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PERCEIVED DISCRIMINATION IN HEALTHCARE AMONG AMERICAN INDIAN
COLLEGE STUDENTS

A THESIS APPROVED FOR THE
DEPARTMENT OF NATIVE AMERICAN STUDIES

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Abstract

Introduction: Trust is integral in the patient-physician relationship. Perceived discrimination can have a detrimental effect on that relationship. The purpose of this study is to investigate Native and Non-Native perceptions of healthcare and their levels of trust in the U.S. healthcare system and government. **Methods:** We conducted a survey of Native and Non-Native college students. Questions focused on the experience of receiving healthcare, opinions on racism, and trust in the U.S. healthcare system and general trust toward government. **Results:** Native and Non-Native participants reported perceived discrimination by their providers, experiencing barriers to open discussion, and reluctance to ask questions during appointments. Native participants reported a stronger agreement with statements about racism in modern society and a lower level of trust in the federal government. **Conclusion:** Trust differs between Native and Non-Native patients and learning more about the factors that affect that trust could be important for improving the healthcare experience for an underserved population.

Introduction

Trust is a crucial factor in the physician-patient relationship. According to the American Medical Association's Code of Ethics, "The relationship between a patient and a physician is based on trust..."¹. If a patient perceives discrimination from the physician, this has a negative impact on their trust in the physician and their relationship.² Birkhäuser et al. (2017) found that patients reported greater satisfaction with treatment, more healthy behaviors, less symptoms, and higher quality of life when they had higher trust in their healthcare provider.³ A patient wants a doctor who will listen to their problems and help find a solution to these problems⁴ and if they cannot trust their physician to do so, they may not be as satisfied with their encounter and could make the decision to switch providers.⁵ Both patients and medical providers have a vested interest in figuring out how to improve trust and build patient satisfaction.

Several studies have examined the connection between perceived discrimination – discrimination based on a perception that an individual is a member of a relevant protected group⁶ – and health outcomes among different ethnic groups, most notably African-American and Latino communities.^{7,8} A study by Pascoe and Richman suggests that discrimination is linked to negative health outcomes – both mental and physical.⁹ There is a positive association between discrimination and a diagnosis of major depression and generalized anxiety disorder.¹⁰ Perceived discrimination has also been linked to stress responses that lead to high blood pressure and subsequent heart disease and hypertension.⁹ Further research identifying communities that may be experiencing discrimination within the healthcare system is needed to improve the health outcomes of those communities.

Previous studies have looked at how satisfied different ethnic groups are with various aspects of their healthcare experiences.^{2,11,12} Hausmann et al. found that African-American patients reported lower ratings of provider warmth/respectfulness and ease of communication.⁷ Author found that AI/AN groups were more likely to question how often their physician listened carefully to them¹¹, experience discomfort when asking questions², and express concerns about time and negative stereotyping.¹² Other studies have investigated specific interventions for AI/AN communities that are in tune with the patients' cultural practices and beliefs.^{12,14,15} Gore and Calf Looking describe a plan for an immersive camp that would aim to replicate a pre-reservation camp for Blackfeet Indians to participate in as substance abuse treatment.¹³ BigFoot and Schmidt developed tools for use in therapy to gauge patient affiliation with their Indigenous culture and allows for inclusion of the family to determine how incorporating culture may help in treatment.¹⁵

American Indian communities have a past that is necessary to understand when examining health and socioeconomic status disparities: the treatment of tribes by the U.S. government, including forced removal and assimilation efforts like boarding schools, and treatment by the medical field.¹⁵ Studies, such as one by Sotero, are in the field of *historical trauma* – the theory that a population historically subjected to long-term mass trauma (genocide, slavery, colonization)

exhibits a higher prevalence of disease several generations after the original trauma occurred.¹⁶ Historical trauma has been linked to negative health outcomes¹⁷, including symptoms of depression and anxiety¹⁸ – similar to the consequences of long-term discrimination reported by Williams et al.¹⁰ Research concerning the healthcare experiences of AI/AN communities is especially important because they are often experiencing health inequalities and worse health outcomes than the majority of the population.¹⁹ It is, however, important to remember that AI/AN communities are not homogenous and thus one study is unlikely to be nuanced enough capture the experience of different AI/AN communities across the country.²⁰

Historical trauma^{17,18} and discrimination^{9,10} have negative impacts on health outcomes of marginalized communities. Improving the healthcare experience for these patients has the potential to increase satisfaction and compliance with treatment plans – leading to improved health outcomes.³ Understanding how to address barriers to care and how patient satisfaction can be improved is critical for reducing health disparities.²¹

This study focuses on the attitudes of Native and Non-Native regarding healthcare experiences along with assessments of perceived discrimination. To do this, we solicited the participation of students at the University of Oklahoma. We asked about perceived discrimination, their trust in the U.S. healthcare system, federal government, and state government.

Methods

Setting and Sample

This study was based at the University of Oklahoma and participants were recruited using student groups (such as the American Indian Student Alliance and Indigenous Graduate Student Alliance), email listservs, and in-person solicitation on the campus. Approval is granted by the University of Oklahoma's IRB (#11575.) We investigated 31 variables.

Measures

Demographic Questions

Race/ethnicity, tribal enrollment status, class standing, age, and gender. We classified those who identified as AI/AN as “Native” and those who did not: Caucasian (n=27), African American (n=3), Hispanic or Latino (n=2), Asian (n=2), and Other (n=3) as “Non-Native.”

Perceived Discrimination

Respondents were asked seven questions that ascertained whether they experienced discrimination due to their race or ethnicity during their time receiving healthcare. These questions were adapted from Williams' Everyday Discrimination measure.^{7,22,23} The seven measures were: (1) You are not treated with courtesy; (2) You are not treated with respect; (3) You receive poorer service than other people; (4) A doctor, nurse, or medical provider acts as if they think you are not smart; (5) A doctor, nurse, or medical providers acts as if they are afraid of you; (6) A doctor, nurse or medical provider acts as if they are better than you; (7) You feel

like a doctor, nurse, or medical practitioner is not listening to what you are saying. The responses were on a 5-point Likert scale (1 = never, 2 = rarely, 3 = sometimes, 4 = most of the time, and 5 = always). These seven questions were combined into a composite variable using the statistical program R and became the perceived discrimination measure.

Reluctance to Ask Questions

These questions were aimed at finding out what caused participants to hold back from asking questions or discussing concerns during their healthcare appointments. The participants were asked whether they had held back from asking questions due to the following three factors: (1) Your healthcare provider seemed rushed; (2) You wanted healthcare that differed from what your healthcare provider recommended; (3) You thought that your healthcare provider might think you were being difficult. Response choices were on a 3-point scale (1 = no, never; 2 = yes, once; and 3 = yes, more than once).²⁴ These questions were modified from those asked in a study by Attanasio and Kozhimannil²⁴ regarding perceived discrimination in maternity care. The three questions were then compiled into a single composite variable measuring reluctance to ask questions.

Barriers to Open Discussion

A set of four questions looked at barriers to discussion during healthcare appointments. These questions were modified from the study by Attanasio and Kozhimannil²⁴ and assessed the frequency of providers doing the following: (1) Use medical words you did not know; (2) Spend enough time with you; (3) Answer all of your questions to your satisfaction; (4) Encourage you to talk about all your health questions or concerns. Answers were given on a 4-point scale (1 = never, 2 = sometimes, 3 = usually, and 4 = always).²⁴ The four questions were combined into a single composite variable that measured barriers to open discussion. Due to the nature of the first question regarding medical jargon use being negative while the rest of the questions are positive, the scoring was reversed during the creation of the composite variable.

Treatment at Facility

A pair of questions assessed whether participants were treated poorly at their healthcare facility and were modified from Attanasio and Kozhimannil.²⁴ Participants were asked whether they were ever treated poorly because of: (1) Your race, ethnicity, cultural background, or language or (2) A difference of opinion with your caregivers about the right care for yourself. Responses were given on a 4-point Likert scale (1 = never, 2 = sometimes, 3 = usually, and 4 = always.²⁴) The pair of questions were compiled into a composite variable that measured the participants' treatment at healthcare facilities.

Individual Trait Questions

A series of questions looked into participants' level of trust in different entities, feelings on racism in modern society, and some aspects of healthcare. They were asked to rate each statement according to how well it described them on a 5-point Likert scale with an opt-out

option (1 = strongly disagree, 2 = somewhat disagree, 3 = neither agree nor disagree, 4 = somewhat agree, 5 = strongly agree, and N/A).

Organization

The first pair of questions looked at how participants described themselves. They were asked a pair of questions to determine whether they consider themselves to be an organized individual or a disorganized individual. These two questions were compiled into a composite variable looking at organization. The scoring of the second question regarding being disorganized was reversed during the creation of the composite variable.

Participant Trust

The next three questions evaluated trust in different entities: the U.S. government, the U.S. healthcare system, and the Indian Health Service (IHS) healthcare system. The responses were the same 5-point Likert scale with an opt-out option. The three questions were combined into a single composite variable that measured trust.

Healthcare Opinions

Three questions were aimed at different aspects of healthcare and evaluated the level in which respondents believed that their provider gives them the best medical care possible and treats them the same as patients of a different ethnicity. They were also asked to evaluate whether they believe that their own appearance has an impact on the quality of care they will receive. Responses were given on the 5-point Likert scale or the opt-out option. These three questions were combined to evaluate opinions on healthcare.

Opinions on Racism

The last three statements evaluated how respondents viewed aspects of racism: “I feel that the worst of racism is behind us”; “I feel that racism is still being perpetuated in modern society”; and “I feel that the current healthcare system is perpetuating racism against Native Americans”. The responses were given on the 5-point Likert scale or the opt-out option. The three questions were combined into a composite variable that measured attitudes about racism in modern society.

Level of Trust in Government Questions

Four questions were modified from Gershtenson and Plane²⁵ to evaluate trust in the government at both the federal and state level: (1) The government in Washington to make decisions in a fair way; (2) The government in Oklahoma to make decisions in a fair way; (3) The government in Washington to do what is best for the country; (4) The government in Oklahoma to do what is best for Oklahoma.²⁵ The two questions regarding the federal government were compiled into a single variable looking at respondent trust in the federal government. The remaining two questions were compiled to evaluate trust in state government (the State of Oklahoma.) Groups of high, neutral, and low trust were created using the 50 percent mark as the threshold, with scores of 50 percent categorized as neutral.

Statistical Analysis

Data was analyzed using Qualtrics and the statistical program R. Questions 1-1 through 1-7 were compiled into a variable measuring perceived discrimination. Questions 2-1 to 2-3 were combined into a variable to measure reluctance to ask questions. Questions 3-1 to 3-4 were compiled into a variable measuring barriers to open discussion. Questions 4-1 and 4-2 were compiled to measure discrimination at facilities. Questions 5-1 and 5-2 were compiled into a variable measuring self-reported organization. Questions 5-3 to 5-5 were compiled into a variable measuring trust. Questions 5-6 to 5-8 were compiled into a composite variable measuring healthcare opinions. Questions 5-9 to 5-11 were compiled into a variable measuring opinions on racism. Questions 6-1 and 6-3 were compiled into a variable measuring trust in the federal government and questions 6-2 and 6-4 were compiled into a variable measuring trust in the Oklahoma state government (Table 5.) Two sample t-tests were used to find statistical significance between means. The interaction between trust in the healthcare system and trust in the government was measured in R and the values for trust in healthcare were reversed for clarity.

Results

Table 1 presents characteristics for all participants (n=100) and the two subsets comprised of those who identified as AI/AN (Native) and those who did not (Non-Native.) Over half of completed studies were done by those who identified as AI/AN (63%) with the second largest group being those who identified as Caucasian (27%.) Over half of respondents (64%) reported being enrolled in federally-recognized tribes. About half of AI/AN participants were graduate students (51%) and a quarter of them are 34+ years of age. Both groups, Native and Non-Native, had the majority of participants identifying as female (76% and 70%, respectively.)

Table 1. Characteristics of total sample and of the Native and Non-Native sub-samples.

Characteristics	Total (n=100)	Native Respondents (n=63)	Non-Native Respondents (n=37)
Enrollment			
Enrolled in a federally-recognized tribe	64	90.5	18.9
Not enrolled in a federally-recognized tribe	20	9.5	37.8
Doesn't identify as AI/AN	16	0	43.2
Class Standing			
Freshman	10	7.9	13.5
Sophomore	16	9.5	27.0
Junior	20	12.7	32.4
Senior	18	19.0	16.2
Graduate	36	50.8	10.8
Age			
18-24	65	52.4	86.5
24-34	16	22.2	5.4
34+	19	25.4	8.1
Gender			
Female	74	76.2	70.3
Male	25	22.2	29.7
Prefer not to answer	1	1.6	0.0

Table 2 presents descriptive statistics stratified by self-reported ethnicity. A little over seventy percent of AI/AN participants reported at least some reluctance to ask questions during their healthcare appointment compared to a little over half (57%) of Non-Native participants. Native participants reported higher frequencies of reluctance to ask questions during healthcare appointments than Non-Native participants (Table 2.)

Although 81% of Native respondents reported experiencing discrimination by their healthcare providers compared to 62% of Non-Native respondents, the overall difference in means between the two groups was not significant. A small difference was found between the percent of Native and Non-Native participants who experienced some form of barrier to open discussion during their healthcare appointment, but the difference is not significant (Table 2.)

Sixty percent of AI/AN respondents reported experiencing discrimination at their healthcare facility based on their race, their opinions on their care, or both. About thirty percent of Non-Native participants reported experiencing this kind of discrimination at their healthcare facilities (Table 2.)

Table 2. Descriptive statistics for 100 survey respondents, stratified by self-reported ethnicity.

	Native Respondents (n = 63)		Non-Native Respondents (n = 37)		<i>P</i>
	% experienced	Mean (SD)	% experienced	Mean (SD)	
Perceived discrimination by providers	81.0	2.15 (0.86)	62.2	1.93 (0.73)	0.162
Reluctance to ask questions	71.4	1.84 (0.75)	60.3	1.53 (0.64)	0.031
Experienced barriers to open discussion	90.5	2.73 (0.70)	89.2	2.86 (0.70)	0.356
Experienced discrimination at facility	56.8	1.52 (0.61)	29.7	1.28 (0.53)	0.043

Native and Non-Native participants showed no difference in the composite variable investigating opinions on healthcare. However, there was a difference between Natives and Non-Natives with regards to one particular aspect of that set. Native participants report a lower mean when asked if they agree with the statement that healthcare professionals will provide them with the best medical care possible (mean = 3.30, STD = 1.12) This is in contrast to Non-Native respondents who leaned more towards agreeing with the previous statement (mean = 3.81; STD = 1.04.) The difference was found to be significant ($p = 0.02$.)

Table 3. Descriptive statistics for 100 survey respondents, stratified by self-reported ethnicity

	Native Respondents (n = 63)	Non-Native Respondents (n = 37)	<i>P</i>
	Mean (SD)	Mean (SD)	
Organization	4.40 (1.02)	4.62 (0.98)	0.296
Patient Trust	3.07 (0.03)	3.08 (0.09)	0.587
Healthcare Opinions	3.57 (0.03)	3.60 (1.03)	0.844
Opinions on Racism	4.42 (0.03)	3.22 (0.06)	<0.001

Table 3 contains the descriptive statistics for 100 survey respondents for four variables looking at self-reported organization, trust in entities such as the government, opinions on healthcare, and opinions on racism in modern society. Native and Non-Native groups reported similar means when identifying as organized or disorganized individuals (4.40 ± 1.02 and 4.62 ± 0.73 , respectively.) The level of trust in entities such as the U.S. government, U.S. healthcare system, and I.H.S. healthcare system was similarly reported for Native and Non-Native participants (3.07 ± 0.03 and 3.08 ± 0.09 , respectively.) Opinions on healthcare were also found to be similar between the two groups (3.57 ± 0.03 and 3.60 ± 1.03 .) When it comes to opinions on racism in modern society, Native participants tended to agree more strongly with statements observing the continuance of racism in modern society (mean = 4.42, SD = 0.03) than Non-Native participants (mean = 3.22, SD = 0.06). The difference between these groups was found to be significant ($p < 0.01$.)

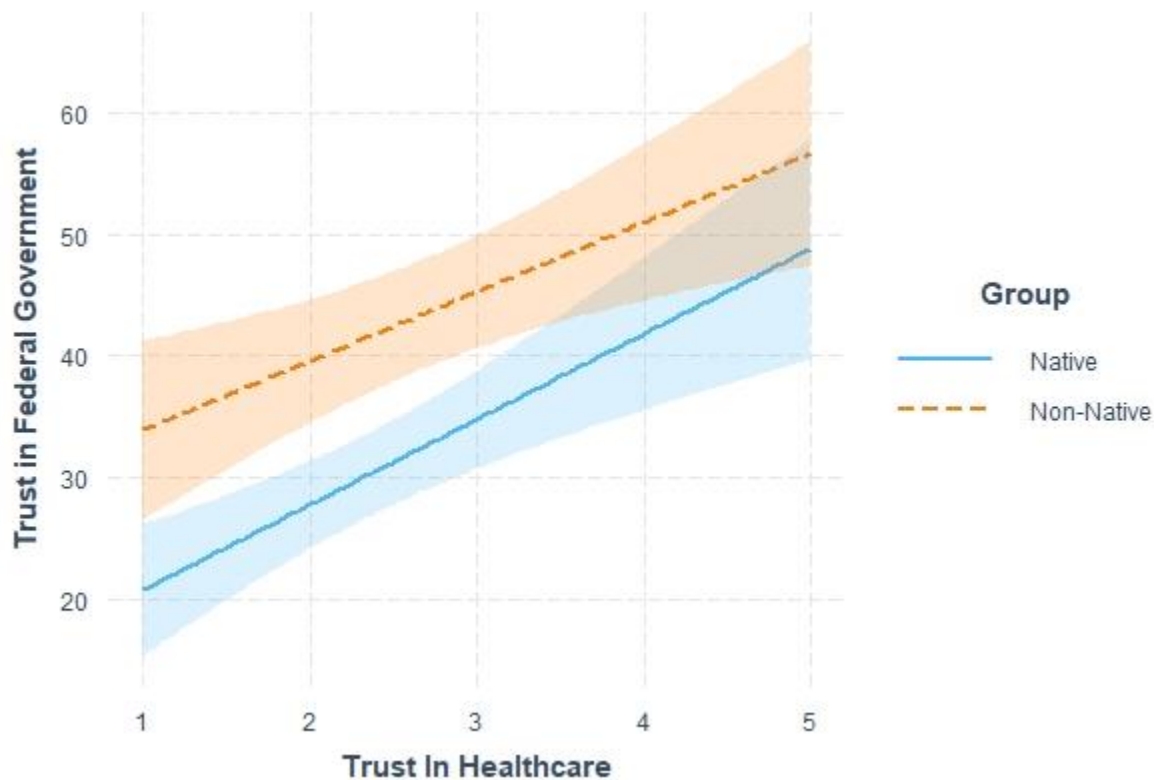
Table 4 contains the descriptive statistics for 100 survey respondents, stratified by self-reported ethnicity. Participants who identified as AI/AN were less trusting of the federal government than Non-Native respondents (Table 4.) Native respondents reported a lower percent of trust in the Oklahoma State government than Non-Natives, though the difference between these means was not found to be significant.

Table 4. Descriptive statistics for 100 survey respondents, stratified by self-reported ethnicity.

	Native Respondents (n = 63)	Non-Native Respondents (n=37)	<i>P</i>
	Mean (SD)	Mean (SD)	
Trust in federal government	30.10 (21.58)	43.46	<0.01
Trust in state government (Oklahoma)	33.11 (26.57)	41.10 (24.97)	0.135

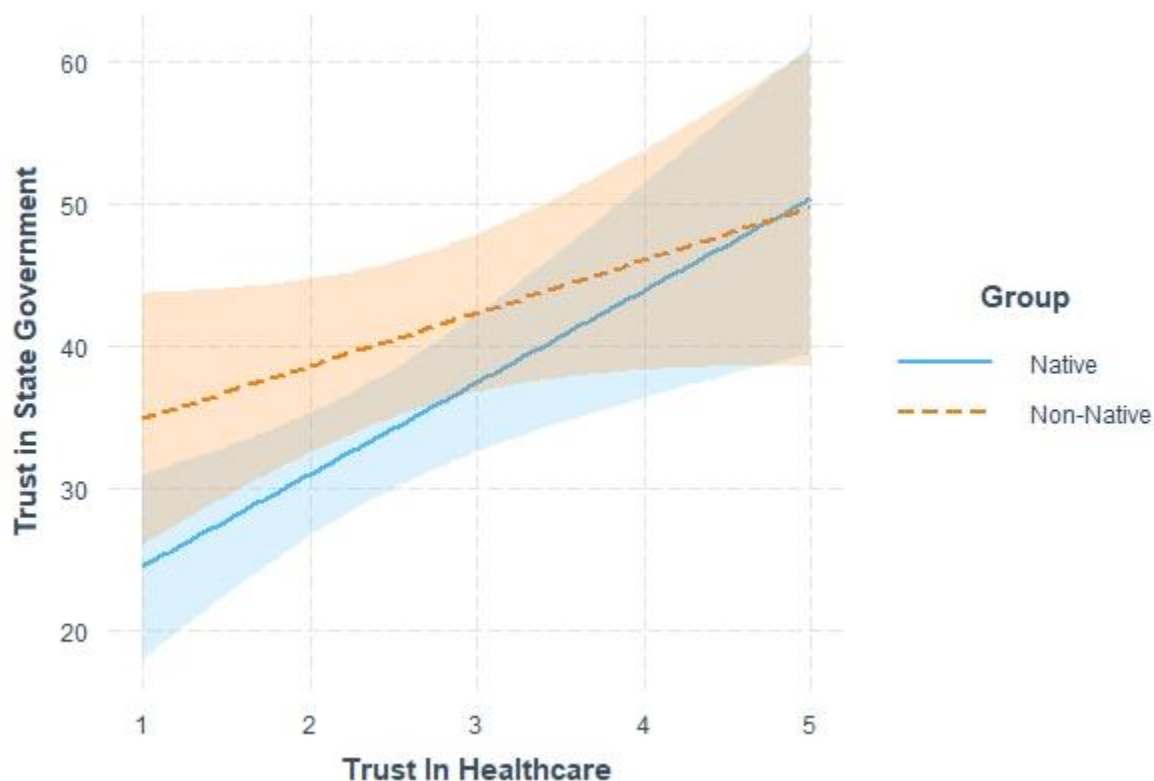
The interaction between trust in healthcare and trust in the government, at the federal and state level, were assessed and provided in Figures 1 and 2. Figure 1 shows the interaction between trust in the federal government and trust in the U.S. healthcare system within the Native and Non-Native groups. Trust in the healthcare system is measured with 1 = lowest level of trust and 5 = highest level of trust.

Figure 1. Interaction plot showing the level of trust in healthcare and level of trust in the U.S. healthcare system for Native and Non-Native participants.



Level of trust in the federal government was related to level of trust in the U.S. healthcare system for both Native and Non-Native participants (Figure 1.) Trust in the federal government has a weak positive correlation with trust in the healthcare system for the participants as a whole ($cor. = 0.36$.) The relationship between trust in the federal government and trust in healthcare was significant for the Native group and the participants as a whole ($p > 0.01$ for both.)

Figure 2. Interaction plot showing the level of trust in Oklahoma state government and trust in the U.S. healthcare system for Native and Non-Native participants.



The correlation between trust in the U.S. healthcare system and trust in the Oklahoma state government was negligible for the participants as a whole ($cor = 0.25$.) The interaction between these two measures of trust was significant for all respondents and the Native group ($p = 0.01$ and $p = 0.03$, respectively.) The relationship between trust in the government and healthcare system differs on the level of government (Figure 1, Figure 2.)

Discussion

Our findings are consistent with previous studies that found a positive correlation between trust in the federal government and trust in the U.S. healthcare system.^{26, 27} Rockers et al.²⁶ found that individuals who reported a higher technical quality of healthcare were significantly more likely to trust the government. Their study also found that individuals who spent more than 5 percent of total expenditures on health were less likely to trust the government.²⁶ A low level of trust in the

healthcare system and the government may be a barrier to receiving care or building a positive patient-physician relationship.²⁷ Whetten et al. found that HIV/AIDS patients who did not trust their providers or the government were less likely to visit clinics, more likely to visit the emergency room, less likely to use retrovirals, and more likely to report poorer health outcomes.²⁷

A study investigating minority trust levels in the government and White officials by Koch found that American Indians and African-Americans hold lower levels of trust in Whites than those held by Asians and Hispanics and that American Indians had more negative judgements of the government.²⁸ Trust in government was evaluated in our study to clarify whether our results show a general distrust in AI/AN individuals or whether distrust is aimed at healthcare specifically.

The time that a patient spends with their provider needs to be long enough for the patient to be able to articulate any questions or concerns that they may have, for the physician to explain any treatment plans or other procedures, and to establish a good relationship.²⁹ The perception that a provider is rushed or might think that a patient is being difficult may account for some reluctance to ask questions on the patient's part. We found that Native patients were significantly more likely to report reluctance asking questions ($p=0.03$.) This is in accordance to findings by other studies that cite a lack of time and impatient physicians as reasons that AI patients may express dissatisfaction with their healthcare.^{11,12} We reported a higher percentage of respondents experiencing some reluctance to ask questions (72%) and barriers to open discussion (90%) than reported by Attanasio and Kozhimannil.²⁴ This may be due to the small sample size and the slight overrepresentation of AI/AN participants in the sample. Previous studies have looked at Black and Hispanic populations with regards to these parameters, so more research is needed to draw any conclusions about differences between findings.

Perhaps a more telling result comes from the assessment of whether participants trust that healthcare professionals will provide them with the best medical care possible. Over 30% of Native respondents reported that they somewhat disagree or strongly disagree with that statement, compared to about 19% of Non-Native respondents. It is hard to find a comparable study because research into AI/AN experiences in healthcare are not as common as with other minority groups. It may be worth exploring the possible historical roots in this distrust in the healthcare system to see if the echoes of past injustices have carried on through generations.^{30,31}

Between 1887 and 1924, AI/AN individuals had to be deemed by an authority to be "fit" to manage their own wealth and properties, and if they were not deemed so, they would be appointed a guardian to oversee those resources for them.³² The same paternalism was often found in healthcare and within the Indian Health Service. As late as the 1970's, doctors and hospital administrators acted on behalf of those patients that they deemed unable to take care of themselves or their children. Some of these physicians went so far as to sterilize Native women without their consent or knowledge. An investigation into sterilization abuse was started by the General Accounting Office (GAO) in 1976 and it found that from 1973 to 1976, approximately

3,406 Indian women were sterilized. These sterilizations were the result of an imbalance of power between doctor and patient and were actions taken by paternalistic, and sometimes eugenicist, physicians. The actions of these physicians never bared any consequences for them and they essentially prevented a generation of Native children from being born and participating in cultural continuance and language survival.^{33,34}

Knowledge and understanding of historical contexts that may be affecting AI patient's relationships with healthcare and with their physician may serve to further the movement for culturally appropriate care in medicine.³⁵ Our results did not find a significant difference between the Native and Non-Native groups perceptions of poor treatment due to race/ethnicity, but there was a significant ($p = 0.02$) difference between the two groups' perceptions of discrimination due to their opinions on medical care. This result is in contrast to Attanasio and Kozhimannil, when they examined discrimination in maternity care and looked at White, Black, and Hispanic women's perceptions during their prenatal care – which found no significant difference between racial/ethnic groups perception of discrimination due to their opinion on medical care.²⁴

Examining historical and contemporary events that impact how AI populations view the government may account for the significantly lower percent of trust in the federal government than is reported by Non-Natives ($p < 0.01$.) Native participants reported an average level of trust at 30.1% in the federal government and Non-Natives reported a trust level of 43.5%. Similar levels were reported for Oklahoma State government (33.1% and 41.1%, respectively.) There was not a significant difference between the level of trust in state and federal governments, which goes against the understanding that people tend to trust their local government (city, county, state) more than the federal government.³⁶

Given the sample size, it would be difficult to extrapolate findings into a larger population. Further research would be needed with larger sample groups in order to verify findings. It is also important to note that the participants who completed the surveys were all university students and thus may have a different perspective on healthcare and government than people with other levels of education. Further research is needed to confirm our findings and to investigate the aspects of the physician-patient relationship that are most important to AI/AN patients. Learning how perceived discrimination and differences of opinion could be affecting the patient-physician relationship has implications for how physicians are trained to interact with AI/AN communities. Other studies could look at different service areas of the IHS or specific tribal communities to make a more targeted recommendation to the healthcare providers seeing these patients.

Conclusion

Our findings suggest that trust differs between Native and Non-Native groups and that this difference in trust may have an impact on opinions on healthcare and the government. The relationship between patient satisfaction with healthcare and their relationship with their provider

is understood to have significant effects on health outcomes and compliance³ – but this relationship has been understudied in AI/AN communities. Research by Sarche and Spicer found that AI/AN communities tend to be in poverty in larger numbers than the general population of the U.S.³⁷ and may be suffering from the consequences of historical trauma.^{27,29} In order to improve the experiences of AI/AN patients, these factors must be further studied and strategies developed for implementation based on findings.

Appendix

Table 5. A table containing the questions, answer choices, and composite groups for this study.

Questions	Answer Choices	Composite Group
<i>Thinking about your experience getting health care, how often does each of the following happen to you because of your race and/or ethnicity?</i>		
Q1-1 You are not treated with courtesy	(1) Never; (2) Rarely; (3) Sometimes; (4) Most of the time; (5) Always	Perceived Discrimination
Q1-2 You are not treated with respect	(1) Never; (2) Rarely; (3) Sometimes; (4) Most of the time; (5) Always	Perceived Discrimination
Q1-3 You receive poorer service than other people	(1) Never; (2) Rarely; (3) Sometimes; (4) Most of the time; (5) Always	Perceived Discrimination
Q1-4 A doctor, nurse, or medical provider acts as if they think you are not smart	(1) Never; (2) Rarely; (3) Sometimes; (4) Most of the time; (5) Always	Perceived Discrimination
Q1-5 A doctor, nurse, or medical provider acts as if they are afraid of you	(1) Never; (2) Rarely; (3) Sometimes; (4) Most of the time; (5) Always	Perceived Discrimination
Q1-6 A doctor, nurse, or medical provider acts as if they are better than you	(1) Never; (2) Rarely; (3) Sometimes; (4) Most of the time; (5) Always	Perceived Discrimination
Q1-7 You feel like a doctor, nurse, or medical practitioner is not listening to what you are saying	(1) Never; (2) Rarely; (3) Sometimes; (4) Most of the time; (5) Always	Perceived Discrimination
<i>During your last healthcare appointment, did you ever hold back from asking questions or discussing your concerns because...</i>		
Q2-1 Your healthcare provider seemed rushed	(1) No, never; (2) Yes, one; (3) Yes, more than once	Reluctance to Ask Questions
Q2-2 You wanted healthcare that differed from what your healthcare provider recommended	(1) No, never; (2) Yes, one; (3) Yes, more than once	Reluctance to Ask Questions
Q2-3 You thought that your healthcare provider might think you were being difficult	(1) No, never; (2) Yes, one; (3) Yes, more than once	Reluctance to Ask Questions

<i>During your healthcare appointments, how often did your healthcare provider...</i>		
Q3-1 Use medical words you did not understand	(1) Never; (2) Sometimes; (3) Usually; (4) Always	Barriers to Open Discussion
Q3-2 Spend enough time with you	(1) Never; (2) Sometimes; (3) Usually; (4) Always	Barriers to Open Discussion
Q3-3 Answer all of your questions to your satisfaction	(1) Never; (2) Sometimes; (3) Usually; (4) Always	Barriers to Open Discussion
Q3-4 Encourage you to talk about all your health questions or concerns	(1) Never; (2) Sometimes; (3) Usually; (4) Always	Barriers to Open Discussion
<i>During your time at your healthcare facility, how often were you treated poorly because of...</i>		
Q4-1 Your race, ethnicity, cultural background, or language	(1) Never; (2) Sometimes; (3) Usually; (4) Always	Discrimination at Facility
Q4-2 A difference of opinion with your caregivers about the right care for yourself	(1) Never; (2) Sometimes; (3) Usually; (4) Always	Discrimination at Facility
<i>Please rate these statements according to how well they describe you.</i>		
Q5-1 I consider myself to be a disorganized individual	(1) Strongly Disagree; (2) Somewhat Disagree; (3) Neither Agree nor Disagree; (4) Somewhat Agree; (5) Strongly Agree; N/A	Organization
Q5-2 I consider myself to be a disorganized individual	(1) Strongly Disagree; (2) Somewhat Disagree; (3) Neither Agree nor Disagree; (4) Somewhat Agree; (5) Strongly Agree; N/A	Organization
Q5-3 I do not trust the U.S. government	(1) Strongly Disagree; (2) Somewhat Disagree; (3) Neither Agree nor Disagree; (4) Somewhat Agree; (5) Strongly Agree; N/A	Trust
Q5-4 I do not trust the U.S. healthcare system	(1) Strongly Disagree; (2) Somewhat Disagree; (3) Neither Agree nor Disagree; (4) Somewhat Agree; (5) Strongly Agree; N/A	Trust
Q5-5 I do not trust the Indian Health Service (IHS) healthcare system.	(1) Strongly Disagree; (2) Somewhat Disagree; (3) Neither Agree nor Disagree; (4) Somewhat Agree; (5) Strongly Agree; N/A	Trust
Q5-6 I trust that healthcare professionals provide me with the best medical care possible	(1) Strongly Disagree; (2) Somewhat Disagree; (3) Neither Agree nor Disagree; (4) Somewhat Agree; (5) Strongly Agree; N/A	Healthcare Opinions
Q5-7 I feel that my healthcare provider(s) treat me the same as a patient of another race/ethnicity	(1) Strongly Disagree; (2) Somewhat Disagree; (3) Neither Agree nor Disagree; (4) Somewhat Agree; (5) Strongly Agree; N/A	Healthcare Opinions
Q5-8 I feel that my appearance makes a difference in the quality of care that I will receive	(1) Strongly Disagree; (2) Somewhat Disagree; (3) Neither Agree nor Disagree; (4) Somewhat Agree; (5) Strongly Agree; N/A	Healthcare Opinions
Q5-9 I feel that the worst of racism is behind us	(1) Strongly Disagree; (2) Somewhat Disagree; (3) Neither Agree nor Disagree; (4) Somewhat Agree; (5) Strongly Agree; N/A	Opinions on Racism

Q5-10 I feel that racism is still being perpetuated in modern society	(1) Strongly Disagree; (2) Somewhat Disagree; (3) Neither Agree nor Disagree; (4) Somewhat Agree; (5) Strongly Agree; N/A	Opinions on Racism
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Q5-11 I feel that the current healthcare system is perpetuating racism against Native Americans	(1) Strongly Disagree; (2) Somewhat Disagree; (3) Neither Agree nor Disagree; (4) Somewhat Agree; (5) Strongly Agree; N/A	Opinions on Racism
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These questions will evaluate your level of trust in the government. On a scale of 0 to 100 what percent of the time do you think you can trust...

Q6-1 The federal government in Washington to make decisions in a fair way	Scale of 0 to 100	Trust in Federal Government
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Q6-2 The government in Oklahoma to make decisions in a fair way	Scale of 0 to 100	Trust in State Government
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Q6-3 The government in Washington to do what is best for the country	Scale of 0 to 100	Trust in Federal Government
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Q6-4 The government in Oklahoma to do what is best for Oklahoma	Scale of 0 to 100	Trust in State Government
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