COMMUNITY-ENGAGED AND CULTURALLY RELEVANT RESEARCH TO DEVELOP BEHAVIORAL HEALTH INTERVENTIONS WITH AMERICAN INDIANS AND ALASKA NATIVES

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Abstract: American Indians and Alaska Natives experience pervasive mental, behavioral, and physical health disparities, yet access to culturally relevant and evidenced-based programs (EBPs) are severely limited. The purpose of this research is to describe the process of conducting a rigorous and culturally sensitive research approach, which was used to inform the development of a family-based substance abuse and violence prevention program that promotes resilience. The focus of this article is on the process of this development, rather than the intervention itself. We utilize a convergent mixed-methods design with distinct tribes in the Southeast that included 436 research participants across individual, family, and focus group interviews, field notes and existing data, and a quantitative survey (n = 127). This community-engaged, culturally sensitive, and rigorous research methodology provides a road-map for developing culturally relevant interventions.

INTRODUCTION

American Indians and Alaska Natives (AI/ANs) experience pervasive, disproportionate rates of violence and health disparities. AI/ANs are reported to have a 5.5 year lower life expectancy than the general U.S. population (Indian Health Service [IHS], 2018). These populations experience serious psychological distress at one and a half times the rate of the general population, and they are at twice the risk for posttraumatic stress disorder (PTSD; American Psychological Association [APA], 2010). Moreover, in comparison with non-AI/ANs, deaths related to accidents are 2.5 times higher, while diabetes-related, alcohol-induced, and cirrhosis and chronic liver death rates are 3.2 times, 6.6 times, and 4.6 times higher than for non-AI/ANs (IHS, 2018). Finally, suicides, drug-related, and homicide-related deaths all hover around twice that of non-AI/ANs (IHS, 2018). AI/AN peoples experience a high risk for violence as well; rates of intimate partner violence (IPV) are 1.7

times higher for AI/AN women (Breiding, Chen, & Black, 2014), and rates of child maltreatment are 1.5 times higher for AI/AN children as compared with Whites (U.S. Department of Health and Human Services, 2013). Given the disparities related to violence and substance abuse in particular, the overarching goal of this research was to identify and translate 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 to develop behavioral health interventions.

In the United States, there are 573 federally recognized tribes (Bureau of Indian Affairs, 2014), more than 60 state-recognized tribes (National Conference of State Legislatures, 2015), and more than 400 tribes outside the federal or state jurisdictions (U.S. Government Accountability Office, 2012). Additionally, some people may identify as AI/AN and not have a tribal affiliation. Depending on their recognition status, tribes have unique needs and opportunities. Federally recognized tribes receive health care through IHS as part of treaty agreements, whereas state recognized tribes do not receive this benefit and may rely more on state funding. Thus, distinct trust relationships, based on treaties with sovereign federally recognized tribes, in addition to the high health disparities experienced by AI/AN peoples, warrants examining AI/AN disparities separately from other ethnic minorities (U.S. Commission on Civil Rights, 2004).

Acknowledging the need for more evidenced-based programs (EBPs), all 50 states now incorporate what is often a mandate to allocate resources to EBPs, ranging from programs in the criminal justice system to family services arenas (National Conference of State Legislatures, 2018). Tribal members from the over 60 state-recognized tribes, those from unacknowledged tribes, and the over four million tribal members residing in urban areas (which represent the majority of the U.S. AI/AN population) are often served by these state-funded and community-based agencies (Urban Indian Health Commission, 2007). Yet, the AI/AN communities served by these programs are often overlooked, and thus, receive services that may be evidence-based, but are not culturally relevant or vice versa. This is problematic in that some EBPs that are not culturally specific have actually been found to worsen outcomes, such as substance abuse, among AI/ANs, rather than improve them as intended (Dixon et al., 2007). Yet, some states, such as Tennessee, are working toward 100% of funding for juvenile justice being allocated for EBPs (National Conference of State Legislatures, 2018). A lack of EBPs, in general, contributes to the problem of requiring EBPs where no such empirically-based programs have been developed, but EBPs that are culturally relevant for AI/ANs are even scarcer. Not only is it ethically important to provide culturally relevant and empirically-

informed interventions for diverse peoples (Moran & May, 2015), many states require that a certain percentage of funding be allocated to such EBPs (Pew-MacArthur Results First Initiative, 2017). If AI/AN people lack access to culturally relevant EBPs, they may receive culturally incongruent EBPs or interventions that are culturally relevant but ineffective or even harmful (Dixon et al., 2007). Thus, despite the tremendous need for solutions to the aforementioned disparities, AI/AN families lack access to programs that are culturally relevant and evidenced-based to reduce violence and unwanted health outcomes (Gone & Trimble, 2012).

Interventions for AI/AN peoples have tended to be imposed from a non-Native perspective, and in some cases, such interventions have been ineffective and even harmful to AI/AN peoples (Burnette & Figley, 2016; Gone & Trimble, 2012; Urban Indian Health Institute, 2014). For example, Dixon et al. (2007) found that drug use *increased* among AI/AN youth after a non-targeted, multicultural substance abuse prevention and intervention program. This is consistent with other findings showing that interventions targeted to a specific cultural group are four times more effective than interventions provided to groups from a variety of cultural backgrounds (Griner & Smith, 2006). Moreover, the interventions that are available tend to use a deficits-based approach that ignore the profound resilience and heterogeneity of AI/AN peoples (Burnette & Sanders, 2017; Yuan, Belcourt-Dittloff, Schultz, Packard, & Duran, 2014). Finally, Western EBPs, with the priority exclusively on empirical evidence, may negate some AI/AN holistic and multifaceted ways of "knowing," which can include ancestral knowledge, spirituality, and intergenerational transmission of lifeways and life practices. This research attempts to be part of a decolonizing process to include these multifaceted ways of knowing by extensive inclusion of community voice throughout the research process.

The Framework of Historical Oppression, Resilience, and Transcendence

To fill the gap in knowledge on how to develop evidenced-based and culturally relevant interventions to address substance abuse, violence, and associated disparities, this article will describe a rigorous and culturally sensitive research approach to inform localized, responsible, and ethical interventions for AI/AN peoples. We integrate Burnette, Sanders, Butcher, and Rand's (2014) toolkit for culturally sensitive and ethical research with AI/AN communities (see Table 1) with an application of Whitbeck's (2006) five-stage culturally grounded research approach to develop EBPs addressing the aforementioned disparities (see Figure 1). The *specific strategies* from the toolkit will be italicized throughout the article where they have been infused, and the definition of each strategy is displayed in Table 1. This toolkit was derived from interviews with

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

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

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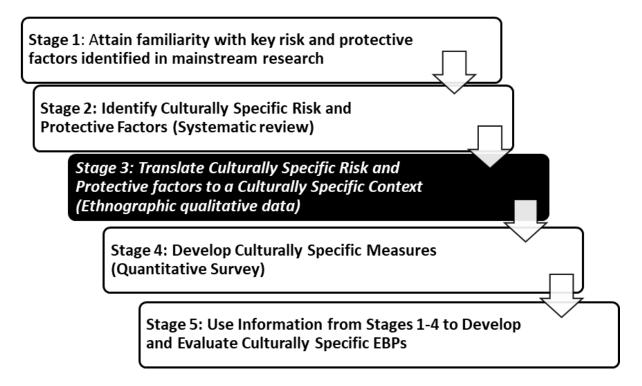
Table 1 Continued

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

Strategy for Researcher(s)	Description			
Advocate	Communicate the needs and rights of AI/AN peoples to decision-making bodies.			
Reciprocate and Give Back	Develop programs, report results, provide compensation, and enable the AI/AN community to determine follow-up.			
Allow for Fluidity and Flexibility	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.			
Develop an Infrastructure	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.			
Invest Resources	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 Al/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

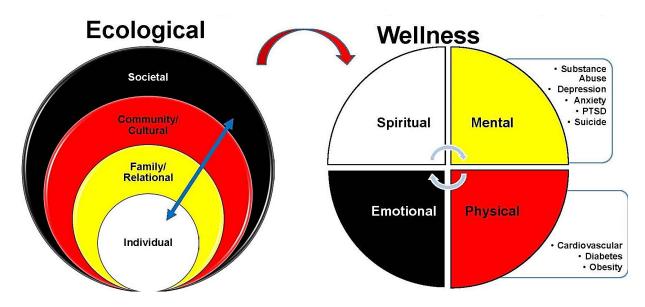


Figure 2. Framework of Historical Oppression, Resilience, and Transcendence

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

- 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) teambased 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 NVivo¹ 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,

¹ 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 elders² (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.

² 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/Cu	Itural Resilience	Family Resilience		Individual and Relational Resilience	
Protective Factors	Risk Factors	Protective Factors	Risk Factors	Protective Factors	Risk Factors
Community Resilience		Family Resilience		Individual Resilience	
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
Cultural Resilience		Commitment	Lack of commitment	Faith	Daily hassles
Enculturation	НО	Communication	Poor communication	Humor, pride, identity	Adverse childhood events
Healing through culture	Forms of HO	Nonviolent norms	Family violence	Relational Resilience	
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 the 208 participants with phone numbers on file and attempts were made to contact the 208 participants with phone numbers on file and attempts were made to contact the 208 participants 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 selfdetermined 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 ds 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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