, Embase), PsycINFO, and other mental health journals and a host of interdisciplinary databases via EBSCO-host including: Academic Search Complete, Child Development &amp; Adolescent Studies, CINAHL, Family &amp; Society Studies Worldwide, Mental Measurements Yearbook, Social Work Abstracts, and Women's Studies International. It also included Bibliography of Native North Americans and grey literature (e.g., IHS reports and tribal research studies). It was decided to keep the search broad and to use an iterative process recommended for scoping reviews and data analysis (Arksey &amp; O'Malley, 2005; Levac, Colquhoun, &amp; O'Brien, 2010).</p>
<b>Results</b>	<p><b>2,809 references</b> were identified and reviewed by the librarian. <b>262 abstracts</b> met inclusion criteria and were reviewed and coded by the research team. <b>72 publications</b> met full review criteria and were selected for full review and coding. The main result was that we found only <b>one instrument developed by Indigenous persons for Indigenous persons</b> that was designed to measure any of the four Phase 1 outcomes. This was the <b>Cultural Connectedness Scale</b> developed by <b>Dr. Angela Snowshoe</b> for First Nations/Indigenous youth in Canada that was designed to measure connection to culture (Snowshoe et al., 2015).</p>

### Why the Snowshoe Study and the Cultural Connectedness Scale Were Important Findings

The Cultural Connectedness Scale (CCS) was developed in Canada by First Nations/Indigenous persons for First Nations/Indigenous persons. The 29-item CCS consists of three sub-scales: identity, traditions, and spirituality. A strength of Dr. Snowshoe's and her colleague's CCS is based in the development approach that was described as using an "Indigenous Quantitative Methodological framework" that embodies First Nations people's stand point, in which community and strengths-based approaches are the core of the framework. The development of the CCS included three main stages: 1) item generation (i.e., items were generated using key informants interviews and youth and community focus groups, which resulted in the



generation of 56 items); 2) judgment quantification (the 56 items were reviewed and evaluated by Indigenous/First Nation expert judges using a content validity index [Grant and Davis, 1997]); and 3) item selection (items were selected based on the review of rational expert judgments and the expert judgments’ feedback on the items). This stage resulted in narrowing the number of items to 45 items that were then examined using exploratory and confirmatory factor analyses to refine and develop the final 29-item instrument (Snowshoe et al., 2015).

Dr. Snowshoe validated the instrument in a sample of First Nations, Metis, and Inuit youth ( $N = 319$ ) living on-reserve (78%) and urban areas (22%) in Saskatchewan and Ontario, Canada. The three subscales demonstrated adequate score reliabilities with Cronbach’s alpha values: a) .872 for Identity, b) .808 for Spirituality, and c) .791 for Traditions. The CCS criterion validity was assessed against proxy measures of well-being/mental health outcomes (See Table 4). Snowshoe et al (2015) reported that all correlations between the CCS subscales and their theoretically relevant measures were in the expected direction and were significant, demonstrating the CCS tool criterion validity. A conclusion in the study by Dr. Snowshoe was that culture is a determinant of mental health.

**Table 4**  
**Correlations between CCS Scales and Well-Being Measures**

Variable	Identity	Traditions	Spirituality
Life Satisfaction	.176**	.006	.136**
Sense of Self in the Present	.166**	.131**	.136**
Sense of Self in the Future	.276***	.097*	.192***

\* $p < .05$  \*\* $p < .01$  \*\*\* $p < .0001$

Given the above, the CCS was an important find as it was an outcome directly requested by the Community Advisory Workgroup, which was to identify or develop an *Indigenous evaluation instrument* that was developed by Indigenous persons for Indigenous persons. The CCS was a most helpful start. However, following consultation by Dr. Snowshoe with the Community Advisory Workgroup, it was clear that the CCS was developed by/for communities that were much less multi-tribal compared to the San Francisco Bay area which has representation of over 100 North American Tribes (California Consortium for Urban Indian Health [CCUIH], n.d.). Given this, the Community Advisory Workgroup directed the project team to conduct the needed research

to adapt the Snowshoe instrument to be appropriate for our more multi-tribal community. This then initiated Phase 3.

## METHODS

### Phase 3: Adapting the Cultural Connectedness Scale for Multi-Tribal Communities

The methods for Phase 3 derived from the results of Phase 2 and were guided by a consensus decision made by the Community Advisory Workgroup which was to implement an approach to modify the original CCS instrument to be a better fit for urban AI/AN persons in the San Francisco Bay area. Because there are 109 federally recognized tribes in California (CCUIH, n.d.), urban Californian AI/AN communities are more multi-tribal than the First Nations, Métis, and Inuit populations that the Snowshoe instrument was developed for and tested in. Therefore, a tool in California urban communities would need to be applied across very diverse communities with a wide range of cultural beliefs, norms, and practices. To determine how best to adapt the CCS, we developed four research questions to guide the process consisting of focus groups and key informant interviews. To achieve this, we presented the original 29 questions of the CCS to the participants. The adaptation in our area of California involved a slight modification of the CCS questions by substituting the original terms: “Aboriginal/FNMI” with “Native American” to be more appropriate for our communities.

#### Phase 3 Research Questions (asked in the focus groups)

1. What does each question on the Cultural Connectedness Scale measure?
2. How is the specific measure linked to Native American/Indigenous culture, identity, or spirituality?
3. What changes in the language are needed to make the question more appropriate for diverse Native American/Indigenous persons living in California?
4. What additions or changes are needed to the measures’ examples provided in CCS?

### Overview

A series of five scripted focus groups were conducted at the participating AI/AN health services organizations in Oakland, San Francisco, Sacramento, and San Jose, and additional key informant interviews were conducted among AI/AN staff and community members ( $n = 20$ ). The

focus groups were facilitated by an elder (and MSW) who was known by each community. Supporting the facilitator were two additional note takers in each focus group.

**Participants and Focus Groups**

Three adult focus groups were conducted. Adult participants were considered “key informants.” They were recruited by the participating Indigenous health organizations that sent formal invitation letters that indicated they were considered to be knowledgeable community leaders. Two youth focus groups (ages 12-17) were held. Youth participants were recruited from summer intern programs conducted by the health organizations. Youth assent was given verbally after being informed of the purpose of the project and their subsequent decision to participate. The total number of focus group participants across all the groups was 60, where the reported number of Tribal affiliations was 37 (see Table 5). Inclusion criteria included: a) participants self-identified as Native American/Indigenous and b) were identified as leaders in their communities.

We recognized that a sense of community ownership and support for the project were important. To facilitate this and to contextualize the project, the facilitator provided background information at the beginning of each focus group that included: i) indicating the project was initiated by the Community Advisory Workgroup that included staff from the local AI/AN health services organization; ii) introducing Dr. Angela Snowshoe as the Indigenous university professor/scholar in Canada who spent years working with First Nations/Indigenous communities to develop the original CCS with the objective of demonstrating that Indigenous culture/cultural connectedness is an important protective factor in the health of Indigenous persons; and iii) indicating that the participants were providing important contributions to the *Culture is Prevention Project* by helping adapt the original CCS instrument so it could also be used in multi-tribal communities to demonstrate that Indigenous culture is a protective factor in health.

**Table 5**  
**Focus Group Tribal Affiliations**

Apache	Kiwa Pueblo	Nez Perce Tribe	Shawnee	Wappo
Blackfoot	Konkow-Maidu	Northern Cheyenne	Taino	Washoe
Cherokee	Kootbah Indian Rancheria	Oneida	The 3 Affiliated Tribes	Yaqui Apache
Chickasaw	Lakota	Osage	of N. Dakota	Yokut
Choctaw	Lumbee	Paiute	Tohono O’odham	Yurok-Karuk
Dine	Miwok Tribe of Ione	Pomo	Tongva	Yuki
Hopi	Nashville El Dorado Miwok	Quenchua	Tubatulabal	
Karuk	Navajo	Sac-N-Fox Nati	Uki	

## Data Collection and Analysis

Each of the three sub-scales in the 29-item CCS instrument were presented and addressed separately: i) identity, ii) traditions, and iii) spirituality (See Table 6). Some of the words in the questions were modified from the original to be more appropriate (e.g., “Aboriginal/FNMI” was changed to “Native American”). For each of the 29 questions on the CCS, we asked the same questions:

- a. Do you find any of the wording in the question confusing or do you have suggestions for how the wording could be changed to be less confusing or a better fit (for multi-tribal communities in California)?
- b. Are there some examples/measures that you feel are missing and should be added?
- c. Are there some examples (e.g., linking to Native American/Indigenous culture, traditions, or spirituality) that you feel are not a good fit for our multi-tribal Native American/Indigenous Communities?

## Participant Responses

Responses generated by focus group participants for each of the individual questions were documented by the facilitator and the two note takers using the “Note Takers Worksheet” that included the focus group questions to guide notetaking. After the first two focus groups (one adult and one youth), common themes/responses emerged and were used to modify/guide the methods in the following focus groups. It became clear there was a need to create “Examples Lists” to address the multi-tribal characteristics of the communities. For example, the original CCS questions asked respondents to link a personal characteristic or measure (e.g., knowledge, plan, activity, attitude, or perception) to a Native or Tribally specific activity or outcome. Results from the first two focus groups indicated that adapting the questions to be more multi-tribal was not going to be achieved by some minor changes to the language but more so by creating Examples Lists, which served to address the multi-tribal characteristics of our communities (see Appendices A & C). For example, *I use tobacco for guidance* was changed to *I use ceremonial/traditional medicines* (see Examples List #1) *for guidance or prayers or other reasons* (see Examples List #2). The Examples List 1 that was developing/growing between focus groups was titled, *List #1 Ceremonial & Traditional Medicines*, whereas the developing/growing Examples List 2 was titled, *List #2 Uses of Ceremonial & Traditional Medicines*.

Following the first two focus groups, results were then presented to the following three focus groups to address consensus. As with the previous focus groups, these participants were also asked the same questions for each of the 29 CCS original questions and were also asked to identify items that should be included in the growing Examples Lists.

**Table 6**  
**Original CCS Subscales**

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**IDENTITY**

1. I plan on trying to find out more about my Native American culture, such as its history, traditions, and customs.
2. I have spent time trying to find out more about being Native American, such as its history, traditions and customs.
3. I have a strong sense of belonging to my Native American community or Nation.
4. I have done things that will help me understand my Native American background better.
5. I have talked to other people in order to learn more about being Native American.
6. When I learn something about my Native American culture, I will ask someone more about it later.
7. I feel a strong attachment towards my Native American community or Tribe.
8. If a traditional person, Elder, or Clan Mother spoke to me about being Native American, I would listen to them carefully.
9. I feel a strong connection to my ancestors.
10. Being Native American means I sometimes have a different way of looking at the world.
11. It is important to me that I know my Native American language.

**TRADITONS**

1. I use tobacco for guidance.
2. I have participated in a cultural ceremony.
3. I have helped prepare for a cultural ceremony.
4. Someone in my family or someone I am close with attends cultural ceremonies.
5. I plan on attending a cultural ceremony in the future.  
*(Examples for 2-5: Sweat lodge, Moon Ceremony, Sundance, Longhouse, Feast, or Giveaway)*
6. I have offered food or feasted someone/something for a cultural reason. *(Examples: Spirit Plate, Thank You Ceremony)*
7. How often do you make tobacco offerings for cultural purposes?
8. How often do you use sage, sweet grass, or cedar in any way or form?
9. How often does someone in your family or someone you are close with use sage, sweet grass, or cedar in any way or form?
10. I can understand some of my Native American language.
11. I have a traditional person, Elder, or Clan Mother who I talk to.

**SPIRITUALITY**

1. I know my cultural/spirit name.
  2. In certain situations, I believe things like animals and rocks have a spirit like Native American people.
  3. The eagle feather has a lot of meaning to me.
  4. When I am physically ill, I look to my Native American culture for help.
  5. When I am overwhelmed with my emotions, I look to my Native American culture for help.
  6. When I need to make a decision about something, I look to my Native American culture for help.
  7. When I am feeling spiritually disconnected, I look to my Native American culture for help.
-

## RESULTS

The main outcome from this phase was the development of a revised instrument, which we call the *Cultural Connectivity Scale – California* (CCS-CA) illustrated in Appendix C. Our main objectives were to modify the original CCS to be more appropriate for our multi-tribal communities, in our service areas in California, while attempting to maintain fidelity to the original CCS instrument by retaining all items (and subscales) and question intent.

Some minor language changes or terms were made to the original CCS. These changes reflected the different tribes and multi-tribal characteristics in our communities compared to the Snowshoe study. However, the main adaptive change was the addition of the six Examples Lists: 1) Ceremonial & Traditional Medicines; 2) Uses of Ceremonial & Traditional Medicines; 3) Traditional, Tribal, & Cultural Ceremonies or Activities; 4) Cultural Uses of Food; 5) Traditional Persons, Elders, & Leaders; and 6) Feathers list. By adding to these lists, each question could then be more appropriate for the AI/AN communities residing within a 150-mile radius of the San Francisco Bay area.

In addition to the development of the CCS-CA, two other interesting results emerged during Phase 3. First, it became clear that the new CCS-CA could be easily adapted for other AI/AN communities and different tribes, on or off reservation, by using the same process, which would mostly focus on making appropriate changes to the Examples Lists and minor phrasing to match local words to refer to culture.

Second, the CBPR approach helped with generating new items and achieving consensus and face validity. It also helped address historical issues with negative or harmful research experiences and lack of trust (Hodge, 2012; Tom-Orme, 2006; Tsosie, 2007). For example, in one community, the health organization had a policy of not participating in research on their community members. This was based on the history of negative or poor research experiences including the knowledge of research causing harm to, or not producing benefits for, Indigenous communities as described by one community member who said: “We have been researched to death and nothing changes.” However, in the *Culture is Prevention Project*, we found the research experience appeared to be having the opposite effect. Focus group participants and key informants were very engaged and seemed to have a sense of pride and ownership over the process and results. Some participants indicated they were proud to be working on a project that was new, respectful, inclusive, supported their narratives, and which could benefit the current community and future generations. In addition, participants frequently wanted to know when they could obtain the final

instrument when it was developed and requested to keep copies of the Examples Lists they had worked to develop.

## **DISCUSSION**

This project began with direction from the Community Advisory Workgroup to identify or develop evaluation approaches that were aligned with an AI/AN epistemology and culture. The directive included the need for the team to be mindful of the diverse multi-tribal differences within the urban AI/AN communities of the San Francisco Bay area. Given that over 100 Tribes are represented in the Bay area, we needed an approach that would work and be acceptable. This indicated that a CBPR approach was the most appropriate to blend Western research methods with Bay Area Indigenous perspectives, experiences, culture, and knowledge.

CBPR approaches help address some of the historical problems associated with non-Aboriginal researchers conducting research in Aboriginal communities by capitalizing on the strengths of both parties (Szala-Meneok & Lohfeld, 2005). Other strengths of CBPR include the sense of community ownership that often develops including pride regarding the outcomes or solutions (Masotti et al., 2006). A particular strength in the *Culture is Prevention Project* was that it was initiated by the Community Advisory Workgroup and was supported by decision makers in the participating Indigenous Health Organizations. The focus groups were facilitated by an Elder known to each community and essentially were run like workgroups where the participants could see the results of their knowledge and input throughout the process.

Throughout Phases 1-3, there was a high degree of interest and engagement among the overall team comprised of the Community Advisory Workgroup, staff from the participating Indigenous Health Organizations, and community members they brought into the project. In part, this was because people were addressing an issue relating to mental health/well-being using a more Indigenous perspective. For example, SAMHSA's mission is to reduce the impact of substance abuse and mental illness (SAMHSA, 2019). However, as indicated earlier, there were concerns that the required outcome measures were overly focused on decreasing 'at-risk' behaviors such as drug and alcohol use and that there did not appear to be interest in capturing 'health promoting behaviors' or strength-based outcomes known to Native persons to improve health at individual, family, and community levels. One of these missing areas was the importance of Native culture as a social determinant of health.

Participants in the *Culture is Prevention Project* frequently indicated they were pleased to be working on a project they considered to be timely and important and which was aligned with their Indigenous strength-based narrative. Increasing protective factors, quality of life, and well-being is more aligned with traditional Native holistic, strength-based, and resiliency-based approaches to health versus the Western approach, which focuses more on decreasing risk or illness (Bartgis, 2016; Singer 2009; Arquette et al., 2002). As described by Bartgis:

Strength-based approaches to health and wellness in tribal communities are not new, but are embedded in diverse tribal best practices, established by systematic observation over centuries, that have been passed down orally from generation to generation. The oral transmission of tribal best practices results in increased supervision and fidelity through a one-on-one mentorship model in which training typically occurs over decades. ... Unlike randomized clinical trials used in Western science, tribal science has collected knowledge of long-term effects of practices that are in tune to the role of the environment. (2016, pi)

Some components of the traditional Indigenous perspective on health is shared with the World Health Organization (WHO). For example, in 1946, the WHO described health as: "...a state of complete physical, mental, and social wellbeing, and not merely the absence of disease or infirmity" (WHO, 1946). However, Indigenous peoples' traditional approaches to health broadened or improved upon this by also including population health approaches centuries before population health was recognized and embraced by Western medical professionals. Given this, we suggest an additional value of CBPR is the potential for bi-directional capacity building whereby both Indigenous community members and academic researchers (or government decision-makers) learn from each other to increase overall capacity to generate health in Indigenous communities and support culturally appropriate evaluation approaches (Masotti et al., 2006; Wallerstein et al., 2008).

## **Lessons Learned**

### **Introducing the Project and CCS**

How the project is introduced is important. After engagement with many people interacting with the *Culture is Prevention Project* and original CCS, it became clear that what people knew about the CCS in the beginning had an impact on how they viewed and accepted it. People were



open and willing to help when they were informed: a) that the original CCS was developed by an Indigenous person and scholar (Dr. Angela Snowshoe) in Canada for Indigenous persons with the objective of demonstrating the relationships between Indigenous culture and health; and b) that revised CCS-CA was developed by AI/ANs in California for AI/ANs. In some settings where the CCS-CA was presented without this history, the opposite reaction occurred. Individuals were immediately skeptical and assumed it was another attempt by science to quantify Native culture based upon Western concepts, biases, and assumptions. We thought this negative response could have been associated with a historical trauma response relating to negative or harmful impacts of outside research on AI/AN communities.

### **Adapting the CCS-CA for the Community**

Adapting the CCS-CA to be community-specific using a CBPR approach, involving multiple community leaders and members, is an important and necessary first step to community acceptance and ownership. This CBPR approach facilitated the process of adapting the 29 questions to be a better fit and more acceptable to multi-tribal communities. In Appendix B we provide a three step approach that interested communities could use to adapt the CCS-CA to be community or tribally specific.

### **Implications**

The Snowshoe study (2015), combined with historical knowledge and other evidence, indicates that culture is an important determinant of health for Indigenous peoples. Snowshoe demonstrated that cultural connectedness can be measured and was positively associated with mental health/well-being. (Note, in our next paper we will present the results of our pilot testing/validation study where we also evaluate the relationship between cultural connectedness and mental health/well-being.) Given this and that cultural connectedness can now be measured, we argue:

- The degree of culture or cultural connectedness can also be seen as an important health program objective.
- Given that the loss of culture has negatively impacted the well-being of Indigenous peoples (e.g., resulting in poor mental, emotional, spiritual, and physical health; lowered life satisfaction; and substance abuse), the degree of reclaimed culture or increased cultural connectedness may be a more important outcome measure, for Indigenous people, than the reduction in frequency of a risky behavior.

- CBPR projects, particularly those in Indigenous communities and in collaboration with government funders, may help to counteract some outcomes of colonization. This approach may facilitate a paradigm shift by increasing the willingness of the dominant culture to acknowledge and understand that some AI/AN practices have thousands of years of use and are successful in creating and supporting health/well-being and are therefore, by definition, “evidence based” (Brave Heart et al., 2011).
- Efforts should continue on the part of Indigenous people to push for increased promotion and use of Indigenous epistemology and approaches to program evaluation and health outcomes measures.
- Government, academia, and Western medicine should be cognizant that Indigenous cultures historically manufactured good health. Therefore, government, academia, and Western medicine should try to better understand and promote Indigenous epistemology and community-defined evidence practices and not undermine it.

### **Limitations**

We do not suggest we speak for all Indigenous communities within or outside of California. The CCS-CA was modified from the original CCS for use with multi-tribal communities in the San Francisco Bay area. Focus groups were held within 100 miles of San Francisco. Although the sample included persons who identified as being affiliated with 36 tribes, it was not a complete representation of all tribes within the area, which is estimated to be over 100. It is expected that the CCS-CA instrument will need to be reviewed and tailored to the culture of the local community, but it will be important that any changes maintain the integrity of the measures, subscales, and scoring system. Therefore, some modifications to the CCS-CA instrument by local communities could impact the reliability or validity of the CCS-CA. Other communities interested in using the CCS-CA are advised to go through a similar process of community introduction and local adaptation. This will support local level acceptance and ownership. We present our suggestions for local adaptation and lessons learned in Appendix B.

### **Future Research**

Future research will include completing Phases 4-6 of the *Culture is Prevention Project*. In the next paper, we will present the results of the pilot and psychometric testing (Phase 4) that

replicated parts of the Snowshoe study (2015) such as the evaluation of the relationship between cultural connectedness and measures of mental health/well-being. In Phase 5 (Developing the Predictive Properties of the CCS-CA), we plan to evaluate if the CCS-CA could be used to identify people who are doing well versus not doing well (e.g., strong, resilient, good well-being versus experiencing or at risk for depression, suicide, or substance abuse). And in Phase 6 (Cultural Connectedness, Integration, Health, Utilization, and Costs in Health Center), we plan to evaluate the relationships between culture, physical health measures, and health organization outcomes (e.g., cost, utilization).

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Urban Indian Health Institute – Seattle

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## APPENDIX

## Appendix A - Cultural Connectedness Scale – California, Sub Scales

**Traditions - 11 Items**

- I use ceremonial/traditional medicines (*See Examples List #1*) for guidance or prayer or other reasons. (*See Examples List #2*)<sup>a</sup>
- I have participated in a traditional/cultural ceremony or activity. (*See Examples List #3*)<sup>a</sup>
- I have helped prepare for a traditional/cultural ceremony or activity in my family or community. (*See Examples List #3*)<sup>a</sup>
- Someone in my family or someone I am close with attends traditional/cultural ceremonies or activities. (*See Examples List #3*)<sup>a</sup>
- I plan on attending a traditional/cultural ceremony or activity in the future. (*See Examples List #3*)<sup>a</sup>
- I have shared a meal with community, offered food or fed my ancestors for a traditional/cultural or spiritual reason.<sup>a</sup>
- How often do you offer a ceremonial/traditional medicine for cultural/traditional purposes? (*See Examples List #1*)<sup>c</sup>
- How often do you use ceremonial/traditional medicines? (*See Examples List #1*)<sup>c</sup>
- How often does someone in your family or someone you are close to use ceremonial/traditional medicines? (*See Examples List #1*)<sup>c</sup>
- I can understand some of my Native American/Indigenous words or languages.<sup>a</sup>
- I have a traditional person, elder or other person who I can talk to. (*See Examples List #5*)<sup>a</sup>

**Identity - 11 Items**

- I plan on trying to find out more about my Native American/Indigenous culture, such as its history, Tribal Identity, traditions, customs, arts and language.<sup>a</sup>
- I have spent time trying to find out more about being Native American/Indigenous, such as its history, tribal identity, traditions, language and customs.<sup>b</sup>
- I have a strong sense of belonging to my Native American/Indigenous family, community, Tribe, or Nation.<sup>b</sup>
- I have done things that will help me understand my Native American/Indigenous background better.<sup>b</sup>
- I have talked to community members or other people (*See Examples List #5*) in order to learn more about being Native American/Indigenous.<sup>b</sup>
- When I learn something about my Native American/Indigenous culture, history or ceremonies, I will ask someone, research it, look it up, or find resources to learn more about it.<sup>b</sup>
- I feel a strong attachment towards my Native American community or Tribe.<sup>b</sup>
- If a traditional person, counsellor or Elder who is knowledgeable about my culture spoke to me about being Native American/Indigenous, I would listen to them carefully. (*See Examples List #5*)<sup>b</sup>
- I feel a strong connection to my ancestors and those who came before me.<sup>b</sup>
- Being Native American means I sometimes have a different perception or way of looking at the world.<sup>b</sup>
- It is important to me that I know my Native American/Indigenous or Tribal language(s).<sup>b</sup>

**Spirituality - 7 Items**

- I know my cultural, spirit, Indian or Traditional Name.<sup>a</sup>
- I believe things like animals, rocks (and all nature) have a spirit like Native American/Indigenous People.<sup>b</sup>
- The eagle feather (or other feathers - *See Examples List #6*) has a lot of traditional meaning for me.<sup>b</sup>
- When I am physically ill, I look to my Native American/Indigenous culture for help.<sup>b</sup>
- When I am overwhelmed with my emotions, I look to my Native American/Indigenous culture for help.<sup>b</sup>
- When I need to make a decision about something, I look to my Native American/Indigenous culture for help.<sup>b</sup>
- When I am feeling spiritually disconnected, I look to my Native American/Indigenous culture for help.<sup>b</sup>

**Response Format**<sup>a</sup> = Yes, No (or Not Applicable)<sup>b</sup> = Strongly Disagree, Disagree, Do Not Agree or Disagree, Agree, Strongly agree<sup>c</sup> = Never, once/twice past year, every month, every week, every day

**Appendix A – Examples Lists: Cultural Connectedness Scale – California**

<b>List #1 Ceremonial &amp; Traditional Medicines</b>	<b>List #2 Uses of Ceremonial &amp; Traditional Medicines</b>	<b>List #3 Traditional, Tribal &amp; Cultural Ceremonies or Activities</b>	<b>List #4 Cultural Uses of Food</b>	<b>List #5 Traditional Persons, Elders &amp; Leaders</b>
<ul style="list-style-type: none"> <li>• Angelica Root</li> <li>• Bear Root</li> <li>• Cedar</li> <li>• Corn Pollen</li> <li>• Copal</li> <li>• Greasewood</li> <li>• Jimson</li> <li>• Milk Weed</li> <li>• Mountain Tea</li> <li>• Mugwort</li> <li>• Palo de Santo,</li> <li>• Peyote</li> <li>• Sage</li> <li>• Sweet grass</li> <li>• Tobacco</li> <li>• Women’s Tea</li> </ul>	<ul style="list-style-type: none"> <li>• Asking for a blessing in a sacred manner</li> <li>• Calmness</li> <li>• Cultural connections</li> <li>• Gifting to show respect</li> <li>• Give thanks</li> <li>• Guidance</li> <li>• Help Sleeping</li> <li>• To honor</li> <li>• Personal Healing</li> <li>• Prayer</li> <li>• Smudge</li> <li>• Spiritual connections</li> <li>• Spiritual Offerings</li> <li>• Steady Mind</li> <li>• Talk to the creator</li> <li>• Keep bad spirits away</li> </ul>	<ul style="list-style-type: none"> <li>• Acorn Ceremony</li> <li>• Beading Class</li> <li>• Bear Dance, Sun Dance, Round Dance or other Cultural Dance</li> <li>• Big Time</li> <li>• Burning of Clothes</li> <li>• Coming of Age</li> <li>• Deer Gathering</li> <li>• Drumming</li> <li>• Feast Giveaway</li> <li>• Fiesta (South of Kern Valley)</li> <li>• GONA</li> <li>• Longhouse</li> <li>• Moon Ceremony</li> <li>• New Years</li> <li>• Pot Latch</li> <li>• Pow Wow</li> <li>• Puberty Ceremony</li> <li>• Repatriation</li> <li>• Running is my High</li> <li>• Spring Ceremony</li> <li>• Story Telling</li> <li>• Sunrise Ceremony</li> <li>• Sun Rise (Alcatraz)</li> <li>• Sweat Lodge</li> <li>• Traditional Tattoo</li> <li>• Washing of the Face</li> <li>• Wiping of Tears</li> <li>• Young Men’s Ceremony</li> <li>• Yuwipi</li> </ul>	<ul style="list-style-type: none"> <li>• Spirit Plate</li> <li>• Thank You Ceremony</li> <li>• Special Feast</li> <li>• Community Feed</li> <li>• Other</li> </ul>	<ul style="list-style-type: none"> <li>• Ceremonial Leader</li> <li>• Cultural Teacher</li> <li>• Doctor</li> <li>• Elder</li> <li>• Father</li> <li>• Feather Man</li> <li>• Feather Woman</li> <li>• God Father</li> <li>• God Mother</li> <li>• Head Heir</li> <li>• Head Man</li> <li>• Head Woman</li> <li>• Medicine People</li> <li>• Mother</li> <li>• Mother Bear</li> <li>• Regalia Leader</li> <li>• Spiritual Person</li> <li>• Timiiwal</li> <li>• Top Doc</li> </ul>
<p align="center"><b>List #6 Feathers</b></p>				
<ul style="list-style-type: none"> <li>• Eagle</li> <li>• Condor</li> <li>• Flicker</li> <li>• Hummingbird</li> <li>• Raven</li> <li>• Hawk</li> <li>• Turkey</li> <li>• Quail</li> <li>• Woodpecker</li> </ul>				

## Appendix B - Community-Specific Adaptation of the Cultural Connectedness Scale – California

We recommend the following three step approach to adapting the CCS-CA to be community or tribally specific.

**Step 1: Develop or use an existing Community Advisory Board comprised of community leaders, elders, youth, and formal and informal community leaders. Provide background on the development of the CCS and CCS-CA:** a) that they were developed by Indigenous/ Native persons for Indigenous/Native persons; and b) publications such as Snowshoe et al., 2015 and King et al., 2019.

1.1) Members of the Community Advisory Board will meet and complete Steps 2 and 3.

**Step 2: Review each question to see if any changes to the language are needed to make the question more appropriate for the community/Tribe/Nation.**

- 2.1) Review each question. Evaluate words and terms such as ‘Native American’, ‘Indian’, ‘Indigenous’, ‘First Nations’, or ‘Aboriginal’.
- 2.2) Change terms or names to what is appropriate to be community or Tribally specific such as changing ‘Clan Mother’ or ‘Traditional Person’ to what is typically used in its place.
- 2.3) This step could also mean changing the possible answers such as what we did for the Question: I know my cultural/spirit name or Indian name, to include the possible answers to be: Yes, No or Not Applicable (We do not have/use ‘Indian Names’).

Note – it is important to try not to change what the question is intended to measure. Thus in this step, the objective is to mostly revise terms and names to be community or Tribally specific.

**Step 3: Review and revise the Example Lists**

- 3.1) Review each of the six Examples Lists and remove all examples that are not relevant for your community, Tribe, or Nation.
- 3.2) Add examples to each of the six Examples Lists that are appropriate for your community, Tribe, or Nation.

## Appendix C – Operational Cultural Connectedness Scale – California

### Background and Introduction

The *Cultural Connectedness Scale* is an instrument that was developed by an Indigenous researcher in Canada, Dr. Angela Snowshoe, to measure cultural connections among First Nations youth. The *Cultural Connectedness Scale - California* (CCS-CA) was adapted from the original Cultural Connectedness Scale (Snowshoe et al., 2015) and tested for use in California with urban Indigenous adults and youth. Individuals participating in the development of this tool were from 37 distinct tribal nations across the United States. During the pilot testing phase, 105 distinct tribal nations were represented.

One of the changes in the CCS-CA is the addition of an *Examples List* (See attached) that should be adapted (changed) for your community in order for the CCS-CA to work best for your location. This Examples List has already been adapted by a tribal nation and is being used in the Great Plains area.

Most people that complete the Cultural Connectedness Scale report a positive experience. However, a few people reported feeling sad, angry, shame, or a sense of loss from some of the questions. For example, some people may not know their *traditional, tribal or Indian name*, creating a sense of loss or a feeling of shame. These individuals may not have had the opportunity to have a *Naming Ceremony* due to a wide range of causes beginning from cultural losses that occurred when Europeans settled in America. Also, some may come from tribes in which Indian naming by ceremony is not a practice. These questions are not to judge or make anyone have a negative reaction, but to help us learn about what is valued and to measure connection to Native American/Indigenous culture(s).

If you feel negative or tender emotions about some of these questions, today or in the future as you recall the questions, it is a very normal reaction to having a loss or disconnection. It is important to be honest with yourself about any negative or unwanted feelings and reach out to a trusted healthy adult or professional in your local community to talk. You can also call a confidential national hotline, LIFELINE at (800)273-8255 (TALK).

We thank you for your participation!

Snowshoe, A., Crooks, C. V., Tremblay, P. F., Craig, W. M., & Hinson, R. E. (2015). Development of a cultural connectedness scale for First Nations youth. *Psychological Assessment*, 27, 249-259.  
<http://dx.doi.org/10.1037/a0037867>

**Cultural Connectedness Scale - California**

**QUESTIONS 1 - 11, Circle the Most Accurate Answer**

1. **I believe things like animals, rocks (and all nature) have a spirit like Native American/Indigenous People.**  
Yes                      No
2. **I can understand some Native American/Indigenous words or language(s).**  
Yes                      No
3. **I know my Cultural, Spirit, Indian or Traditional Name.**  
Yes                      No                      Does Not Apply (We do not use these names)
4. **I use ceremonial/traditional medicines (See Examples List #1) for guidance or prayer or other reasons (See Examples List #2).**  
Yes                      No
5. **I have participated in a traditional/cultural ceremony or activity (See Examples List #3).**  
Yes                      No
6. **I have helped prepare for a traditional/cultural ceremony or activity in my family or community (See Examples List #3).**  
Yes                      No
7. **I have shared a meal with community, offered food or fed my ancestors for a traditional/cultural or spiritual reason (See Examples List #4).**  
Yes                      No
8. **Someone in my family or someone I am close with attends traditional/cultural ceremonies or activities (See Examples List #3).**  
Yes                      No
9. **I plan on attending a traditional/cultural ceremony or activity in the future (See Examples List #3).**  
Yes                      No
10. **I plan on trying to find out more about my Native American/Indigenous culture, such as its history, Tribal identity, traditions, customs, arts and language.**  
Yes                      No
11. **I have a traditional person, elder or other person who I can talk to (See Examples List #5).**  
Yes                      No

**QUESTIONS 12 - 29, Circle the Most Accurate Answer**

- 12. I have spent time trying to find out more about being Native American/Indigenous, such as history, tribal identity, traditions, language and customs.**  
 Strongly Disagree      Disagree      Do Not Agree or Disagree      Agree      Strongly Agree
- 13. I have a strong sense of belonging to my Native American/Indigenous family, community, Tribe, or Nation.**  
 Strongly Disagree      Disagree      Do Not Agree or Disagree      Agree      Strongly Agree
- 14. I have done things that will help me understand my Native American/Indigenous background better.**  
 Strongly Disagree      Disagree      Do Not Agree or Disagree      Agree      Strongly Agree
- 15. I have talked to community members or other people (See Examples List #5) in order to learn more about being Native American/Indigenous**  
 Strongly Disagree      Disagree      Do Not Agree or Disagree      Agree      Strongly Agree
- 16. When I learn something about my Native American/Indigenous culture, history, or ceremonies, I will ask someone, research it, look it up, or find resources to learn more about it.**  
 Strongly Disagree      Disagree      Do Not Agree or Disagree      Agree      Strongly Agree
- 17. I feel a strong connection/attachment towards my Native American community or Tribe.**  
 Strongly Disagree      Disagree      Do Not Agree or Disagree      Agree      Strongly Agree
- 18. If a traditional person, counselor or Elder who is knowledgeable about my culture, spoke to me about being Native American/Indigenous, I would listen to them carefully (See Examples List #5).**  
 Strongly Disagree      Disagree      Do Not Agree or Disagree      Agree      Strongly Agree
- 19. I feel a strong connection to my ancestors and those that came before me.**  
 Strongly Disagree      Disagree      Do Not Agree or Disagree      Agree      Strongly Agree
- 20. Being Native American/Indigenous means I sometimes have a different perception or way of looking at the world.**  
 Strongly Disagree      Disagree      Do Not Agree or Disagree      Agree      Strongly Agree
- 21. The eagle feather (or other feathers) has a lot of traditional meaning for me (See Examples List #6).**  
 Strongly Disagree      Disagree      Do Not Agree or Disagree      Agree      Strongly Agree
- 22. It is important to me that I know my Native American/Indigenous or Tribal language(s).**  
 Strongly Disagree      Disagree      Do Not Agree or Disagree      Agree      Strongly Agree
- 23. When I am physically ill, I look to my Native American/Indigenous culture or community for help.**  
 Strongly Disagree      Disagree      Do Not Agree or Disagree      Agree      Strongly Agree
- 24. When I am overwhelmed with my emotions, I look to my Native American/Indigenous culture or community for help.**  
 Strongly Disagree      Disagree      Do Not Agree or Disagree      Agree      Strongly Agree

**25. When I need to make a decision about something, I look to my Native American/Indigenous culture or community for help.**

Strongly Disagree      Disagree      Do Not Agree or Disagree      Agree      Strongly Agree

**26. When I am feeling spiritually ill or disconnected, I look to my Native American/Indigenous culture or community for help.**

Strongly Disagree      Disagree      Do Not Agree or Disagree      Agree      Strongly Agree

**Please answer how often you experience the following:**

**27. How often do you offer a ceremonial/ traditional medicine for cultural/traditional purposes? (See Examples List #1)**

Never      Once/Twice in the Past Year      Every Month      Every Week      Every Day

**28. How often do you use ceremonial/traditional medicines? (See Examples List #1)**

Never      Once/Twice in the Past Year      Every Month      Every Week      Every Day

**29. How often does someone in your family or someone you are close to use ceremonial or traditional medicines? (See Examples List #1)**

Never      Once/Twice in the Past Year      Every Month      Every Week      Every Day

**CCS-CA SCORING**

Yes = 5      No = 1      NA = 3

Strongly Disagree = 1

Disagree = 2

Do Not Agree/Disagree = 3

Agree = 4

Strongly Agree = 5

Never = 1

Once/Twice Past Year = 2

Every Month = 3

Every Week = 4

Every Day = 5

**CCS-CA Range: 29 – 145**

Identity Subscale: 11 - 55

Traditions Subscale: 11 - 55

Spirituality Subscale: 7 - 35



Examples Lists: Cultural Connectedness Scale - California

List #1 Ceremonial & Traditional Medicines	List #2 Uses of Ceremonial & Traditional Medicines	List #3 Traditional, Tribal & Cultural Ceremonies or Activities	List #4 Cultural Uses of Food	List #5 Traditional Persons, Elders & Leaders
<ul style="list-style-type: none"> <li>• Angelica Root</li> <li>• Bear Root</li> <li>• Cedar</li> <li>• Corn Pollen</li> <li>• Copal</li> <li>• Greasewood</li> <li>• Jimson</li> <li>• Milk Weed</li> <li>• Mountain Tea</li> <li>• Mugwort</li> <li>• Palo de Santo,</li> <li>• Peyote</li> <li>• Sage</li> <li>• Sweet grass</li> <li>• Tobacco</li> <li>• Women’s Tea</li> </ul>	<ul style="list-style-type: none"> <li>• Asking for a blessing in a sacred manner</li> <li>• Calmness</li> <li>• Cultural connections</li> <li>• Gifting to show respect</li> <li>• Give thanks</li> <li>• Guidance</li> <li>• Help Sleeping</li> <li>• To honor</li> <li>• Personal Healing</li> <li>• Prayer</li> <li>• Smudge</li> <li>• Spiritual connections</li> <li>• Spiritual Offerings</li> <li>• Steady Mind</li> <li>• Talk to the creator</li> <li>• Keep bad spirits away</li> </ul>	<ul style="list-style-type: none"> <li>• Acorn Ceremony</li> <li>• Beading Class</li> <li>• Bear Dance, Sun Dance, Round Dance or other Cultural Dance</li> <li>• Big Time</li> <li>• Burning of Clothes</li> <li>• Coming of Age</li> <li>• Deer Gathering</li> <li>• Drumming</li> <li>• Feast Giveaway</li> <li>• Fiesta (South of Kern Valley)</li> <li>• GONA</li> <li>• Longhouse</li> <li>• Moon Ceremony</li> <li>• New Years</li> <li>• Pot Latch</li> <li>• Pow Wow</li> <li>• Puberty Ceremony</li> <li>• Repatriation</li> <li>• Running is my High</li> <li>• Spring Ceremony</li> <li>• Story Telling</li> <li>• Sunrise Ceremony</li> <li>• Sun Rise (Alcatraz)</li> <li>• Sweat Lodge</li> <li>• Traditional Tattoo</li> <li>• Washing of the Face</li> <li>• Wiping of Tears</li> <li>• Young Men’s Ceremony</li> <li>• Yuwipi</li> </ul>	<ul style="list-style-type: none"> <li>• Spirit Plate</li> <li>• Thank You Ceremony</li> <li>• Special Feast</li> <li>• Community Feed</li> <li>• Other</li> </ul>	<ul style="list-style-type: none"> <li>• Ceremonial Leader</li> <li>• Cultural Teacher</li> <li>• Doctor</li> <li>• Elder</li> <li>• Father</li> <li>• Feather Man</li> <li>• Feather Woman</li> <li>• God Father</li> <li>• God Mother</li> <li>• Head Heir</li> <li>• Head Man</li> <li>• Head Woman</li> <li>• Medicine People</li> <li>• Mother</li> <li>• Mother Bear</li> <li>• Regalia Leader</li> <li>• Spiritual Person</li> <li>• Timiiwal</li> <li>• Top Doc</li> </ul>
<p><b>List #6 Feathers</b></p>				
<ul style="list-style-type: none"> <li>• Eagle</li> <li>• Condor</li> <li>• Flicker</li> <li>• Hummingbird</li> <li>• Raven</li> <li>• Hawk</li> <li>• Turkey</li> <li>• Quail</li> <li>• Woodpecker</li> </ul>				