BODIES DON’T JUST TELL STORIES, THEY TELL HISTORIES

Embodiment of Historical Trauma among American Indians and Alaska Natives

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Abstract

Increasingly, understanding how the role of historical events and context affect present-day health inequities has become a dominant narrative among Native American communities. Historical trauma, which consists of traumatic events targeting a community (e.g., forced relocation) that cause catastrophic upheaval, has been posited by Native communities and some researchers to have pernicious effects that persist across generations through a myriad of mechanisms from biological to behavioral. Consistent with contemporary societial determinants of health approaches, the impact of historical trauma calls upon researchers to explicitly examine theoretically and empirically how historical processes and contexts become embodied. Scholarship that theoretically engages how historically traumatic events become embodied and affect the magnitude and distribution of health inequities is clearly needed. However, the scholarship on historical trauma is limited. Some scholars have focused on these events as etiological agents to social and psychological distress; others have focused on events as an outcome (e.g., historical trauma response); others still have focused on these events as mechanisms or pathways
by which historical trauma is transmitted; and others have focused on historical trauma-related factors (e.g., collective loss) that interact with proximal stressors. These varied conceptualizations of historical trauma have hindered the ability to cogently theorize it and its impact on Native health. The purpose of this article is to explicate the link between historical trauma and the concept of embodiment. After an interdisciplinary review of the “state of the discipline,” we utilize ecosocial theory and the indigenist stress-coping model to argue that contemporary physical health reflects, in part, the embodiment of historical trauma. Future research directions are discussed.

Keywords: Historical Trauma, Embodiment, Stress, American Indian, Alaska Native, Native American, First Nations, Indigenous

INTRODUCTION

American Indians and Alaska Natives (AIANs) throughout North America suffer devastatingly high rates of health disparities, many of which are linked to land loss, cultural devastation, and a lack of access to healthy environments (Walters et al., 2011). AIAN poor health is manifested in disproportionately high rates of chronic and communicable diseases coupled with inadequate living conditions, insufficient nutrition, and exposure to high levels of environmental contaminants (Barnes et al., 2010).

Health disparities among AIANs have been theoretically and empirically linked to social, economic, cultural, or political inequalities and not to any inherent Native trait or gene (Adelson 2005). Moreover, the complex political histories between AIANs and the federal government have limited the ability of AIAN communities to adequately address their own health needs. Ecosocial theory (Krieger 1999) has been put forth as an epidemiological framework integrating social and biologic conceptualizations of health and articulating how social inequalities become embodied in human beings. According to Krieger (1999), ecosocial theory posits . . . that how we develop, grow, age, ail, and die necessarily reflects a constant interplay, within our bodies, of our intertwined and inseparable social and biological history. . . Taking literally the notion of ‘embodiment,’ this theory asks how we literally incorporate biologically—from conception to death—our social experiences and express this embodiment in population patterns of health, disease, and well-being (p. 296).

Although classic social determinants of health (e.g., low socioeconomic status) contribute to poor health among AIANs, these factors do not sufficiently explain the high rates of poor health and mental health, particularly with respect to Post Traumatic Stress Disorder (PTSD), anxiety, depression, diabetes, cardiovascular disease (CVD), and pain reactions among AIANs (Walters and Simoni, 2002). As a result, scholars have turned their attention to examining how historical and societal determinants of health—and in particular historically traumatic events (e.g., forced relocation and boarding schools), microaggressions, and disproportionate exposures to lifetime trauma—impact not only contemporary AIAN health, but may persist for generations (Chae and Walters, 2009; Evans-Campbell 2008). Utilizing an ecosocial framework, one can examine health disparities among AIANs and question how social experiences, such as historical trauma (HT), have shaped health status.

AIANs have suffered numerous historical experiences of European colonization and the ongoing contemporary effects of colonization (e.g., oppression). The amass-
The purpose of this article is to explicate the link between HT and the concept of embodiment. Specifically, we will review the “state of the discipline” with respect to theoretical and empirical scholarship on historical trauma, intergenerational trauma, and embodiment across disciplines. Additionally, we will locate the “state of the discipline” in terms of AIAN theory development and empirical scholarship related to HT. Finally, building upon an expansive view of Indigenous health frameworks, such as the indigenist stress-coping model (Walters and Simoni, 2002), we argue that contemporary health and health risk behaviors are, in part, the embodiment of HT.

STATE OF THE DISCIPLINE: HISTORICAL AND INTERGENERATIONAL TRAUMA

Historical Trauma: Key Components
Historical trauma can be conceptualized as an event or set of events perpetrated on a group of people (including their environment) who share a specific group identity (e.g., nationality, tribal affiliation, ethnicity, religious affiliation) with genocidal or ethnocidal intent (i.e., annihilation or disruption to traditional lifeways, culture, and identity) (Walters et al., 2011). Such events include direct attacks on the community, as in the case of massacres, as well as indirect attacks, as in the case of destroying buffalo to near extinction. Individually, each event is profoundly traumatic; taken together they constitute a history of sustained cultural disruption and destruction directed at AIAN tribal communities. The resulting trauma is often conceptualized as collective, in that it impacts a significant portion of a community, and compounding, as multiple historically traumatic events occurring over generations join in an overarching legacy of assaults. For AIANs, cumulative HT events are coupled with high rates of contemporary lifetime trauma and interpersonal violence, as well as high rates of chronic stressors such as microaggressions and daily discriminatory events (Chae and Walters, 2009). Together, these historical and contemporary events undermine AIAN physical, spiritual, and psychological health and well-being in complex and multifaceted ways.

Historically Traumatic Events
The last 500 years of AIAN history has largely been a history of trauma and resistance. Beginning with the first contact between European “explorers” and AIAN communities and lasting into the present, AIAN people have been devastated by disease, warfare, forced migration, cultural genocide, racism, and poverty. Likewise, cultural practices, including languages, educational systems, spirituality, and the daily practices of everyday life were systematically attacked, oppressed or outlawed. HT is not a historical anecdote for contemporary AIAN peoples. The parents and grandparents of many AIAN people faced rapid social change and cultural destruc-
tion wrought by HT-based policies designed to “kill the Indian to save the man.” Specifically, by the mid-nineteenth century, American expansionist attitudes laid the foundation for massive American Indian removal policies. On the heels of the removal and reservation efforts, the U.S. government also instituted a boarding-school campaign with the express purpose of assimilation by removing AIAN children from their tribal communities and placing them in non-Indian run residential schools. Torn from family, land, and ancestors, children were forbidden to practice any form of their traditional ways of life and, instead, were forced to learn Western mannerisms and speak English (Evans-Campbell 2008). Physical abuse and neglect were commonplace, and high numbers of children were also sexually abused. Simultaneously, during this time period, the Court of Indian Offense legally mandated the prohibition of cultural and spiritual practices under threat of imprisonment or withholding of rations. The collective cultural disruption that resulted from these initiatives was profound.

Historical trauma also includes the systematic destruction of environment. Today, tribal lands are subject to some of the most invasive, toxic, and destructive environmental practices. Perhaps the best contemporary example of this can be seen in the rapid rise of diabetes among the Pimas and Maricopas when, after their water was diverted from their traditional lands for non-Native community and commercial consumption, the diabetes rate increased 500% (Bennett 1999).

Historical Trauma and Intergenerational Trauma: Empirical Support

Currently, the scholarship on “historical trauma” is limited, in part because the term itself has been used interchangeably with other terms such as soul wound, collective unresolved grief, collective trauma, intergenerational trauma, transgenerational trauma, intergenerational post traumatic stress, and multigenerational trauma (Palacios and Portillo, 2009), and also because the term has been used differentially across a number of studies. For example, some scholarship has focused on HT events as etiological agents to social and psychological distress (Palacios and Portillo, 2009; Walters et al., 2011), whereas others have focused on HT as an outcome—also known as either historical trauma response (Brave Heart 1999) or colonial trauma response (Evans-Campbell 2008)—which includes clustering of Native-specific expressions of distress. Others have focused on HT as a potential mechanism or pathway by which it is transmitted (e.g., storytelling or secondary traumatization (Palacios and Portillo, 2009)); and others still have focused on HT-related factors (e.g., collective loss or pain) that interact with proximal stressors (Whitbeck et al., 2004). The simultaneous use of the term “historical trauma” to encapsulate four different HT processes (as an etiological factor; as a particular type of trauma response and syndrome; as a pathway or mechanism to transfer trauma across generations; and as an HT-related stressor interacting with other proximal stressors) has hindered the ability to cogently theorize historical trauma and its impact on indigenous health across disciplines.

Despite these divergent conceptualizations, HT scholars have noted individual- and communal-level impacts of HT events on AIAN health. At the individual level, the impact includes impairments in family communication (Evans-Campbell 2008); mental health symptoms of PTSD survivor guilt, anxiety, depression and substance abuse (Whitbeck et al., 2004). At the community level, collective responses include the disruption of traditional customs, languages, and practices. Notably, despite exposure to historical and cumulative traumatic stressors, many Native people do not manifest psychopathology. Indeed, emerging research indicates that the very areas of Native culture that have been targeted for destruction (e.g., identity, spirituality,
traditional practices) may, in fact, be sites of resistance (Walters et al., 2011). Moreover, some communities commemorate HT events to signify and celebrate the ability of subsequent generations to thrive and survive after such events (e.g., the Trail of Tears commemorative annual walk among the Choctaw).

“A related field, intergenerational trauma, also recognizes collective traumatic events but is inclusive of natural disasters and other traumatic events (e.g., famine) that are man-made but not targeted with intention upon a particular group for social, cultural, ethnic, or political decimation or annihilation” (Walters et al., 2011, p. 10). As Walters et al. (2011) note, intergenerational trauma and HT research indicates that the impact of these massive traumatic events that target a collective may persist over generations (Nagata et al., 1999); that the trauma may have a greater effect on descendant survivors if both parents were exposed to the event (Yehuda 1999); that the trauma may be differentially experienced by men and women (Brave Heart 1999); and that the trauma can literally become embodied, manifesting as poor mental and physical health outcomes in descendant generations (e.g., Kuzawa and Sweet, 2009). Although descendants of survivors are not more likely than others to have poor mental health, they may be predisposed to higher stress vulnerability. Thus, when descendant survivors experience high levels of contemporary traumatic stress, they may be more likely than others to exhibit PTSD or related symptomology (e.g., Yehuda et al., 2005). Despite emerging research on HT and intergenerational trauma, few studies have focused on HT-related issues specific to AIAN populations. For example, recovery from historically traumatic events is compounded by the fact that AIANs remain living in the places where historically traumatic events occurred and experience constant reminders of these events. Additionally, there has been little articulation of how the chronicity of certain HT events (e.g., boarding school) might produce different mental and physical health outcomes over generations compared to acute but discrete HT events (e.g., massacre). It also appears that diverse types of HT events might yield very different trauma reactions—psychological and physiological. Our preliminary research, for example, indicates that HT events that disrupt ties to family, community, or place (e.g., boarding school, forced relocation) may be associated with depressive symptoms, whereas HT events that cause direct physical harm to community, body, land, or sacred sites are more likely to be associated with anxiety or PTSD symptoms (Walters et al., 2011). Finally, though we know that many people exposed to HT remain healthy, research has not explored factors related to maintaining health in the face of HT events.

EMBODIMENT AND HISTORICAL TRAUMA

Embodiment Overview
Recently, the body has emerged as a key focus in the social and behavioral sciences. In particular, researchers have begun to examine the impact of social and economic inequities on physical health and how embodiment of these inequities is multifaceted and influenced by social, cultural, economic, and biological processes. As Krieger and Davey Smith (2004) note, recognition of the link between the body and social inequities first gained attention in the 1840s when social scientists found that the impact of abhorrent working conditions, poor access to food, and inadequate health care in childhood led to premature mortality. However, it was not until the Depression Era that American researchers began to move away from “faulty gene” research to explore how social, economic, and political forces were expressed in bodies. Recently, research has attempted to examine gene-environment interactions as a way
to explore environmental impact on health outcomes. However, as Krieger and Davey Smith (2004, p. 94) state, shifting from gene-frequency concerns to determinants of gene expression, researchers called “into question the popular notion of “gene-environment interaction,” since “genes” do not interact with environments—only organisms do, with consequences for gene regulation and expression.”

Additionally, embodiment acknowledges that while bodies tell [his]stories, they reveal stories that are also not conscious, hidden, forbidden, or even denied by individuals or groups. Studying the embodiment of HT and corresponding health consequences allows us to determine the forces driving intergenerational patterns of health and disease among AIANs (Krieger 1999). Moreover, such knowledge will likely yield important directions for developing culturally relevant policies and practices to reduce AIAN health inequities and ultimately grow AIAN health and wellness for future generations.

**AIAN Relational Worldviews and Embodiment**

The concept of embodiment is consistent with AIAN spatial and relational worldviews that recognize the interdependency between humans and nature, the physical and spiritual worlds, the ancestors and the future generations (Walters et al., 2011). According to AIAN worldviews, environment, mind, body, and emotional health are inextricably linked to human behavior, practices, wholeness, and hence, wellness (Walters et al., 2011).

In recent years, a wholistic orientation that incorporates the interconnectedness of the mind, body, and spirit has gained acceptance, particularly in the fields of psychoneuroimmunology (Lyons and Chamberlain, 2006), epigenetics (Holliday 2006), cardiovascular disease (Kuzawa and Sweet, 2009), inflammation disorders (Jessop et al., 2004), and neuroendocrine and immune functions (Seeman et al., 2003).

**Epigenetics and Historical Trauma**

There is strong evidence that poor health outcomes are linked to genetic, environmental, and behavioral risk factors (Matthews and Phillips, 2010), yet the actual pathways and mechanisms, particularly biological and sociological mechanisms, for the intergenerational transmission of HT events among humans are hotly contested and remain open to debate. Specifically, the relative impact of HT on descendant physical and mental health is a point of contention, particularly among behavioral scientists. While some scholars have argued that the intergenerational effects of historical trauma (i.e., distal causes) are likely negligible once lifetime trauma exposures (i.e., proximal causes) are accounted for; other scholars point to preliminary evidence indicating that extreme environmental stress in one generation can alter health outcomes for descendant generations (Walters et al., 2011). Specifically, as Walters et al. (2011) note “these scholars point to the amassing of evidence at the cellular level that powerful stressful environmental conditions can leave an imprint or “mark” on the epigenome (cellular genetic material) that can be carried into future generations with devastating consequences” (p. 11). For example, inadequate prenatal maternal nutrition at key gestational developmental periods can lead to descendant offspring developing CVD in adulthood (Kuzawa and Sweet, 2009). The debate about which has the strongest or combined net effect on poor health outcomes and the persistence of health disparities remains open to ongoing empirical
verification; however, the preliminary evidence for intergenerational transmission of stress has critical implications for the study of HT among AIANs.

Several animal and, more recently, human studies have demonstrated pervasive and enduring effects of the neurobiological toll of stress on neurodevelopmental delays, hypothalamic-pituitary-adrenocortical (HPA) axis dysfunction, metabolic syndrome, CVD, immune system dysfunction, major depressive disorder, PTSD, compromised reproductive health and transgenerational effects of stress exposure on the health of offspring generations (Brand et al., 2010; Yehuda and Bierer, 2009). Moreover, different changes in HPA axis and related neuroendocrine systems are linked with different disease outcomes (Matthews and Phillips, 2010). For example, hypercortisolemia (abnormally high levels of cortisol) increases susceptibility to depression, hypertension, and diabetes whereas hypocortisolemia (abnormally low levels of cortisol) increases susceptibility to chronic fatigue syndrome, fibromyalgia, and PTSD (Matthews and Phillips, 2010). Emerging epigenetic and neurobiological research is beginning to provide evidence that neuroendocrine response to stress can be transmitted to future generations by means of nongenomic mechanisms—having major implications for how environmental stressors in one generation can influence the disease risk of subsequent generations (Matthews and Phillips, 2010). For example, maternal stress exposure studies indicate that maternal psychological and nutritional stress during pregnancy can lead to biological changes that predispose their offspring to diabetes, CVD, and other diseases (Kuzawa and Sweet, 2009). Finally, overfeeding and overeating during critical developmental periods following periods of poor nutrition could lead to metabolic adaptations over generations—particularly high CVD- and diabetes-related mortality in subsequent generations (interestingly, transmitted through the male line (Kaati et al., 2002)). Clearly, there is growing consensus that environmental influences contribute to health disparities by influencing biological processes and responses at key developmental periods throughout the life course and across generations.

In terms of AIANs, our own work has shown that a high proportion of AIANs have high levels of historical-trauma loss manifesting in thinking about the impact of land-based trauma, on a weekly, and in some cases, daily basis. Moreover, after controlling for contemporary trauma, we found that HT land-based events continued to have a significant effect on mental and physical health (Walters et al., 2011). These findings provide preliminary support that HT related to land losses may persist and also become embodied. Although we cannot conclude directionality given the cross-sectional nature of the survey data from this study, the findings illuminate some of the HT factors that may lead to poor health.

Although embodiment reminds us that we cannot exclude social, historical, or cumulative experiences and their corresponding impact on our health and wellness, and ultimately on population health disparities, parsing out these processes is difficult in HT research and requires a multilevel, integrated approach (Krieger 2005). However, this should not preclude our delving into the intricacies and complexities of HT research nor should we assume that HT is irrelevant because of the difficulties involved in disentangling its effect on health inequities from other traumatic stressors.

**Pathways to Embodying HT**

Biological expressions of HT may, in part, produce health disparities in a wide spectrum of outcomes—from chronic and persistent illnesses (e.g., diabetes) to poor mental health (e.g., PTSD, depression). From an ecosocial perspective, certain pathways to embodiment of HT are clearer given that some HT events are tied to exposures to noxious physical, chemical, biological, and psychosocial insults—all of
which can affect biological integrity at numerous interacting levels (Krieger 2005). Other pathways are much more challenging to investigate, but no less important. The net effect of these multiple, intersecting pathways leads to health inequities not only in the life course of an individual, but over generations.

Another relevant factor is the varied responses AIAN people have to HT, ranging from internalized oppression and substance use to community organizing around HT as a social movement strategy. From a theoretical viewpoint, the utility of an ecosocial framework and embodiment encourages the identification of potential testable hypotheses by systematically tracing pathways between HT events and their potential embodied expressions. Additionally, resistance, positive coping, and resiliency can be mapped by utilizing an indigenist stress-coping framework (Walters and Simoni, 2002) to identify how HT events not only have direct effects on wellness outcomes, but also how cultural protective factors (e.g., identity) can buffer the impact of these events on wellness outcomes. Importantly, pathways could also be traced across generations to examine how the cumulative effect of HT events, or perhaps type of events, continue to impact the health of the present generation.

**FUTURE DIRECTIONS: MEASUREMENT AND METHODOLOGICAL ISSUES**

Measuring the pernicious health effects of HT is daunting. Because HT is so difficult to measure, indirect methods (Krieger 1999) might be one way to infer the impact of HT on AIAN health. For example, with AIAN populations, exceedingly high rates of psychological and physiological distress and disparities have been identified as indirect indicators of not only structural and economic inequalities, but also of successive exposures to HT over generations. Although indirect approaches do not allow for investigation of issues related to intensity, duration, time period of exposure to HT—particularly generational cohort effects to HT events; indirect strategies could address whether HT-related losses or other factors presumed to be related to HT account for observed differences in health between dominant and subordinate groups (Krieger 1999) and in some cases between tribal members who experienced an HT event compared to tribal members who did not (e.g., Cherokees who were not removed in the 1830s vs. the ones who were relocated on the infamous Trail of Tears).

Slightly more direct routes would involve specifically measuring HT events, as well as their intensity, duration, and time period of exposure (Krieger 1999) for particular tribal populations. In some cases, there are opportunities to observe how an HT event within a particular tribe had differential impact on tribal members who either directly or indirectly experienced the event or descended from someone who directly or indirectly experienced the event. Additionally, depending on health outcomes under study, chronic and acute HT exposures (e.g., one day massacre) may matter, as will the intensity of the HT event, its duration, and the frequency of exposure to HT events in a particular generation or across generations. Moreover, the daily wear and tear of HT-event exposure (e.g., boarding school living; experimental bombing on traditional homelands) may pose health hazards distinct from those resulting in major acute HT events (e.g., massacre) (Krieger 1999). Finally, chronicity of events over one’s lifetime and over generations may have health consequences different from those ensuing from one or two events over generations. All of these factors have to be considered when measuring HT. Moreover, future research should work with tribal communities to identify resiliency responses, resistance strategies, positive coping and other factors that buffered the impact of HT on tribal, communal, familial, and individual wellness.
Epidemiologic principles can provide useful guidance for measuring and analyzing self-reported experiences of HT and its effects on health and wellness (Krieger 1999). Drawing on Krieger’s (1999) tenets for measurement of the health effects of discrimination, to examine the health effects of HT, researchers would need to do the following: assess the variability in the time period since exposure to the HT within a tribal community, the family, and for the individual; determine: (1) the domain or level of specificity for examination (global HT as a variable or specific HT events that could be examined individually or collectively); (2) the intensity and frequency of exposure (e.g., boarding school vs. massacre survival); (3) the relevant etiologic historical period; (4) the variability of targets of HT (land, objects, body, mind, spirituality) and whether descendancy is direct from HT survivors or indirect (e.g., individual has an aunt who attended boarding school vs. a parent); (5) the developmental age and time for the person or ancestor/s who experienced the event; and (6) the destructive or disruptive valence of the HT event (e.g., near-death experience, direct attacks on person, place, object, culture vs. indirect via disruptions in relationships to persons, place, culture).

Developing culturally valid and reliable measures is a major concern in HT research. Measures should include questions on specific HT events and be separate from HT sociopsychological responses (e.g., historical trauma response). Moreover, the HT-event questions should be clear and direct and address multiple facets of an HT event for measures that study the health consequences of a particular HT event. This is an easier approach when working with a particular tribal community, more challenging when working in urban settings where many different tribes live and AIANs tend to descend from multiple tribes. In the case of urban HT research, it may be necessary to develop HT-event items that cut across tribes, where members of different tribes (each with its own different specific HT history) who share similar cross-cutting HT events could say “yes” to an item that they could plug themselves into (e.g., been forcefully relocated)—although the cultural and tribal specificity of that particular event would be lost with such a measure. Global HT event indexes could be developed (e.g., Walters et al., 2011) that measure different types of HT events within an individual’s lifetime and across generations. In other words, the respondent may be asked if he/she experienced a particular HT event or set of events and then would be given follow-up stem questions asking if his/her parents, grandparents, etc. also experienced the same event (e.g., forced relocation or boarding school attendance). We have successfully used this approach, albeit with limitations, in urban AIAN samples. It is important to note that global indexes or a summary HT event measure would likely yield underestimates of HT exposure. Moreover, HT events that are tied to specific generational cohorts (e.g., massacres in the grandparent generation) may require the respondent to have “knowledge” or consciousness of the HT event itself, as well as their own familial experience of that event. This approach will likely yield an underestimate of HT transgenerational experiences, in part because survivors and descendant offspring of HT experiences tend not to want to “talk” about the event, thus the respondent may not have specific knowledge of the event from their family of origin. Thus, it is important to identify qualitative and archival methods that will supplement some of this information to better interpret HT data.

CONCLUSION

This article has provided conceptual links among HT and overall health and well-being among AIANs. Future research is needed to further discern the relationship among proximal and distal HT factors on specific health outcomes and to identify
important factors, such as identity, that buffer against the impact of such potentially traumatic losses. These protective factors may play a significant role in regulating biological mechanisms. Future research will need to better elucidate the biological pathways and mechanisms associated with HT effects on physical health. Moreover, even if HT makes only a moderate contribution to our understanding of population health in future studies, modest findings indicate the importance of examining further potential nongenomic biological mechanisms and pathways that might allow AIAN bodies to reveal their histories even as AIAN communities are beginning to find the words and [re]generating the practices to heal.

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