



How does the consideration of Indigenous identities in the US complicate conversations about tracking folk racial categories in epidemiologic research?

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Abstract

In public health research, tracking folk racial categories (in disease risk, etc.) is a double-edged tool. On the one hand, tracking folk racial categories is dangerous because it reinforces a problematic but fairly common belief in biological race essentialism. On the other hand, ignoring racial categories also runs the risk of ignoring very real biological phenomena in which marginalized communities, likely in virtue of their marginalization, are sicker and in need of improved resources. Much of the conversation among epidemiologists and philosophers of medicine concerning the issue of tracking folk racial categories in public health research springs forth from largely black/white binarized health inequities. While health inequities between black and white Americans are certainly a very important topic, I am interested in investigating the complications to this conversation about the potential harms of tracking folk racial categories in public health research generated by the consideration of Indigenous identities in the US—groups whose health inequities are typically tracked based on the folk racial category of “Native American” or “American Indian,” but whose unique identity categories and community membership problematize the current spectrum of approaches to tracking folk racial categories in epidemiologic research. This paper will draw on scholarship by and about Indigenous people in the US context to address an undertheorized facet of the conversations concerning the potential harms of tracking folk racial categories in public health research, including the potential undermining of American Indian sovereignty and Indigenous epistemologies. I will end on some methodological considerations inspired by the inclusion of Indigenous identities in the US in the conversation about tracking folk racial categories in epidemiologic research.

Keywords Philosophy of race · Philosophy of epidemiology · Philosophy of medicine · Philosophy of human biology · Indigenous philosophy · American Indian

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philosophy · Indigenous epistemologies · Indigenous research methodology ·
Research sovereignty

1 Introduction

In public health research, tracking folk racial categories (in disease risk, etc.) is a double-edged tool. On the one hand, tracking folk racial categories is dangerous because it reinforces a problematic but fairly common belief in biological race essentialism. On the other hand, ignoring racial categories also runs the risk of ignoring very real biological phenomena in which marginalized communities, likely in virtue of their marginalization, are sicker and in need of improved resources. Much of the conversation among epidemiologists and philosophers of medicine concerning the issue of tracking folk racial categories in public health research springs forth from largely Black/white binarized health inequities.¹ While health inequities between Black and white Americans are certainly a very important topic, I am interested in investigating the complications to this conversation about the potential harms of tracking folk racial categories in public health research generated by the consideration of Indigenous identities in the US—groups whose health inequities are typically tracked based on the folk racial category of “Native American” or “American Indian,” but whose unique identity categories and community membership problematize the current spectrum of approaches to tracking folk racial categories in epidemiologic research.^{2,3} This paper will draw on scholarship by and about Indigenous people in the US context to address an undertheorized facet of the conversations concerning the potential harms of tracking folk racial categories in public health research, including the potential undermining of American Indian sovereignty and Indigenous epistemologies. I will end on some methodological considerations inspired by the inclusion of Indigenous identities in the US in the conversation about tracking folk racial categories in epidemiologic research (Fig. 1).

¹ Although there has been some important studies regarding health inequities of groups outside of the Black/white binary, for the most part, the epidemiologic discussions occurs within the binary. For examples of these studies see: Neophytou et al. (2018), Mak et al. (2018), Marques et al. (2017), Nishimura et al. (2016), Oh et al. (2012), and Lichtensztajn et al. (2014).

² While as an Indigenous person, I prefer to use the term “Indigenous” to refer to myself, I use “Indigenous identities in the US,” “American Indian,” and “Native American” interchangeably in this piece to refer to the folk racial categories used by Indigenous peoples in the United States.

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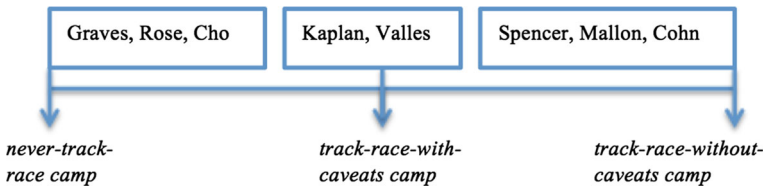


Fig. 1 Spectrum of approaches to tracking folk racial categories in public health research

2 What's the current conversation about tracking folk racial categories in epidemiologic research?

In this section, I will briefly survey the spectrum of approaches to tracking folk racial categories in public health research. I will then focus on two particular approaches, those of Jonathan M. Kaplan and Sean Valles, and detail the caveats they propose for the use of folk racial categories in public health research. I will return to the caveats offered by Kaplan and Valles later in the paper to apply them to examples concerning the specific case of American Indian folk racial categories.

Philosophers and scientists debate both the usefulness as well as the potential for harm in the use of folk racial categories in public health research. Folk racial categories are the socially identified racial categories used on US census forms, among other sources.⁴ Contributors to the debate weigh the usefulness and potential for harm in the tracking of folk racial categories against one another in order to determine whether or not folk racial categories ought to be used in public health research. Some scientists and philosophers argue that folk racial categories are not useful at all, and since their use has potential for harm, they ought not be employed in epidemiologic and public health research.⁵ Within this camp are philosophers and scientists who argue that even if folk racial categories are useful in some ways, the potential harm is too great for their implementation in public health research. I refer to this camp as one end of a spectrum of approaches called the *never-track-race camp*. At the opposite end of the spectrum, some scientists and philosophers argue that folk racial conceptions are useful, and have minimal potential for harm, so their use in public health research is encouraged.⁶ I call this other far end of the spectrum of approaches the *track-race-without-caveats camp*. Philosophers and scientists of a more moderate persuasion make up the center of the spectrum and argue folk racial categories are useful for collecting and organizing data, for tracking racial inequities (in access to healthcare, in exposure to toxins and pollution, etc.), for making public health recommendations, and for making policy recommendations, but that their potential for harm is strong and must be accounted for and mitigated with specific restrictions on their use.⁷ I refer to these more moderate positions in the spectrum as the *track-race-with-caveats camp*.

⁴ For more examples, see: Kaplan (2010, 2011).

⁵ For examples, see: Cho (2006) and Graves and Rose (2006).

⁶ For examples see: Cohn (2006), Mallon (2013) and Spencer (2013).

⁷ For examples, see: Valles (2012) and Kaplan (2010).

First, representing the never-track-race camp, are the views of Joseph Graves, Michael Rose, and Mildred Cho. Graves and Rose (2006) argue that folk racial categories are too dangerous, with great potential for harm that outweighs any usefulness of their implementation. Cho (2006) argues that folk racial categories are not useful at all since they are based on flawed and often racist conceptions of physiological differences between arbitrarily defined groups. Cho concludes that, with regard to research that does not specifically concern perceived aspects of race or ethnicity, “there is no ‘baby in the bathwater,’ no clinical or scientific utility to racial and ethnic categories” (2006, p. 499).

On the other end of the spectrum, Quayshawn Spencer, Ron Mallon, and Jay Cohn represent the track-race-without-caveats camp. Spencer holds to a line of argument that suggests there are indeed bio-genetic differences between groups referred to by folk racial categories and that tracking folk racial categories tracks these real, genetic dissimilarities (2013). For Spencer, folk racial categories’ usefulness exceeds any potential harm. Mallon presents an analysis of the relationship between folk racial categories and what he sees as biologically essential differences between groups, pinning the differences between groups on inherent bio-cognitive differences. Cohn calls the use of folk racial categories in public health research a “useful means of improving diagnostic and therapeutic efforts” and assesses the risk of eliminating folk racial categories from medicine to be more dangerous than altering the use of folk racial categories (2006, p. 552).

Many, if not most, philosophers and scientists contributing to the conversation about the usefulness and potential harms of folk racial categories in public health research seem to fall between the previously described extreme ends of the spectrum. I’ve chosen to focus on just two of these views: that of Kaplan (2010) and that of Sean Valles (2012).⁸ The concreteness of the caveats Kaplan and Valles offer on the use of folk racial categories allow for easy application to the challenging scenarios presented when the conversation is expanded from Black American/white American health inequities to the health inequities faced by those who fall into the folk racial category of “American Indian.” I will return to this application later in the paper.

Jonathan M. Kaplan certainly ranks the danger in using folk racial categories in public health research as very high, noting that reifying biological race essentialism is a serious liability; however, Kaplan also ranks the usefulness of using folk racial categories as very high for rather unique reasons. Kaplan argues that though there is likely no significant genetic homogeneity within any given group referred to by a folk racial category, the creation and continued maintenance of folk racial categories contributes to biologically real health inequities between groups. Kaplan states that though race is socially contingent and sociopolitically constructed, and that there is little genetic homogeneity within folk racial categories, race is nonetheless still

⁸ Kaplan and Valles actually offer very similar caveats on the use of folk racial categories in the public health research. In my explication of their views, I focus on their recommendations as separate: Kaplan recommends tracking racism, not race, while Valles recommends offering more specific parameters for risk than mere race; however, I believe Kaplan recognizes the value of and presupposes the merit of giving more specific parameters for risk, while Valles also notes that folk racial categories are useful in tracking health inequities caused by racism. For ease of articulation, I use each author as representatives of their primary caveat in this paper, though I think it should be noted that their views share important similarities.

biological “because racism (and more generally a society organized by race) has profound biological effects” (2010, p. 293). Kaplan suggests that the impulses that lead to the creation of folk racial categories in the first place are the likely the contributors to health inequities: namely, racism. Kaplan states: “...taking self-identified race into account in medical decision making might make sense locally, given that self-identified race *is* a good predictor of one’s experience with racial discrimination, prejudice, and racism more generally” (2010, p. 293). Thus, according to Kaplan, tracking folk racial categories in public health research is also tracking the effects of racism and living within a racialized society. I believe that Kaplan is endorsing the use of folk racial categories in epidemiologic research, but with an important caveat: folk racial categories should be used in public health research, but only with the understanding that biology doesn’t make race; race makes biology. The perceived health inequities between folk racial categories are due to “racial discrimination, prejudice, and racism more generally,” not due to any essential biology of race (2010, p. 293).

Arguing along similar lines as Kaplan, Sean Valles notes that there is danger in the use of folk racial categories in public health research, and argues that if public health researchers use more specific sub-categories in their recommendations than mere race, some of the harm of using folk racial categories in public health research can be mitigated (Valles 2012). Valles presents two case-studies, the Finnish descendant exception to the public health association between Caucasianness/whiteness with cystic fibrosis and the immigrant Black-American exception to the public health recommendation that African-Americans in general avoid salt because of increased risk of hypertension, to highlight that there is heterogeneity of risk among racialized sub-populations in public health recommendations (Valles 2012). Valles shows that though epidemiologic research and recommendations often treat racialized subcategories of Americans as homogenous with respect to risk, there are actually “low-risk islands within seas of high risk” and that “mere race” is privileged in public health recommendations “when delineating which populations have public health risks” (2012, p. 405). The problems of homogenizing risk and privileging folk racial categories “combine to impede the dissemination of more nuanced data about heterogeneity of risk within racial groups” (2012, p. 405). Valles’ important caveat on the use of folk racial categories in public health research is: folk racial categories can be used in public health research, but only alongside “nuanced/specific representations of the relevant at-risk populations” (2012, p. 406). I agree with both Valles and Kaplan in part, but believe their conversation is complicated significantly by the inclusion of Indigenous identities in the US context.

3 What are some of the unique features of Indigenous identities in the US?

Much of the discussion of the usefulness and potential harm of folk racial categories in public health research surveyed in the previous section is generalized from specific examples of health inequities between Black Americans and white Americans. While these health inequities are important and demand serious attention, I believe the conversation is complicated when it is refocused on examples from the folk racial category of “Native Americans” and “American Indians.” In this section, I will ges-

ture at some of the unique features of Indigenous identities in the US I will focus on four specific features: (1) Political Status versus Racial Identity, (2) Hypodescent versus Blood-Quantum, (3) The Indian-Grandmother Complex, (4) The Indian Health Service (IHS) and Community Location. It is my goal to show how these features complicate the conversation about the use of folk racial categories in public health research by introducing potential harms that as of now appear to be unaccounted for. I will also discuss how the caveats provided by Kaplan and Valles are less promising means of mitigating the harms of folk racial categories in public health research with respect to the unique features of Indigenous identities in the US.

Before jumping into the unique features of Indigenous identities in the US, it is important to briefly describe the two primary federal epidemiological monitoring systems concerning Indigenous people in the US. Epidemiologic data concerning the health risks to American Indian people is collected through several sources, two prominent sources of self-reported data being The Behavioral Risk Factor Surveillance System (BRFSS) and Indian Health Services (IHS).

The Behavioral Risk Factor Surveillance System (BRFSS) is an important source of self-reported information about health and wellness in the US. The BRFSS is “the nation’s premier system of health-related telephone surveys that collect state data about US residents regarding their health-related risk behaviors, chronic health conditions, and use of preventive services.”⁹ Since the BRFSS is conducted over the phone, it is a unique opportunity for “more than 400,000 adult[s]” to be interviewed every year, “making it the largest continuously conducted health survey system in the world.”¹⁰ The BRFSS data is collected and used for “targeting and building health promotion activities.”¹¹ Data is sponsored and utilized by the “CDC National Center for Chronic Disease Prevention and Health Promotion; other CDC centers; and federal agencies, such as the Health Resources and Services Administration, Administration on Aging, Department of Veterans Affairs, and Substance Abuse and Mental Health Services Administration.”¹² The questions on the 2016 and 2017 BRFSS questionnaires concerning American Indian identities focus on self-identified racial categories and whether or not the respondent meets qualification (e.g. tribal enrollment, blood-quantum minimum, status as dependent on tribal member) for the Indian Health Service (IHS).¹³ The BRFSS data is limited to respondents who can be reached by landline or cell phone and who are willing to participate in a phone survey.

⁹ “The Behavioral Risk Factor Surveillance System,” (2014), Centers for Disease Control and Prevention, Accessed October 1st, 2017. Available at <https://www.cdc.gov/brfss/about/index.htm>, and on file with author.

¹⁰ “The Behavioral Risk Factor Surveillance System,” (2014), <https://www.cdc.gov/brfss/about/index.htm>.

¹¹ “The Behavioral Risk Factor Surveillance System,” (2014), <https://www.cdc.gov/brfss/about/index.htm>.

¹² “The Behavioral Risk Factor Surveillance System,” (2014), <https://www.cdc.gov/brfss/about/index.htm>.

¹³ pages: 11, 17, 18, 40, 67, 68 of “Behavioral Risk Factor Surveillance System 2016 Questionnaire,” BRFSS, accessed October 1st, 2017. Available at https://www.cdc.gov/brfss/questionnaires/pdf-ques/2016_BRFSS_Questionnaire_FINAL.pdf and on file with author; pages: 12, 20, 21, 55, 88, of “Behavioral Risk Factor Surveillance System 2017 Questionnaire,” BRFSS, accessed October 1st, 2017. Available at https://www.cdc.gov/brfss/questionnaires/pdf-ques/2017_BRFSS_Pub_Ques_508_tagged.pdf and on file with author.

The Indian Health Service (IHS) is another source of epidemiologic data concerning American Indian people. IHS is a federal agency responsible for the advocacy, service, and provision of healthcare to American Indians and Alaskan Natives who qualify for IHS. Issues pertaining to IHS qualification, health care provision, and health care resource rationing are addressed through collaborative efforts between IHS and the tribes; some tribes have opted for solo decision-making processes through the IHS Tribal Self-Governance Program. Access to IHS resources is determined largely by tribal enrollment and proximity to IHS facilities, which tend to be on or near the reservations of federally-recognized American Indian tribes.¹⁴ Urban Indian Health facilities are also options for enrolled members who live in cities that are not near reservations, but these facilities tend to be located only in cities with large Native populations. Some data for public health research concerning American Indians is collected at IHS facilities by health care practitioners and surveys, as well as from Resource and Patient Management Systems (RPMS) into which medical staff digitally input medical data and analyses. Ursula Bauer notes that her research is extrapolated from IHS patient registration records (Bauer 2014, p. S256). Noting some limitations of the research, Bauer writes: “linkages to IHS patient registration records identify only those eligible for services through federally recognized tribes. The data do not represent the entire AI/AN population because many tribes are not federally recognized. The problems of racial classification that have plagued surveillance and research on incidence and mortality in AI/AN people continue to be a significant challenge” (Bauer 2014, p. S256). The information collected by IHS is not likely representative of the entire American Indian population because IHS facilities are underfunded, located in only some reservation areas and urban centers, and only available to individuals who qualify for IHS.

4 Political status versus racial identity

Dissimilar from the other folk racial categories in the US, the folk racial category of American Indian refers to both a racial identity as well as a political status. American Indians who are members of federally recognized tribes have a documented political status, while those who identify racially or ethnically as American Indian without being enrolled in a federally recognized tribe do not have a documented political status. The documented political status of being American Indian, for many tribes, is determined by blood-quantum, a concept I will return to in more detail in the next section (Spruhan 2006). When an Indigenous person meets a given tribe’s criteria for tribal enrollment they may choose to proceed with the enrollment process (which, depending on the tribe, may involve applying for and receiving a Certificate of Degree of Indian Blood from the federal government, perusing tribal rolls for family names, meeting with a tribal historian or genealogist, and even, in some cases, pursuing DNA testing for comparison with alleged blood relatives who are enrolled tribal members). If they complete the enrollment process successfully, they will receive documentation, in the

¹⁴ Indian Health Service: The Federal Health Program for American Indians and Alaska Natives, “Locations.” Accessed October 22nd, 2017. Available at <https://www.ihs.gov/locations/> and on file with author.

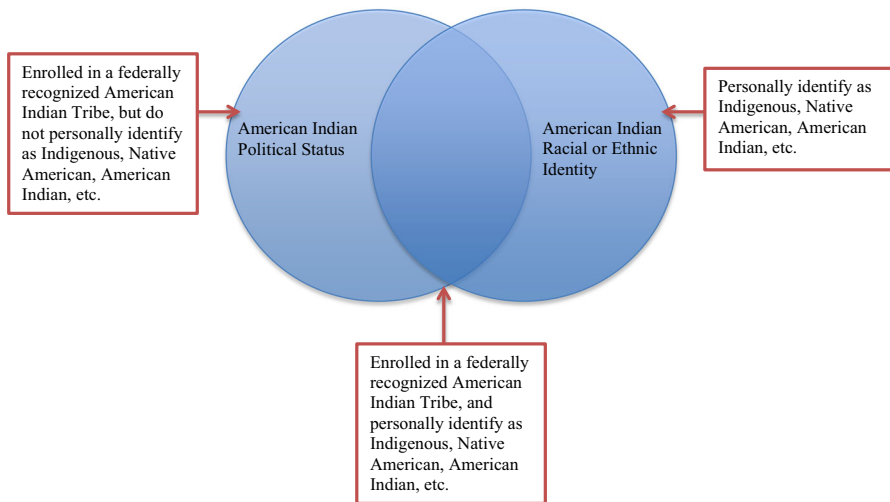


Fig. 2 This Venn diagram illustration was used by Prof. Wenona Singel in a Tribal Law course she taught at Michigan State University in 2015. It has not, to my knowledge, been published anywhere, but is nonetheless an excellent organizational model for an otherwise very complicated concept. The Venn Diagram is not meant to intimate estimated size of each demographic. Singel, Wenona. “Morton versus Mancari: Indian Status,” Tribal Law Lecture, Michigan State University, East Lansing, MI, September 30, 2015

form of paperwork or a tribal identification card, of their enrollment. This documented political status is unique to American Indian people; no other racialized community in the US is defined by such standards.

In Fig. 2, borrowing from Singel (2015), I have illustrated the conceptual relationship between the political status of being American Indian and the racial or ethnic identity of American Indian. The left portion of the Venn diagram represents the political identity of American Indian, which requires an individual be enrolled in a federally recognized American Indian tribe. The right portion of the Venn diagram represents the racial or ethnic identity of being American Indian, which informally requires that one personally identify as Indigenous, Native American, American Indian, etc.¹⁵ The center of the Venn diagram, where the two circles overlap, represents individuals who are both enrolled members of a federally recognized tribe, as well as personally identify as American Indian. Though in the illustration each section of the Venn diagram are equal in size, this is not meant to reflect the estimated size of each demographic in relation to one another.

Individuals who fall into the American Indian Political Status portion of the Venn diagram, but not into the overlapping center, do not identify with the racial or ethnic category of American Indian despite being enrolled in a federally recognized American Indian tribe. There are several reasons an individual might occupy this particular space, for example: the individual is an adopted member of a tribe with no ancestral ties to the group, the individual has been encouraged, consciously or unconsciously, after

¹⁵ For ease of explication, I have focused solely on racial and ethnic self-identification. Unfortunately, due to space constraints, I am not able to address in greater detail the similar and pressing issues faced by Kanaka Maoli people and Alaskan Natives.

several generations of discrimination not to identify as American Indian for purposes other than tribal membership/voting/hunting and fishing rights, the individual has married into a tribe that grants membership through marriage, or the individual has been granted honorary membership.

Individuals who fall into the American Indian Racial or Ethnic Identity portion of the Venn diagram but not into the overlapping center personally identify as American Indian, but are not enrolled members of federally recognized tribes. There are several reasons one might occupy this position, some of which include: being a member of one of the 100+ tribes that are not federally recognized, being a member of a tribe whose federal recognition was stripped by the US government, being a descendant who does not qualify for enrollment and/or was disenrolled, being a member or descendant of a tribe that is in what is now called “Mexico” or “Canada,” being an accepted member of an Indigenous community but not being able to find a family surname on tribal rolls or censuses collected during the Allotment Era.

That “American Indian” is used to describe both a political status as well as a racial and/or ethnic identity generates unique issues for discussions about tracking folk racial categories in epidemiologic research. During the collection of epidemiologic data from self-identified American Indian groups, it is not always clear whether or not surveys are specifying which sort of American Indian identities they are seeking information from.

American Indian health data collected via phone reporting may be unreliable because of the aforementioned issues regarding “American Indian” referring to both a political status as well as a racial or ethnic identity. Haozous et al. describe the “(iv) Inadequate definitions of AI/AN identity” of health data collection as a systems issue, or an issue that arises at the level of data collection systems, and not at the level of individual respondents (Haozous et al. 2014, p. 5). Since data collection resources like the BRFSS do not contain any specifications about what they are asking respondents to identify as when they identify as “American Indian,” it is not clear that there will be any consistency in the experiences or identities of those respondents who identify as “American Indian.” It is possible that a descendant and accepted member of an Indigenous community who identifies racially as American Indian, but who is not a tribal member, might answer that they are non-Indian in virtue of the fact that they are not enrolled and do not qualify for IHS. It is also possible that someone who is an enrolled member of a federally recognized tribe but does not racially identify as American Indian might identify as non-Indian on the BRFSS survey as well in virtue of her distant relationship with her tribal community. Whether or not someone identifies as American Indian on a phone survey is likely contingent on many complicated features of Indigenous identities in the US context, many of which revolve around the issue of “American Indian” referring to both a political status as well as a racial or ethnic category. The information gleaned from BRFSS surveys and consolidated around the folk racial category “American Indian” is not likely a reliable extrapolation tool for recommendations meant to apply to all those who inhabit American Indian identities. Further, racial misclassification is a serious issue for Indigenous communities, not just in virtue of inaccurate data sets that generate inadequate public health recommendations, but studies by Haozous et al. suggest that the experience of being

racially misclassified in and of itself has negative health effects on American Indian people (Haozous et al. 2014).

5 Hypodescent versus blood-quantum

As mentioned briefly above, a unique issue faced by American Indians is the diminishing-return principle of blood-quantum. Contrasted with hypodescent, in which any individual with any known Black ancestry is still, due to a lingering US custom, typically labeled as Black, blood-quantum works in much the opposite way, though much to the same end. Most federally recognized American Indian tribes in the US require the verification of some form of “Indian blood quantum” for tribal membership. Many tribes require a quantum minimum for enrollment. For example, in Article 2, Section A of the constitution of the La Jolla Band of Luiseño Indians, the criteria for tribal enrollment reads: “Persons who possess at least 1/8 degree of Indian blood born to members on or after the effective date of this Constitution whose ancestors are shown on the rolls described in paragraph (1) or (2), regardless of whether the ancestors are living or deceased.... Indian blood shall include blood of any federally recognized Indian tribe.”¹⁶ If an individual can prove, through archival and family research, she possesses at least 1/8th Total Indian Blood, has a parent enrolled in the tribe, and can locate ancestors on tribal rolls, she can be enrolled in the tribe. If any one of these criteria is not fulfilled, she cannot be an enrolled member of the tribe.¹⁷ Some tribes forego the use of blood-quantum and instead require solely the presence of a direct relative’s surname on old tribal rolls or censuses collected by the US government, or that each member be a direct descendant of an enrolled member.¹⁸ Though usually more inclusive than blood-quantum, the use of tribal rolls or censuses are also problematic in that they were often collected by the US government with the intention of dispossessing Indigenous peoples of their land or force tribes into allotment scenarios (Whyte 2016a, pp. 2–3). Tribal members are often prompted to prove their heredity and qualifications for tribal membership to tribal and federal agencies, employers, and universities. Blood quantum is an invention of settler colonialism, but many federally recognized tribes in the US use it to determine membership because, according to Kyle Whyte, “many federally-recognized Tribal governments stem from US policies in particular time periods, such as the 1930s, when the US pressured tribes to adopt certain governmental structures and membership criteria” (Whyte 2016a, p. 2).

Blood quantum works in the opposite direction of hypodescent, or one-drop-rules. Black Americans and their descendants, according to the colonial logics of hypodescent, will always be Black, while American Indians and their descendants, can

¹⁶ *Constitution of the La Jolla Band of Luiseno Indians*, Article 2, Section A.

¹⁷ Blood quantum is a very controversial topic in Indian Country and some Native people, myself included, consider it a flawed ancestral tracking mechanism that propagates Western heteropatriarchal conceptions of kinship at the expense of Indigenous conceptions of family/community. That being said, tribes are sovereign nations whose criteria for enrollment depend solely on their own governance structures, and thus, intrusion on this issue from non-Indigenous scholars is not acceptable. More on this later.

¹⁸ “Enrollment,” *Wiyot Tribe*, accessed September 9th, 2017, available at <http://www.wiyot.us/programs-and-services/human-resources/enrollment>, and on file with author.

potentially become non-Indian. Though these work in opposite directions, they work toward the same goal; as Eve Tuck writes, “The racializations of Indigenous people and Black people in the US settler colonial nation-state are geared to ensure the ascendancy of white settlers as the true and rightful owners and occupiers of the land” (Tuck and Yang 2012, p. 12). Tuck, summarizing Kim TallBear, continues, “Through the one-drop rule, blackness in settler colonial contexts is *expansive*, ensuring that a slave/criminal status will be *inherited* by an expanding number of ‘black’ descendants. Yet, Indigenous peoples have been racialized in a profoundly different way. Native American-ness is *subtractive*: Native Americans are constructed to become fewer in number and *less* Native, but never exactly white, over time” (Tuck and Yang 2012, p. 12).¹⁹ Both hypodescent and blood-quantum are designed by white settlers to inevitably privilege white settlers in their claims to resources, labor, and land.

Because American Indian identities are often subject to the diminishing return principle of blood quantum, the American Indian folk racial category is in constant flux. In Fig. 2, membership in the left portion or center portions of the Venn diagram often relies on blood-quantum, but not always. When membership in the left or center portions of the Venn diagram does depend on blood quantum, it does not always depend on the same minimum quantum.²⁰ Individuals who fall into the left portion of the Venn diagram would not be part of the data sets collected by BRFSS because BRFSS is based on self-identifying as American Indian, though individuals on the left side of the Venn diagram might be part of a data set generated by IHS if they choose to use and have access to IHS facilities. Individuals who fall into the right side of the Venn diagram also have varying blood quantum. Someone can have a “high” blood quantum, but no membership in a tribe, and still identify as American Indian, and still be counted in the data sets generated by BRFSS. Someone who is an adult and who is not enrolled in a tribe, likely does not qualify for IHS and would not be represented by a data-set generated therefrom. IHS data sets seem to correlate with tribal enrollment, which in varying ways, in some cases, is based on blood-quantum. It is not clear what the relationship between BRFSS data sets and blood-quantum might be; while BRFSS data is based on self-identifying as American Indian, blood quantum may or may not correlate with whether or not someone identifies as American Indian.

Blood quantum plays a significant role in the lives of many American Indian people, but the relationships between blood quantum and public health recommendations generated from the epidemiologic research in BRFSS and IHS collections are muddled. If two American Indian individuals with different blood quanta live relatively similar lives in close proximity to one another with similar experiences and similar access to healthcare and other resources, their exposure to health risks is likely also relatively similar. It is also possible that two people have the same blood quantum, live in

¹⁹ For more on this topic from Kim TallBear, see Latour (2012) and TallBear (2013).

²⁰ Recall the La Jolla Band of Luiseño Indians currently employs a 1/8th minimum blood quantum for enrollment. A nearby federally recognized tribe of Luiseño and Cupeño called the Pala Band of Mission Indians had a minimum blood quantum of 1/16th in 2012. The criteria for tribal enrollment are matters of tribal constitution and therefore subject to change. Tony Perry, 2012. “Pala Tribe Roiled By Bloodline Dispute,” Los Angeles Times. Available at <http://articles.latimes.com/2012/mar/17/local/la-me-pala-dispute-20120318> and on file with author.

relatively similar regions and conditions, but one person could be enrolled in a tribe while the other is not because of their tribes' differing criteria for enrollment. Whether or not someone's blood quantum is 'low' or 'high' does not likely correlate with their exposure to health risks, but it does correlate in some strange ways with who is 'counted' as a data sample for epidemiologic research gathered through IHS and BRFSS.

6 The Indian-grandmother complex

Closely related to the complications that arise out of American-Indianness being both a political status and a racial identity, the Indian-grandmother complex is another unique feature of Indigenous identities in the US. Countless white Americans with no or very little American Indian ancestry claim to be Native American, or more commonly "part Indian," because they believe or have been told they have an American Indian ancestor. This phenomenon is referred to as the "Indian-grandmother complex" (Tuck and Yang 2012, p. 12). Tuck describes the Indian-grandmother complex as a settler move to innocence, or a defense mechanism of settlers that allows them to disassociate from the moral and causal responsibilities of being descendants of colonizers. Tuck and Yang write, "In this move to innocence [the Indian-grandmother complex], settlers locate or invent a long-lost ancestor who is rumored to have had 'Indian blood,' and they use this claim to mark themselves as blameless in the attempted eradications of Indigenous peoples" (Tuck and Yang 2012, p. 10). Deloria, who gave the phenomenon its name, speculates that the Indian-grandmother complex allows for settlers to claim ownership, albeit usually through imaginary means, of the stolen land upon which they reside:

While a real Indian grandmother is probably the nicest thing that could happen to a child, why is a remote Indian princess grandmother so necessary for many white [people]? Is it because they are afraid of being classed as foreigners? Do they need some blood tie with the frontier and its dangers in order to experience what it means to be an American? Or is it an attempt to avoid facing the guilt they bear for the treatment of the Indians? (Deloria 1998; Tuck and Yang 2012)

Settlers suffering from the Indian-grandmother complex sometimes fall into the far right category in the Venn diagram in Fig. 2²¹; some of them racially or ethnically identify as American Indian, but are usually not enrolled in a federally recognized tribe.²²

On the other hand, As Tuck and Yang point out, though American Indian-ness is a folk racial category of great significance to many who legitimately identify as such, sometimes those afflicted with Indian-grandmother complex actually use their mythical Indian ancestor to further stake their claim to American-ness and their membership in the white racial category. Tuck and Yang write:

²¹ There are exceptions.

²² There are always exceptions.

In the racialization of whiteness, blood quantum rules are reversed so that white people can stay white, yet claim descentance from an Indian grandmother. In 1924, the Virginia legislature passed the Racial Integrity Act, which enforced the one-drop rule *except* for white people who claimed a distant Indian grandmother - the result of strong lobbying from the aristocratic “First Families of Virginia” who all claim to have descended from Pocahontas (including Nancy Reagan, born in 1921). Known as the Pocahontas Exception, this loophole allowed thousands of white people to claim Indian ancestry, while actual Indigenous people were reclassified as “colored” and disappeared off the public record (Tuck and Yang 2012, p. 13)

Tuck and Yang point out that because of blood-quantum-based understandings of Indigeneity are determined on a diminishing return principle, one is able to claim Indigeneity, thus claiming legitimate ownership of the land, but also maintain one’s whiteness. Sufferers of the Indian-grandmother complex get to “have their stolen cake,” and be white too (Meissner and Whyte 2017). In these cases, an individual afflicted with the Indian-grandmother complex might claim to be of American Indian descent, but not actually racially identify as American Indian unless put in particular situations. This individual, the “convenient Native,” would sometimes fall into the far right category on the Venn diagram, and sometimes not be in the model at all.

Since the Indian grandmother complex and the convenient Native are symptoms of structural racism and settler colonialism, it stands to reason that these are not isolated instances and that these practices have effects on the data collected by BRFSS-style research and the public health recommendations generated therefrom. The information gleaned from BRFSS surveys and consolidated around the folk racial category “American Indian” is not likely a reliable extrapolation tool for recommendations meant to apply to all those who inhabit American Indian identities.

7 IHS and community location

Another unique facet of American Indian identities that has a profound effect on health, access to health care, and the data pertaining to American Indian health inequities is community location. According to the Bureau of Indian Affairs, “There are approximately 326 Indian land areas in the US administered as federal Indian reservations (i.e., reservations, pueblos, rancherias, missions, villages, communities, etc.)” and it is not the case that all 573 federally recognized American Indian tribes have a reservation.²³ Many American Indian people live on reservations, but it is estimated that roughly 78% of American Indians live off of reservations, predominantly in urban settings.²⁴ IHS and folk racial concepts both have trouble handling the double-edged problems of place for American Indians.

²³ “What Is A Federal Indian Reservation?” Accessed October 1st, 2017, available at <https://www.bia.gov/frequently-asked-questions> and on file with author.

²⁴ 2010 US Census. Here, I note that this is an estimate since, as I’ve been arguing, data based on the folk racial category “American Indian” can be unreliable.

First, tribal lands are sites of disproportionate environmental hazards. Concerning cancer-causing environmental risk factors, Weaver notes that the exposure to carcinogens is higher for American Indians (Weaver 2010, p. 274). As an example, Weaver describes Akwesasne, a Mohawk reservation, located “less than 100 feet from the General Motors-Central Foundry Division Superfund hazardous waste site. Additionally, the Aluminum Company of America (ALCOA) operates two aluminum processing facilities in the area. Many of the PCBs released into the air from these plants are absorbed into the food chain” (Weaver 2010, p. 274). Brooks explains that the hazardous waste stored on or near Indian reservations is owned by the US government as well as by private companies (Brooks 1998). Brooks writes, “Because of the severe poverty and extraordinary vulnerability of Native American tribes, their lands have been targeted by the US, government and the large corporations as permanent areas for much of the poisonous industrial by-products of the dominant society” (Brooks 1998, p. 106). Brook notes that out of the 565 federally recognized tribes within the US, every single one has been petitioned to host nuclear waste in exchange for millions of dollars (Brooks 1998, p. 106).²⁵ Contextualizing these proposed ‘exchanges,’ Brook writes, “Given the fact that Native Americans tend to be so materially poor, the money offered by the government or the corporations for this ‘toxic trade’ is often more akin to bribery or blackmail than to payment for services rendered” (Brooks 1998, p. 106). American Indians who live on tribal lands have a high likelihood of being exposed to environmental hazards. In rural reservation spaces, health care, if it is available, is provided through IHS clinics.

The health effects of exposure to toxins dumped near or on tribal land is more likely to be tracked by IHS-based data collection, but the recommendations generated therefrom are not likely as relevant for the estimated 78% of the American Indian population who live off reservations.²⁶ Since it is estimated that most American Indian folks do not live on tribal land, IHS, which is devastatingly underfunded, is not likely as available to them. The epidemiological risks to American Indians are more intensely geographically concentrated and complex. Brook and Weaver describe the difficulty in measuring and tracing the causes and solutions for environmental hazards on or near tribal land. The epidemiological risks to American Indians are also more diffuse than can be easily measured given that IHS is only able to track the health of a subset of the eligible people who do not live on tribal land. The health and healthcare access of American Indians are affected by community location, as is the epidemiologic data collected pertaining to American Indians. Bauer notes that the epidemiologic data collected by IHS “are often available by zip codes or other geographic units, but analyses within and across these arbitrary boundaries are often necessary” (Bauer 2014, p. S256). Tracking the folk racial category of “American Indian” may not only fail to track environmental hazards to health, it may also obscure the effects of environmental racism.

²⁵ Brooks’ article is from 1998; as of 2018, there are 573 federally recognized tribes in the US.

²⁶ Though there is strong evidence to suggest that Indigenous people living in urban centers are still subject to environmental racism, though from different sources and to differing degrees. See: Weaver (2010). BRFSS data is also difficult to tie to location, especially so now that cellular phone respondents make up a significant contribution to BRFSS data.

8 How does the complicated nature of Indigenous identities in the US affect the potential harms of tracking the folk racial category American Indian?

The unique features of Indigenous identities in the US that I've presented in the previous section are difficult to parse. The Indian-grandmother complex is deeply connected to issues of blood-quantum, which are deeply connected to American Indian-ness being both a political status as well as a racial or ethnic identity, which is deeply connected to the way Indian Health Services is structured, how health resources are allocated, as well as the access issues and environmental racism of reservation-based and urban communities. All of these features are relevant to conversations about tracking folk racial categories in public health research, but as of yet, have remained absent therefrom. In this section, I will address how these features affect the potential for harm in tracking the folk racial category of American Indian. I have chosen to focus on just two potential harms with regard to tracking the folk racial conception of American Indian, which are organized into the following categories: the reification of biological race essentialism and the undermining of American Indian sovereignty and Indigenous epistemologies.

8.1 Harm 1: Reification of biological race essentialism

As noted by most of the authors surveyed in the first section, there is a worry that the use of folk racial categories in public health reifies biological race essentialism. The reification of biological race essentialism is, of course, dangerous in any case and for those tracked by all folk racial categories. However, there may be potential harm in specific ways that are unique to Indigenous communities in the US. Biological race essentialism is a concept already discarded by many critical race theorists, biologists, and philosophers alike, but the prevalence of notions like blood-quantum within Indigenous communities reveals that biological race essentialism is part of a colonizer-imposed Indigenous identity that many Native people grapple with daily. Blood-quantum may or may not refer to the genetic components of blood (see sources regarding the rise of Ancestry.com and regional genetic markers), but the notions of race associated with blood-quantum are nonetheless biological. Kim TallBear writes, "If the material properties of blood—the red fluid itself—are no longer legitimate for the study of race, symbolic blood remains very much at play in twenty-first-century sociopolitical formations of the Indian" (TallBear 2013, p. 47).

Further reifying biological race essentialism with the tracking of the folk racial category of American Indian has potential to further reify the fractionalized sense of self promoted by the diminishing-return principle of blood-quantum. Citing several Indigenous authors and artists including "Paula Gunn Allen (Laguna/Sioux/Lebanese), Sherman Alexie (Spokane/Coeur d'Alene)... Elizabeth Woody (Warm Springs/Wasco/Yakama/Pit River/Navajo), Teresa Iyall-Santos (Couer d'Alene/Yakama), James Luna (Luiseño/Diegeño), Marie Annharte Baker (Anishinabe/Irish), and Hulleah Tsinhnahjinnie (Seminole/Muskogee/Dine)," Elizabeth Archuleta writes, "Blood quantum standards divide and alienate American

Indian communities and perpetuate a colonial discourse that promotes internalized self-hatred, alienation, and fractionation” (Archuleta 2005, p. 1).

The reification of biological race essentialism also reinforces many of the abundant stereotypes already in the public imaginary about Native peoples’ alleged ‘inferior genetics.’ Based entirely on racist fictions, narratives about Indigenous peoples’ ‘primitive biology,’ genetically predisposed weakness to alcohol, gambling, and European disease are in wide circulation in the US and could be further promulgated by the tracking of the folk racial categories in public health research (TallBear 2013). The myth of the “vanishing Indian,” or the common belief among non-Natives that American Indians are on a steady path to disappearing or have already disappeared. This myth is also further concretized in the American imaginary by the reification of biological race essentialism because the privileging of biological conceptions of race, in the case of American Indians and the diminishing-return principle of blood-quantum, leads to the inevitable ‘breeding out’ of Indigeneity.

8.2 Harm 2: Undermining American Indian sovereignty and Indigenous epistemologies

Finally, another potential for harm in the tracking of the folk racial category of American Indian in public health research is the possible undermining of Indigenous epistemologies and sovereignty that comes from the promotion of non-Indigenous conceptions of race and the promotion of non-Indigenous conceptions of health. Like binarized notions of gender, racial categories are an invention of Western colonizers. In his forthcoming entry for the word “Indigeneity,” in *Keywords for Environmental Studies*, Whyte does not use the word “race” at all, and instead chooses to describe Indigeneity through “place-based descriptions of relationships” that insinuate a “prior or more original claim to a place in contrast to individuals considered to be newcomers” (Whyte 2016b, p. 1). Whyte provides an example from his own tribal heritage, writing, “Anishinaabe people in the Great Lakes region of North America, for example, have been in a relationship with wild rice, or ‘*manoomin*,’ as it is called in the Anishinaabe language, across many generations. Wild rice is a spiritual food (gifted by the Creator) that figures crucially in Anishinaabe origin and migration stories. Anishinaabe people consider themselves in a relationship with wild rice that have evolved together across many generations” (Whyte 2016b, p. 2). Manoomin, as Whyte points out, is understood as Indigenous to the Great Lakes area by the Anishinaabe because of its long intergenerational relationship with the Anishinaabe people and other relations of the area. Whyte continues:

When Anishinaabe people refer to the nativeness or indigeneity of wild rice, they are referring to it as part of an intergenerational system of their place-based relationships with the humans and non-human beings (e.g. plants and animals), entities (e.g. spirits and sacred shrines) and systems (e.g. seasonal cycles and forest landscapes) in the region. Human communities, then, are an integral part of the ecological system. Moreover, human communities via their cosmologies ascribe agencies and responsibilities to the different beings and collectives in the region. These moral relationships between, for example, humans and wild

rice are both intrinsically and instrumentally valuable. They are intrinsically valuable as part of, for example, Anishinaabe identity [...] According to this understanding, indigeneity refers to systems among humans and non- humans operative in particular places over many generations (Whyte 2016b, p. 2).

Whyte's description of the Anishinaabe understanding of Indigeneity shares very little if anything in common with the criteria that could be used in the folk racial category of American Indian as it is currently used in public health research. Promoting an understanding of Indigeneity that undermines a central aspect of Indigenous peoples' identities according to their own knowledge systems is a potential for harm unaccounted for by the spectrum of approaches detailed in the first section of this paper.²⁷

Though current public health research does not employ Indigenous conceptions of 'race,' and instead, employs a confusing and inadequate folk racial category, challenging the current methods used for determining tribal membership could also result in serious harm because it undermines the sovereignty of tribes to determine their own membership. For example, it may seem unjust or non-sensical to a non-Indigenous public health researcher that blood-quantum is the chosen method for a given tribe's enrollment policies, or that some tribes allow non-Indigenous people to marry-in; however, it's not the place of non-Indigenous people or agencies to police the procedures of any tribe. As Tuck writes, "Indigenous identity and tribal membership are questions that Indigenous communities alone have the right to struggle over and define, not DNA tests, heritage websites, and certainly not the settler state" (Tuck and Yang 2012, p. 13). Should public health researchers seek to circumvent some of the problems that arise when tracking folk racial categories by redefining Indigeneity, they would be committing a serious offense against the sovereignty of Indigenous communities.

The potential for harm in tracking the folk racial category of American Indian in public health research with respect to undermining Indigenous conceptions of race is strong but also puts non-Indigenous public health researchers in a tricky dilemma: On the one hand, if public health researchers use a counter-Indigenous conception of race by tracking the folk racial conception of American Indian in their research, they undermine Indigenous epistemologies by subverting an Indigenous understanding of Indigeneity, like that detailed by Whyte. On the other hand, if non-Indigenous public health researchers attempt to redefine Indigeneity to make their data more useful, they undermine the sovereignty of tribes and their distinct authority to determine their own membership, as detailed by Tuck.

Similar to harms that result from the employment of counter-Indigenous notions of race in public health research, there are also potential harms generated by the public health recommendations generated thereby. The conception of health predominantly employed in public health recommendations is decontextualized, not land-based, and often focused on the individual. Many tribal epistemologies have a holistic understanding of health that is interconnected with community well-being and the well-being of the land. Ranco et al. note,

²⁷ In a recent article, Sean Valles argues something similar regarding the pan-ethnic identity "Hispanic." See Valles (2016).

[In] many Native American communities, health is defined on a community level, consisting of inseparable strands of human health, ecological health, and cultural health, all woven together, all equally important. Within this definition many of the dimensions of good health are difficult to quantify such as participation in spiritual ceremonies, intergenerational education opportunities, and traditional harvesting practices, yet they may be negatively impacted or even destroyed when resources are contaminated (Ranco et al. 2011, p. 227).

Indigenous conceptions of health are contextualized and complex. Food security, the environment, natural medicines, the air, water, grass, cattle are all components of an Indigenous conception of health that tie to the land. This conception of health bears little resemblance to public health recommendations generated based on the folk racial category of American Indian for American Indian communities.

Many tribes have conducted their own nuanced research informed by methodologies based on their own tribal epistemologies. One example of research informed by Indigenous methodologies comes from the Swinomish Tribe. This research team “prioritize[s] a set of nonbiological physical health indicators emphasizing community health and well-being and a method for assessing their health status in respect to a contaminated resource. The identified health indicators were non-commensurate with... qualitative risk assessment” (Ranco et al. 2011, p. 227). More common, dominant methods of QRA focus on individuals and cancer death rates; the Swinomish research team focused on different health indicators like “community cohesion, food security, ceremonial use, knowledge transmission, and self-determination” (Ranco et al. 2011, p. 227). These health indicators provide more useful research for the tribe because they reflect the tribe’s commitments to a unique, tribally specific conception of health. The public health recommendations to Indigenous communities generated by the tracking of the inadequate folk racial conception of American Indian also rely on a Western conception of health that has serious potential for harm in that it undermines Indigenous epistemologies and research methodologies. Propagating a Western conception of health might not only be harmful to Indigenous knowers, epistemologies, and research methodologies, it might also be harmful to the land since the land is often left out of consideration in public policy recommendations. Subverting an Indigenous conception of health is a potential for harm unaccounted for by the spectrum of approaches detailed in the first section of this paper.

9 Do the caveats from Kaplan and Valles mitigate these harms?

Returning now to the important caveats on the use of folk racial categories in public health research proffered by Kaplan and Valles, I’d like to examine the application of their caveats to cases concerning the use of the folk racial category of American Indian in public health research. Recall Kaplan endorses the use of folk racial categories in public health research, but with an important caveat: folk racial categories should be used in public health research, but only with the understanding that biology doesn’t make race; race makes biology. The perceived health inequities between folk racial categories are due to “racial discrimination, prejudice, and racism more generally,”

not due to any essential biology of race. Recall also Valles' important caveat on the use of folk racial categories in public health research: folk racial categories can be used in public health research, but only alongside "nuanced/specific representations of the relevant at-risk populations" (Valles 2012, p. 406). Do the caveats offered by Kaplan and Valles remedy the complications that arise when the conversation about tracking folk racial categories is refocused on American Indian folk racial categories?

First, the issue of usefulness: do the caveats provided by Kaplan and Valles make tracking folk racial category of American Indian in public health research any more useful? Kaplan's caveat makes the tracking of generalized folk racial categories more useful by stipulating that instead of tracking mere race, folk racial categories have the potential to help public health researchers track biological effects of racism. Kaplan writes, "Insofar as racism forms a long-standing and ubiquitous part of life in the US, folk racial categories will themselves reliably create biological differences" (Kaplan 2010, p. 291). If public health researchers use the data collected using folk racial categories, according to Kaplan, to track health inequities caused by racism, public health researchers will have new and interesting lens through which to analyze their data. Some of the causes of health inequities among folk racial categories that Kaplan believes can be tracked are residential segregation, "different treatment in shops, in the work place, in social situations, by the police including while driving," (2010, p. 289) and "differences in income, wealth," and the "stress of racism" to name a few (2010, p. 291). Though Kaplan's caveat is really important and has the potential to ameliorate some of the harms created by the use of folk racial categories (namely, it reduces the potential for reification of biological race essentialism), it's not clear that his fix works as well for the specific folk racial category of American Indian. Because the folk racial category of American Indian is simultaneously too broad (e.g. many folks identifying by it, though they don't have ancestral ties to a tribe, don't face racial discrimination, and don't live in a racialized ghetto where they are exposed routinely to toxins) and too narrow (many folks not identifying with it, though they do have ancestral ties to a tribe, do face racial discrimination, and do live in a racialized ghetto where they are exposed routinely to toxins), it seems that the folk racial category of American Indian is even less reliable than other racial categories, which have already been rejected by the aforementioned critics as unsuitable for rigorous health research. It is also not clear that even if folk racial categories have the power to track racism in some cases, they have the power to track racism as it affects Indigenous people in the US. Some folk racial categories may have the power to track the effects of structural racism, but they may not have to power to track the effects of settler colonialism.

Valles' caveat makes the tracking of generalized folk racial categories more useful by requiring that instead of tracking mere race, public health researchers track more specific parameters for risk and implement these in their public health recommendations. If public health researchers collect and organize data more carefully, adding parameters other than just mere folk racial categories, the public health recommendations they generate will not succumb to the problems of heterogeneity of risk within racialized subpopulations. When applied specifically to cases concerning the folk racial category of American Indian, I think Valles' suggestion has potential. Since the primary problem with the folk racial category of American Indian is that it is simultaneously too broad and too narrow to generate useful public health data, the

hope is that public health researchers on the data-collection end can carefully construct the questions on public health surveys and censuses to glean more information from respondents. That way, public health recommendations generated from the data can be more specific instead of relying on mere race. As a hypothetical example, public health researchers and officials could make recommendations based on more specific data—e.g. the prevalence of type 2 diabetes is highest among American Indians who live in reservation-based communities and are exposed to government-subsidized foods—instead of relying on mere racial categories—e.g. the prevalence of type 2 diabetes is highest among American Indians. Valles' recommendation does make folk racial conceptions more useful for the dissemination of more accurate and specific public health research and de-reifying biological race essentialism.

Second, the issue of harm: do the caveats provided by Kaplan and Valles make tracking folk racial category of American Indian in public health research any less harmful? As far as the potential for harm is concerned in the tracking of folk racial categories in public health research, Kaplan's caveat is meant to ameliorate the harms in reifying biological race essentialism. Since Kaplan's suggestion is to track racism, not race, it seems his suggestion indeed can lead public health researchers to use generalized racial categories more carefully. Recall, some of the potentials for harm with regard to tracking the folk racial conception of American Indian in public health research are the reification of biological race essentialism, the generation of faulty public health recommendations, and the undermining of Indigenous epistemologies. It's not clear that Kaplan's suggestion to 'track racism not race' lessens any potential for harm with regard to the American Indian folk racial category because it seems the folk racial category of American Indian is not sufficient for tracking racism (or the effects of settler colonialism). Because the folk racial category is not tracking racism, it does not seem like Kaplan's suggestion allows for the de-reification of biological race essentialism with regard to the folk racial category of American Indian. The danger of generating faulty public health recommendations is also not ameliorated when Kaplan's suggestion is applied to the folk racial category of American Indian. The dangers of undermining Indigenous epistemologies are also not ameliorated by Kaplan's caveat. Kaplan's caveat still allows for the use of folk racial categories, and thus, allows for the promotion of non-Indigenous conceptions of race. Kaplan's caveat also allows for the promotion of non-Indigenous conceptions of health.

Valles' caveat fairs only slightly better than Kaplan's with respect to reducing potential for harm in tracking the folk racial category of American Indian in public health research. Valles' caveat is meant to ameliorate the harms in reifying biological race essentialism as well as harms generated by faulty public health recommendations. Recall, some of the potentials for harm with regard to tracking the folk racial conception of American Indian in public health research are the reification of biological race essentialism and the undermining of American Indian sovereignty and Indigenous epistemologies. As described above in my analysis of the usefulness of folk racial categories that have been subjected to Valles' caveat, I believe Valles' caveat does reduce the potential for harm in tracking the folk racial category of American Indian in that it de-reifies biological race essentialism and allows for the dissemination of more accurate public health recommendations. However, I want to note that it is of critical importance that when researchers on the data-collection end carefully con-

struct the questions on public health surveys and censuses to glean more information from respondents, they do not give any impression that Indigeneity is being defined or redefined by non-Indigenous public health researchers. If it were the case that non-Indigenous public health researchers were attempting to re-define Indigeneity to make the data set more useful, this would be a serious compromise of the sovereignty of Indigenous communities as well as an undermining of Indigenous epistemologies. Even if public health researchers wouldn't be re-defining Indigeneity to make the data set more useful, it's not clear that Valles' caveat ameliorates the harm generated by the promotion of non-Indigenous conceptions of race. Though the caveat allows for the promotion of more nuanced parameters for risk, the use of folk racial categories alongside the nuanced parameters still seems to allow for the promotion of non-Indigenous conceptions of race. It is also not clear that Valles' recommendations ameliorate the harms from the promotion of non-Indigenous conceptions of health. Though some of the potential for harm in tracking the folk racial category of American Indian are ameliorated by Valles' caveat, (and possibly by Kaplan's if combined with Valles'), the potential for harm with respect to Indigenous epistemologies are still very likely and needs to be addressed.

9.1 Methodological concerns

The potentials for harm to Indigenous epistemologies I've discussed above just lightly touch on some important methodological concerns I believe are generated by expanding the conversation about tracking folk racial categories to include Indigenous identities in the US, so I've cordoned off another section in order to contextualize this portion of my analysis with some background on the importance of privileging Indigenous-led research programs and Indigenous research methodologies as well as promoting trust between public health research communities and Indigenous communities.

As admirable as many of the goals of public health research appear to be, many atrocities have been committed against Indigenous peoples in the name of public health research. Scientists starved Aboriginal children in Canadian residential schools as an experiment in vitamin retention and forcefully sterilized Native women in the US in the 1970s (Lawrence 2000; US National Library of Medicine 2013; Fraser and Mosby 2005). Scientific rhetoric has been used to gain forced access to Indigenous bodies (as recently as the Human Genome Diversity Project), to cast Indigenous peoples as genetically inferior, to subvert and co-opt traditional ecological knowledge, and to justify private companies and federal agencies alike in their exploitation of the land (Reardon 2011; Mosby 2013). Paleogenomic research, often justified by the potential benefits for public health, has been weaponized to subvert Indigenous community histories and to undermine Indigenous conceptions of kinships, lineage, and governance (Bardill et al. 2018). Public health researchers, epidemiologists, and health care practitioners have been complicit in projects of genocide. Indigenous communities have ample grounds for rational distrust of scientific communities, public health research programs included.

In virtue of these points, public health researchers have a moral responsibility to promote trust-building in their interactions with Indigenous communities, as well

as a practical responsibility to do so if they desire sound and useful knowledge production. As mentioned above, another potential for harm in the tracking of the folk racial category of American Indian in public health research is the possible undermining of Indigenous epistemologies that comes from the promotion of non-Indigenous conceptions of race and the promotion of non-Indigenous conceptions of health. Research *on* Indigenous communities, even with a goal of ameliorating health inequities, has the potential to disregard the harmful effects of colonization, compromise tribal sovereignty, build and maintain dependency relationships with a settler colonial nation state, and further erode trust. Though I do not have the space in this paper to elaborate on this recommendation, I believe the promotion, funding, and privileging of Indigenous-led public health research and Indigenous methodologies in public health research can lead to the amelioration of the unique harms generated by tracking the folk racial category of American Indian in public health research.

10 Conclusion

After a brief survey of the current conversations in philosophy of human biology about tracking folk racial categories in public health research, I spent some time detailing the approaches of Jonathan M. Kaplan and Sean Valles. Both approaches recommend caution in utilizing folk racial categories in epidemiologic research, and promote doing so only with important caveats: *folk racial categories should be used in public health research, but only with the understanding that biology doesn't make race; race makes biology* and *folk racial categories can be used in public health research, but only alongside "nuanced/specific representations of the relevant at-risk populations"* (Valles 2012, p. 406). I then refocused the conversation to pertain specifically to Indigenous identities in the US. Much of the scholarship utilized in this section springs from Indigenous Studies, sociology, and anthropology, and Indigenous researchers working on similar analyses (Kim TallBear, Nanibaa' Garrison, and Lisa Kahaleole Hall (2009), to name just a few) engage in highly interdisciplinary work. Drawing from these interdisciplinary sources, I described unique features of Indigenous identities in the US, including (1) Political Status versus Racial Identity, (2) Hypodescent versus Blood-Quantum, (3) The Indian-Grandmother Complex, (4) The Indian Health Service (IHS) and Community Location. Due to these unique features of Indigenous identities in the US, the folk racial category of American Indian is not only difficult to track, doing so might not be useful in the ways proponents of racial categories in public health research claim its usefulness for other folk racial categories. Not only is tracking the folk racial category of American Indian likely less useful than tracking other racial categories might be, the potential for harm is also very high for very unique reasons.

The two specific harms I have focused on in this discussion are the potential for reifying the unique form of biological race essentialism that pertains to Indigenous communities in the US and the potential for undermining American Indian sovereignty and Indigenous epistemologies. In my abrupt shift to some methodological concerns, I addressed the need for trust-promotion between non-Indigenous public health research programs and Indigenous communities. I also recommend that public health programs

further their commitments to the health of Indigenous communities by sponsoring Indigenous-led research and privileging of Indigenous research methodologies.

In this discussion, I chose to focus on just a handful of features of Indigenous identities that complicate folk racial categories and only two potential harms. However, there are several additional features and potential harms in the tracking of the folk racial category of American Indian that I hope will be taken seriously by researchers and taken up by other Indigenous researchers. In addition to unique features like the Indian Grandmother Complex and blood quantum, some others include but are certainly not limited to: environmental racism, the gendered aspects of ascriptions of Indigenous identities, access to traditional food and medicines, experiences of trauma, federal funding (or devastating lack thereof) for Indian Health Services, and the experiences of forced removal and/or relocation. Some of the additional potential harms include but are not limited to: the reification of settler heteropatriarchal conceptions of gender and kinship, the creation and maintenance of dependency relationships on the settler nation state, obscuring environmental racism that targets Indigenous peoples and our non-human relations, and the creation and maintenance of trauma narratives that pathologize Indigenous peoples. Reiterating my recommendations that the promotion, funding, and privileging of Indigenous-led public health research and Indigenous methodologies in public health research can lead to the amelioration the potential harms addressed herein, it is my hope that this work serves as a jumping off point for further Indigenous-led research.

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