



## “I’m stronger than I thought”: Native women reconnecting to body, health, and place



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### ARTICLE INFO

#### Article history:

Received 11 September 2015

Received in revised form

9 January 2016

Accepted 1 May 2016

Available online 7 May 2016

#### Keywords:

Wilderness

Experiential

Indigenous

American Indian

Historical trauma

### ABSTRACT

This community-based research applied principles of wilderness experience programming and Indigenous knowledges in an exploratory intervention designed to address health disparities in a tribal community. Drawing on historical trauma frameworks, tribal members rewalked the Trail of Tears to consider its effect on contemporary tribal health. Qualitative data from tribal members suggest that engagement with place and experiential learning, particularly the physical and emotional challenge of the Trail, facilitated changes in health beliefs, attitudes, and behaviors. Deep engagement outside of traditional health service settings should be considered in interventions and may be particularly effective in promoting positive health behaviors in Native communities.

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Making connections between historically anchored traumatic events and current health inequities among American Indians and Alaska Natives (AIAN) has launched innovative research among AIAN communities and researchers. Historical trauma, a collective and cumulative intergenerational wounding resulting from traumatic events targeting a community (e. g., forced removal from homelands), has been posited by Native communities, health practitioners and researchers to have pernicious effects that may persist across generations through a myriad of mechanisms from biological to behavioral and from cell to society (Chae and Walters, 2009; Evans-Campbell, 2008; Walters et al., 2011a, 2011b). Indian removal from the Southeast through a sustained policy of forced removal and relocation had devastating impacts on the tribes involved and is now commonly referred to as the Trail of Tears. Choctaws of the Southeast were the first of the Five Civilized Tribes to be moved under the Indian Removal Act of 1830.<sup>1</sup> This

forced migration covered approximately 500 miles and took place in three waves (1831 – 1833). Perilous conditions on the Trail resulted from poor planning, inadequate supplies and funding, and harsh winter weather, leading to cholera, starvation, and death and decimation of the Tribe. More than 12,500 were removed from the Southeast with an estimated death toll ranging from 2500–6000 (Akers, 2004; DeRosier, 1970; Foreman, 1932; Wright, 1928). Recently, Native scholars have theorized the Trail of Tears as a major factor influencing enduring health issues in the lives of tribal members of those Nations affected by the Indian removal policy of the 1830s.

The *Treaty of Dancing Rabbit Creek*<sup>2</sup> stipulated that Choctaws could remain in Mississippi if they relinquished their sovereignty. Oklahoma Choctaws are the descendants of those willing to risk death through removal to remain as a sovereign People. Those who survived the arduous journey had a vision of health for future

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<sup>1</sup> The Indian Removal Act, signed into law by President Andrew Jackson on May 28, 1830, authorized the president to grant unsettled lands west of the Mississippi in exchange for Indian lands within existing state borders. The Act opened land inhabited by the Tribes in the Southeast to non-Indian settlement; many Tribes resisted this relocation policy but many also were forcibly relocated.

<sup>2</sup> The Treaty of Dancing Rabbit Creek was signed in 1830 between the Choctaw and United States governments. It was the first removal treaty under the Indian Removal Act and mandated that the Choctaw cede 11 million acres of tribal land and move to “Indian Territory”, now known as the state of Oklahoma, in exchange for keeping their status as a sovereign nation. The Choctaw who remained in Mississippi would be recognized as US citizens. This was the last major land cessation treaty signed by the Choctaw.

generations.<sup>3</sup> To complement existing treatment efforts within the Choctaw Nation and to reconnect and recommit to an ancestral vision of health, Choctaw health leaders sought innovative, culturally-based solutions for health promotion and prevention efforts. This led to re-walking a portion of the Trail of Tears in 2012. Named Yappalli, a Choctaw word meaning to walk slowly and softly (Meshaya and Stroud, personal communication, 2012), this project emphasized experiential learning, personal challenges, and engagement with place to develop a culturally-grounded Choctaw health promotion model. Connected to similar initiatives across Indian country that aim to remember place-specific historically traumatic events in order to shape a better future,<sup>4</sup> Yappalli retraced one of the southern 1831 removal routes (via Arkansas Post through Roc Roe to North Little Rock and then south and east into Eagletown, Oklahoma). The purpose of this paper is to examine how the outdoor, experiential aspects of walking the Trail can be understood in relation to wilderness experience programming (WEP) and culturally-specific health intervention designs.

## 1. Historical trauma and contemporary health

Researchers have examined how historically traumatic events affect the magnitude and distribution of health inequities within Native communities (Evans-Campbell, 2008; Walls and Whitbeck, 2012; Walters et al., 2011b). Scholarship on historical trauma focuses on traumatic events as causal agents for health disparities or as mechanisms for transmitting trauma, and historical trauma responses (e. g. high rates of AOD abuse, depression, anxiety, chronic preventable diseases) as health outcomes (Walters et al., 2011b). The study of embodiment seeks to identify the ways that social experience is physically integrated into the body and expressed (Krieger, 2005). Walters et al., (2011b), draw on embodiment in their examination of the ways in which historical trauma can be passed intergenerationally, suggesting social and biological mechanisms for explaining how an event like the Trail of Tears may continue to impact Choctaw wellness. Potential mechanisms for the transmission of historical trauma include cultural disruption to family, language, or spiritual practices, physical harm from changes in diet or sanctioned physical activity (e. g. walking, hunting, gathering, etc.), or epigenetic or neurobiological transmission of trauma (Yehuda, et al., 2005; Yehuda and Bierer, 2009). Despite historical, catastrophic upheaval brought on in part by removal policies, Choctaws of Oklahoma have prospered economically, building successful tribal infrastructure and social service programs.

## 2. Indigenous knowledges

Traditional ecological knowledge (TEK) emphasizes the interrelatedness of all creation; humans, animals, plants, the land and cosmos are all part of an intricately connected web of relationships

<sup>3</sup> George Harkins, a Choctaw Chief during removal was quoted in an 1832 newspaper article, "We as Choctaws rather chose to suffer and be free, than live under the degrading influence of laws, which our voice could not be heard in their formation.... I could cheerfully hope, that those of another age and generation may not feel the effects of those oppressive measures that have been so illiberally dealt out to us; and that peace and happiness may be their reward." (Harkins, 1995)

<sup>4</sup> Many tribal nations that have experienced historically traumatic events create and participate in annual or regular memorial events. These events are described as healing or ceremonial as tribal members remember their ancestors and make offerings of physical struggle, time, energy, and resources as spiritual obligation to care for their tribes and future generations. For examples, see Dakota Commemorative March, Sand Creek Massacre Spiritual Healing Run and Walk, Yavapai-Apache Exodus Spiritual Run, or Navajo Journey for Existence.

(Pierotti and Wildcat, 2000). Though the notion of the "web of life" is part of many Native spiritual belief systems, Pierotti and Wildcat (2000) write that, much like physiological and biochemical science principles, "TEK is a practical recognition of the fact that all living things are literally connected to one another" (p. 1336). Acknowledging the interrelatedness of all things, TEK provides foundational knowledge for how to care for one's self, family, community, and the planet. Disruption to any aspect of the web essentially affects all other connected parts including biological, psychological, social, spiritual and cosmological systems.

Indigenous knowledges are imbued with a fundamental principle that nature and all beings have a purpose and relationship to each other (Cajete, 1994; Walters et al., 2011a; Wilson, 2003). Knowledge acquisition emphasizes participation and experiential learning within these relationships. Native science has been described as a metaphor for processes of "coming to know" that emphasize active engagement; "To gain a sense of Native science one must *participate* with the natural world" (Cajete, 2000, p. 2). Indigenous worldviews are rooted in "the experiential realm of human existence" (Wildcat, 2005, p. 435) and emerge from observation and interaction with biological and social environments (Getty, 2010). Incorporating a relational worldview in health interventions with a focus on observational and experiential learning suggest that a culturally-specific pathway to health is facilitated by getting out into the natural world. As original tribal practices may have been interrupted by historically traumatic events, revisiting tribally specific historically and culturally significant environments and places may provide powerful new insights to create innovative responses to contemporary health problems that are grounded in original cultural practices of place.

## 3. Indigenous place

For Indigenous peoples, the concept of place is deeply rooted in a profound relationship with the land; particularly original tribal lands that are part of ancestral knowledge, cultural memory and historical significance.<sup>5</sup> This is in contrast to wilderness education or therapy programs that may be rooted in connecting with the outdoors in general, but are not tied to a specific place or history. Indigenous scholars suggest that the most effective space to share cultural knowledge is in the place in which that culture developed (Cajete, 1994; Lowan, 2009; Simpson, 2002). For Native people, engaging with the natural environment and gaining knowledge through observation, interaction and experience in places of historical and spiritual significance may be one way of reconnecting to traditional health knowledge and integrating this knowledge into new approaches to health promotion.

## 4. Wilderness experience programming

Programs utilizing experiential learning in natural environments are not unique to Indigenous communities. Miles and Priest (1999) describe four groups into which these programs can be categorized: recreational, educational, developmental or therapeutic. Friese et al. (1998) summarized over 700 wilderness experience programs in the United States and described three categories of intended outcomes: healing, education, and personal growth. Within WEP, treatment modalities based on outdoor experiences, experiential learning and adventure-based components

<sup>5</sup> The vital importance of place in Indigenous worldviews and knowledge is a vast and rich literature and is explored more thoroughly in other works (Cajete, 2000; Deloria, 1994; LaDuke, 1999; Walters et al., 2011a).

include several approaches, but according to Swaim and Petr (2003), “the one dynamic that unites the different nomenclature is the idea that psychotherapeutic interventions can move beyond the traditional office setting and utilize the inherent value of personal challenge and environments unfamiliar to the client” (p. 1). In general, WEP includes experiential learning or therapeutic approaches that occur in the outdoors. There tends to be a common emphasis on contact with nature, adventure, group processes, and engaging both emotionally and physically (Pryor et al., 2005). The combination of these aims “constitutes the basis for a socio-ecological approach to health, where individual, community and environmental sustainability are integrated” (Pryor et al., 2005, p. 5), consistent with Native values and worldviews.

Research on health outcomes of WEP have been mixed, often describing challenges in comparing effectiveness across programs because of the broad range of theory and methodology and lack of randomized assignment, control groups, and longitudinal designs (Gillis and Gass, 2003; Russell, 2012). In spite of methodological shortcomings, beneficial effects of WEP have been reported. Demonstrated benefits include reductions in behavioral and emotional disorders (Russell, 2012), psychological benefits (Pryor et al., 2005), reductions in depressive symptoms (Pryor et al., 2005), and improvement in self-esteem and locus of control (Cason and Gillis, 1994). Most published accounts have focused on mental health more than somatic conditions and short-term benefits are more documented than long-term benefits (Frumkin, 2012).

This project draws on key features of WEP and Indigenous knowledges – namely, engagement with the outdoors or specific place-based locations, personal challenges, learning from physical experience, and relationships among people and places. Leaders of Yappalli sought to engage the environment and challenges of the Trail to generate new ideas for health promotion and consider how the Trail may be a site for health intervention efforts in the future. Yappalli required tribal members to spend an extended amount of time in the outdoors and a culturally-significant place; physical and emotional challenges were a definitive and anticipated part of the experience; learning emerged from engagement with the Trail and facilitated new or renewed connections to body and health. What distinguishes this research from the WEP literature are the cultural aspects of program design, including Indigenous values related to history, place, ancestors and culturally-specific ways of understanding this type of experience.

## 5. Methods

Using a community-based participatory research model, this research developed through a partnership between the Choctaw Nation of Oklahoma (CNO) and Choctaw university researchers. Community-based participatory research can be defined as a collaborative approach to research with a goal of equitable partnerships between community members, organizations, and researchers during all aspects of the research process and recognizes the unique strength and shared responsibilities of each partner (Isreal et al., 2008; Minkler and Wallerstein, 2008). All authors of this article are Indigenous (including four enrolled members of CNO), were involved in the design of the project, and participated in walking the Trail. We received Institutional Review Board approval from the university and CNO.

## 6. Walking the trail

Participants travelled 254 miles over nine days across Arkansas, starting at one of the major deportation sites and walking 8–10 miles per day – approximately the average number of miles

walked by original Choctaw ancestors. The Trail covered a variety of physical environments including the Grand Prairie, the Mississippi alluvial plain, swamp, forested hills, farmland, and one major city. Participants camped in state parks and wildlife refuges on or near the historical encampment sites of the original removal – setting up and breaking down camp daily. Temperatures on the Trail hovered around 100°F and protection from the sun and hydration were closely monitored. Physical discomfort resulted from insect bites, heat, and blisters and sore muscles from walking. Curricular cards were read out loud to the group each morning. These cards contained Choctaw vocabulary, historic information corresponding to the daily route, and meditations on health and cultural values (e. g. “Today we are being asked to reflect on cultural ways to address loss, grief, and trauma.”).

## 7. Sample

A purposive sampling strategy drew from those who volunteered to go on the Walk. Eligibility requirements included identifying as Indigenous and participating in the Walk. The age requirement for in-depth interviews was 18 years of age or older; focus group participation did not have any age requirement and included participants aged 12 and 16 years. To focus on the experience of Choctaw tribal members, this article uses a sub-sample of six adult, tribally enrolled Choctaw women. This was a diverse group relative to age (21 – 49 years of age), region (living within and outside of Oklahoma), and self-identified connectedness to Choctaw culture, language, and traditions.

## 8. Data collection

Data sources included pre- (n=6) and post-Walk (n=6) in-depth interviews and two focus groups. All interviewers were Indigenous (including two Choctaw tribal members). Informed consent protocol took place before beginning interviews and focus groups and participants were offered up to \$40 for their participation. Interviews were conducted in person at community agencies, the university, or in homes. Focus groups took place at campsites during the Walk. Pre-Walk interviews occurred approximately one month before and post-Walk interviews about three months after the Walk.

Pre-Walk interviews included questions about participants' understandings of health and wellness, meanings associated with removal, and major concerns, challenges and strengths in personal and tribal health. Focus group questions asked about emerging understandings of the role of the Trail and ancestral knowledge in tribal health, and personal challenges, strengths and reflections on health while on the Trail. Post-Walk interviews asked participants to reflect on new understandings of health and the historical significance of the Trail as well as personal experiences and how participation in the Walk facilitated changes in attitudes or behaviors related to individual and tribal health. Transcripts are not verbatim in this article; utterances, duplicate words, and material not relevant to the quotation were deleted.

## 9. Analysis

Thematic analysis began with thorough immersion in the data, reading transcripts multiple times before turning to individual transcripts to identify phrases, sentences, or paragraphs that revealed issues of importance to the participants. Initial coding led to intermediate coding to determine properties and relationships of and between codes, and the development of categories. Finally,

transcripts were uploaded to Dedoose, an analytic software, and coded a third time. After revisiting the literature to reflect on themes emerging in the data, the coding framework was revised a final time to focus on experiential aspects of participant experiences. Using a tabletop categories approach (Saldaña, 2009, p. 188), excerpts of the data were printed, organized by codes and sorted manually then re-assembled and organized by the themes in this article. To provide cultural validity and credibility, findings were reviewed with tribal members as they were developed and before publication.

## 10. Results

The unique setting of this project, drawing not only on the historical significance of the Trail, but the demands of walking and camping challenged participants mentally, physically, and spiritually. The challenge of walking, living outdoors, being away from homes, and the emotional and spiritual challenges of addressing the legacy of historical trauma resulting from being on the Trail combined to force participants out of their comfort zones. From the data emerged the narrative of a journey, facilitated by engaging with an unfamiliar and uncomfortable place. This resulted in new or renewed relationships to their bodies and reflections on health behaviors. Three themes emerged: (a) [re]connecting to the body, (b) out of the head and into the body, and (c) reflecting and [re]connecting. Sub-themes of [re]connecting to the body include: (a) discomfort, disequilibrium, and doubt; (b) breaking down; and (c) breaking through. Yappalli proposed a unique approach to thinking about health attitudes and behaviors by expanding traditional spaces where researchers, health professionals, and community members come together to think about health promotion.

## 11. [Re]connecting to the body

Drawing on principles of WEP (Stiehl and Parker, 2007), we purposefully challenged participants to face uncertainty and take risks as a means of facilitating learning on the Trail. In a post-Walk interview, one of the organizers reflects on this design:

It is not even just a physical relocation, but also an environment and a social situation where people either are not used to being in it or do not like being in it.... We put people in a very odd space, which I think was part of what made it hard, but I also think that it was the catalyst for a lot of learning, not just about the project, but about each other and ourselves. That we do not really get there sometimes until we make ourselves uncomfortable.

Forcing participants to encounter settings and situations that were uncomfortable or unfamiliar was designed to act as a catalyst for learning not just about themselves, but about the Trail and tribal health in ways that transcend Western behavioral approaches to health, and connect to the experiential/relational practices associated with traditional Indigenous health knowledge.

### 11.1. Discomfort, disequilibrium, and doubt

Incorporating the challenge of a new environment, socially and physically, as a catalyst for learning drew on Indigenous knowledge and principles of WEP contending that risk-taking and facing uncertainty are fundamental to “true knowing” (Stiehl and Parker, 2007, p. 65). Tribal members described the Walk as hard, difficult, challenging, or exhausting. For some, the experience elicited more

than just discomfort – it resulted in a sense of disequilibrium from home environments and routinized ways of being:

And as beautiful as it was, it was not home, and I knew that there were things that did not feel comfortable. And, so in my body, I felt unbalanced because I had not made a normalcy out of where we were and what we were doing and the unknown of what it was going to be like in the morning. All those things, all those unknowns – trying to find a place of comfort ... I had to find a way to, to make it okay within myself and not knowing [how, because] there were so many variables. (Post-Walk)

The sense of being away from home, being uncomfortable, and in an unknown place called forth an embodied lack of balance that led her to seek ways to make sense of her experience. The search for a way to “make it okay within myself” is more than simply physical discomfort, but a sense of unease and need to re-establish an in-place equilibrium resulting from the challenge of this experience.

In post-Walk interviews participants reflected on doubt about their abilities to make it through this state of disequilibrium. Allowing oneself to question whether the struggle is worth it may be valuable as one navigates and commits to action to sustain the effort. This not only increases commitment to finish, it establishes a connection to the hardship that makes the experience worthwhile and meaningful. This may be true not only for completing the Walk, but also motivation to engage in behavioral health change. Tribal members described the Trail as not only physically demanding, but emotionally and spiritually demanding. As participants negotiated their commitment to the Trail, they simultaneously navigated a “breaking down” of their everyday bodily lived experience – a process which in turn created opportunities for “breaking through” and moving beyond self-doubt and other personal narratives that they held about themselves and their abilities.

### 11.2. Breaking down

Mental and physical discomfort led to a breaking, or turning point, resulting in new reflections on their own health and the significance of the Trail in tribal health. Participants described moments of duress that forced them to think deeply or differently about what they were experiencing and their abilities to navigate the experience:

Most of the *points where something would become clear to me* tended to happen through extreme physical distress.... It just got me to a point where my defenses were so low that I had to be forced to face whatever the deepest thing that was going on at the moment was, because normally you feel so safe and secure in your body and whatever you're doing in that moment that you're able to hide it physically and it got to a point where I just could not hide some of those things. So I was forced to deal with thoughts like that. Feelings of not being worthy and things that I was not expecting were going to come up. (Post-Walk)

Breaking down forced this participant to reflect and become clear about her own health behaviors. She was forced to deal with issues of self-worth, belonging, and physical health as they came up during the Walk because she was away from her usual comfort and supports that enable her to avoid difficult issues when they arise. This may not have occurred in a traditional medical, therapeutic or research setting and provide compelling evidence of the potential for these types of experiences to inform behavioral health promotion. This participant recognized how she positively responded to these challenges, suggesting implications for the role

of these types of experiences in interventions:

Being able to get to a place of complete breaking someone down so much that they are able to really just start to rebuild – when I say breaking down, I'm thinking my layer of physical comfort, my layer of physical stability, my layer of mental stability, breaking down those layers and getting to a point where you're able to start putting those back together in a healthy way.... What I mean by putting those back together is learning healthy, new techniques or changing those that you previously had. Because when you get down to that point of being so open, you can then start to think critically about things that you were doing or reflecting on your actions in regard to health and wellness. (Post-Walk)

For this participant, one of the outcomes of hardship was that it forced her to critically examine negative cognitions about her abilities, her body, and herself as she experienced physical challenges associated with the Trail. The ineffectiveness of normal coping strategies enabled her to re-assess assumptions about herself and provided an opportunity to develop new and healthy responses that could potentially apply beyond the Trail. Breaking down facilitated rebuilding new, healthy responses to the challenges she faced on the Trail, which can then be translated to everyday life challenges.

### 11.3. *Breaking through*

For some tribal members, dealing with the physical and emotional stress did not come naturally or easily. Attempts to re-establish equilibrium or make sense of the disequilibrium promoted at times disengagement or distancing oneself from the experience. At stages throughout the Walk, individuals demonstrated or explicitly expressed resistance by disengaging from the group, becoming angry with the process, or discussing leaving the Trail. The process of giving oneself permission to consider disengaging or distancing from the challenge facilitated lower resistance to the challenge itself and allowed for room to make the cognitive shift to [re]embrace the challenge.

All participants eventually found ways of dealing with, pushing through, moving from strategies of distancing to strategies of embracing the challenge, and in some cases, reconnecting to strengths of self and others. Strategies included drawing on support from others on the journey or drawing on culturally-significant understandings of the challenge to make sense of their experiences. Reciprocity and earned knowledge is consistent with an Indigenous epistemology and was unique to tribal participants' understanding of the challenges. For this participant the Walk provided a tangible, embodied opportunity to invest in earning knowledge, a culturally-specific approach to the challenges of the Trail:

I do not deserve to have this knowledge just handed to me.... Making myself physically work at it was a way that was tangible, you could feel yourself working at something and that made me feel like, "Okay, I'm actually trying to do something here." It might just be walk an extra five miles, but I'm trying to push myself to do something that hurts and makes me uncomfortable because I want to somehow offer something. (Post-Walk)

Hardship as an offering is an explicitly Indigenous response, and a component of this project that sets it apart from other types of wilderness education or therapy that also intentionally challenge participants.

Walking and being challenged in unfamiliar places was demanding, but empowering. Some were surprised by their abilities

to manage the hardship: "I learned that I was stronger than I thought ... it was surprising to me [and] I took that away – I'm stronger than I thought" (Post-Walk). Although WEP-based interventions stress the recognition of personal strengths and those of others, the process of breaking down and breaking through to facilitate this recognition is not examined in the WEP literature. As participants drew on renewed personal and collective strength, they began to discern what is healthful for themselves and self-monitor their body and abilities. For example, one participant was surprised at her ability to go as far as she did and her desire to go even further, but she also recognized the power of and importance of self-care and how self-care is inextricably linked to the care and well-being of others:

I went longer than I thought I was going to, I would've wanted to go even more, but at the same time recognizing that in order to take care of myself – that allowed somebody else to go on and do what they could do for themselves. So it's finding that balance of being able to be weak or be strong, or give or take, that flow that happens between people and families and communities that sometimes I think we have blocked off in our world today. (Post-Walk)

In addition to finding that she could go further than she had expected, she articulated an opportunity to learn about herself and a new understanding that being self-aware about the limits of her abilities and caring for herself was inextricably linked to others' ability to go forward. These relational responses to understanding the role of self in relationship to others, demonstrates a culturally-rooted relational worldview. Her own actions were fundamentally tied to actions and opportunity for others.

Another tribally-specific understandings of the hardship included approaching Yappalli as ceremony. From an Indigenous perspective, ceremonies often include some element of sacrifice or hardship in order to ask for and receive knowledge or spiritual cleansing. Approaching discomfort through the lens of ceremony as a meaningful sacrifice allowed this participant to give meaning to the discomfort and draw on previous, culturally-specific experiences as a way of dealing with the hardship:

And if I [approach] this as a ceremony I have a certain set of expectations and I just know things are going to be hard. I just know things will be – they are supposed to be hard, you know? And so you do not shy away from it; you just accept it and you figure out how you can learn from it. (Post-Walk)

Ceremony is an Indigenous approach to knowledge transmission and places an individual in context within a relational world (Cajete, 2000). For participants drawing on experiences of engaging in ceremony, approaching the Walk from this perspective allowed them to depart from individual sacrifice and connect it to a higher significance.

## 12. *Out of the head and into the body*

Experiential learning reverses a traditional sequence of information assimilation. While typical Western education begins with receiving, assimilating, and specifying application of data and then testing the application; experiential learning begins with action and moves to observation of the effects of that action (Wurdinger and Priest, 1999). Health promotion that seeks to reconnect women with their bodies and bodily experiences of health and health practices should consider this reversal in facilitating behavioral health change through experiential, culturally place-based learning that integrates body, mind and spirit:

When you get out of your head and into your bodies, you start

getting into a realm that's not about intellectual anymore.... Then it gets into a way of changing behavior that's not about cognitively making the shift. But you're bodily making the shift ... your body makes a shift first, and that helps you change how you think about it, as opposed to interventions that say, "Change your thinking, and that will affect your body." (Pre-Walk)

This participant goes on to suggest that embodied learning and reciprocity resonate with tribal members, suggesting the value of interventions and health programs rooted in tribally-specific values:

We know we need to take our vitamins. We know we need to go for a walk, but that intervention needs to resonate with our heart and our body.... The walk is one way to get to that body place. Literally, you're physically walking. You're praying. You're asking for guidance and support for this. We believe in reciprocity. That's another [Choctaw] value. I'm not going to ask for something and not give something back. I have to give something back, so what am I going to give back? ... That's when we have that ah-ha. We get it. It is not in the head get it. We all know what we should be doing to be healthier. That's not the problem. We don't need more education. (Pre-Walk)

Health interventions that get outside of a cerebral focus on information transmission and engage a more holistic approach to include the body may be more effective in tribal communities with traditions of experiential learning that bridge relationships between mind, body, spirit and place.

### 13. Reflecting and [Re]-connecting

A unique aspect of the Walk as a site for future interventions is that it moves beyond typical mental health services within traditional medical settings to a holistic environmental approach by incorporating embodied experiences facilitated by physically engaging with tribally-significant places. The challenge of the Trail pushed participants to reflect deeply on their own health in part because many of them were unfamiliar with physically challenging themselves in this way and were forced to recognize the state of their health. Prior to the Walk many participants described health as a state of balance between mental, physical and spiritual aspects of their lives. Yappalli provided the opportunity to connect with their bodies and experience the embodiment of this balance:

Before [balance] was a very abstract concept for me. Something I was aiming for but didn't actually think was a possible goal to achieve. And on the trip I actually felt like there were definite moments when I felt like my body and my mind were in balance.... It was nice to reach those feelings and feel like, "look at what my body is doing. Look at how much energy I have. Look at how I am experiencing this world around me." ... And being able to pinpoint and feel those moments, now it's not an abstract idea anymore. Now I know what my goal is. I felt it. So it feels much more doable ... to get back to a place like that because I know that I've done it before. (Post-Walk)

This recognition not only led to discoveries about personal health, it motivated this participant to make changes in her behaviors to maintain that feeling after the Walk. These types of experiences may prove to be a successful motivator for behavioral health changes:

Now I am trying to get back into that feeling of being connected to my body physically and being connected to my emotions and what I need and knowing how to balance and regulate those

things.... I feel like that trip helped me recognize that balance and I am trying to make sure that I stay in that area. (Post-Walk)

Participants described changes to their health behaviors that were motivated by their experiences. These included changing their diet, facilitated in part by recognizing food as "fuel" when faced with the physical challenges of the walk. Other goals included increased physical activity. For some this resulted from the recognition that it felt good to be physically engaged with their body and a desire to return to that feeling. For others, the inability to participate in the Walk at a level they had desired because of limited physical capacity inspired them to increase physical activities and improve their health.

A final motivation for behavioral health changes resulted from the hardship of the Trail leading to new respect for the strength of ancestors and the opportunity to honor that strength through healthy living. This project was different from historical trauma memorial events or walks that have focused on healing by centering the trauma of the experience. In contrast, Yappalli stressed reconnecting to ancestral strength and visions of health. It emerged as a way to reflect on their own behaviors by recognizing that health is a relational obligation:

By walking [the Trail] I recognized what my ancestors had put before me in a way that just reiterated, "Oh, no. You belong and this is your responsibility." It's not that I just belong but now I have a responsibility, and now that I've walked it I have an accountability. Now that I've walked it, I have action that I have to take. That's always been there.... It was there, but it was more in my head. It wasn't in my body in the same way. I would say it was transformative in that way for me. (Post-Walk)

Relational responsibilities that emerged in post-Walk interviews suggest motivations for behavioral health change and implications for intervention designs that draw on TEK and tribal values of accountability to ancestors and future generations. These were enabled in part by recognizing the sacrifice of their ancestors through their own experiences of hardship. Being on the Trail changed tribal members' understandings of this event and revealed motivations for and pathways toward healthier lives, families, and communities.

And the role of place in this intervention was an integral component of participants' new, renewed, and [re]connected understandings of this significant event, the role it plays in contemporary health, and motivations for improving individual health behaviors. In a post-Walk interview, one participant describes the relief she felt at recognizing the existence of beauty on what she had previously imagined as all "horrible and a death march". Village Creek State Park came up in the post-Walk narratives of every tribal member. This particular portion of the Walk preserves a dramatic portion of the Trail of Tears. Most ridges and mountains of Arkansas have a foundation of solid bedrock, but Crowley's Ridge in Village Creek State Park has a foundation of clay, sand and gravel (Arkansas Department of Parks and Tourism, n. d.). This creates an erosive nature and on this portion of the Trail tribal members walked through deep ravines that had been created in part by the sheer number of people that walked the Trail in the 1830s. Although an intense immersion in the magnitude of the Removal, it is also a remarkably beautiful portion of the Trail forested with leafy trees and a cool breeze at the time participants visited. This contradiction of trauma and beauty co-existing in one place served to highlight each other, reinforcing the discovery of beauty by placing it in contrast to understanding the pain and suffering of the Trail:

When I used to reflect on the trail, I'd think about literally the

Trail of Tears. It's all, this trail, the trauma, and the disaster for people. Now through this project, I've been really thinking about it as, not so much about being stuck in the trauma or the drama of the trauma, but it's really to me become the trail of hopes and dreams that our ancestors walked this trail with a vision [of health] for us in mind. (Pre-Walk)

This experience changed images of the Trail as only trauma and disaster to a site of hopes and dreams for the future health of the Choctaw Nation.

#### 14. Discussion

A Western approach to health service delivery is rooted in brief in-person interventions in a medical or professional setting where client and practitioner talk about behavioral changes. These often include imagining or examining change taking place outside of the therapeutic setting. This analysis suggests that engagement with place and experiential learning facilitated changes in health beliefs, attitudes, and potentially behaviors that may not successfully occur in a typical, brief therapy session. Getting out of the office/clinic and into the world may be particularly effective in promoting positive health behaviors in Native communities. Deep engagement outside of traditional health service settings should be considered in intervention design and current health services. Participants explicitly described the power of physically engaging with the Trail and considering its significance for tribal health as fundamentally different than discussing it in meetings and conferences or talking about health in doctors' offices, clinics, at kitchen tables or church gatherings.

The physical experience of walking and engaging with the Trail generated significant personal reflection, corporeal experiences, and new ways of thinking about health that may not have originated without the unique location and experiential design of this project. This complements evidence from WEP and suggests that place-based interventions rooted in experiential learning are compatible with Indigenous epistemologies and may prove more effective in AIAN communities. Culturally-specific methods for accessing learning should inform health promotion and Indigenous approaches to knowledge acquisition that include experiential learning and reciprocity should be included in intervention design. Wilderness experience programming-informed interventions should consider (1) the ability of challenge and outdoor experiences to facilitate changes in personal health behaviors and (2) integrating cultural understandings of the role of hardship in knowledge acquisition. Healing through reconnection to the body might be particularly relevant to work with Native women who are members of communities who have experienced historically traumatic events.

Previous findings have demonstrated that individual Native health cannot be examined independently from the unique socio-historical context of tribal communities, particularly historical trauma and associated health outcomes, and that Indigenous worldviews should be integrated into physical and mental health practice (Walters et al., 2011a). Many Western approaches attend to the individual in isolation, while many Indigenous approaches tend to individuals as components of the whole with obligations to give, teach, or share with community. In many Native communities, individual experience is inextricably linked to the collective.

This research suggests that reconnecting to ancestral histories, bridging past and present, and emphasizing narratives of survival and resilience may provide unique opportunities for health interventions in Native communities. It also suggests that health promotion requires more than culturally relevant messaging and that experiential learning in places of cultural and historical

significance might be most effective in challenging constructions of historical traumatic events and understandings of self and tribe in relation to those events. Not only did Yappalli emerge as an opportunity to honor that ancestral journey, tribal members bodily recognized that caring for their own health and the health of the Tribe is an ongoing way of fulfilling ancestral obligations to honoring that journey and vision. Health providers and systems should consider incorporating this perspective in holistic approaches to health services and interventions.

This research shows promise with broad implications for interventions aimed at myriad health concerns in Native communities such as obesity and cardiovascular disease, mental health conditions, and substance use. In the three months prior to the Walk, some participants began working toward individualized health goals that included increasing physical activity, losing weight, and abstaining from alcohol. One participant lost weight in readiness for the Walk and continued toward her goals after the Walk. She has lowered her BMI and lost over 60 pounds (and has sustained this loss for over three years). Another continued walking after returning from the Walk until she reached her goal of 322 miles – the total mileage of the first removal route. While many participants talked about changes in health behaviors they had made after this Walk, research is needed to ascertain if they sustained commitments to attitudinal or behavioral changes past post-Walk interviews.

#### 15. Limitations

Participants in this sample were similar to each other in their orientation to health promotion, recognition of the significance of historical trauma in contemporary health disparities, and a shared belief in the importance of cultural and ancestral knowledge. The group was primarily women who work in health service delivery or research. We do not know if the same findings would emerge in a group less versed in historical trauma, health and health services, a group with more male participants, or for all members of CNO. Findings may be transferrable to other communities, but we are unable to determine replicability given limitations of the design. Additionally, because post-Walk interviews took place approximately three months after the walk, we are unclear about the long-term effects of Yappalli on participants' attitudes and health behaviors.

#### 16. Future research

This research calls for a closer examination of the impact of Yappalli on long-term changes in individual health attitudes and behavior. Future research might also expand on the integration of Choctaw-specific health values, increased relationships with other tribal members, and stronger tribal identities and understandings of "what it means to be Choctaw" articulated through this project in health interventions and program design. And finally, the role of relational responsibility in tribal health deserves a more thorough investigation.

#### Funding

The authors disclosed receipt of the following financial support for the research and authorship of the article: William P. and Ruth Gerberding Endowed Professorship and the Indigenous Wellness Research Institute at the University of Washington and the Choctaw Nation of Oklahoma. Research reported in this publication was supported by the National Institute on Drug Abuse of the National

Institutes of Health under award number HHSN271201200663P and award number R01DA037176 and the National Institute on Minority Health and Health Disparities of the National Institutes of Health under award number P60MD006909. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

## Acknowledgements

We acknowledge the contributions of Karen Hearod, who served as Principal Investigator (PI) during the Yappalli pilot study, a tribal member whose leadership during the Walk invariably ensured its success and who continues to be supportive in her review of analyses and ongoing support as the project moves into new phases. We would also like to acknowledge Kristi Brooks, who transitioned into the Choctaw Nation PI role after the completion of the pilot study. The first author would like to thank Taryn Lindhorst for her outstanding assistance in developing the qualitative methods and analysis for this article. We are also thankful for the emotional and pragmatic support from all of the participants and volunteers from the 2012 Walk. And finally, we would like to acknowledge Sharon Ishcomer-Fleming's enduring spirit and her vision and support in the development of Yappalli.

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