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# Criterion Validity of American Indian Identity: Policy Recommendations From a Small National Sample

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**Abstract**

This Research Note discusses emerging findings from a small national sample of government officials who represent federally recognized American Indian tribal governments. Data were collected from individuals who responded to an anonymous survey questionnaire in which respondents were asked about their American Indian ethnic and cultural identities. While the sample size for this on-going national study was small (*N* = 12), when analyzed with the same data collected during two distinct larger studies - the *Southern Ute Indian Community Safety Survey* (*N* = 667) and the *Native American Indian Women in Prison in O.R.W.* (*N* = 596) - using ANOVA, Pearson's correlations, and Principal Component Factor Analysis (PCA), concordance was discovered between ethnic identity data from the three distinctive studies which were conducted over thirty years. Findings from this test of criterion validity on the identity measures have public policy implications, which are discussed.

**Keywords:** Criterion, validity, American Indian, identity, policy, recommendation, national sample

## Introduction

Native American Indian identity is of persistent and mounting interest among academics and the public. Hundreds of years of federal policy and practice to eliminate American Indians from the land now known as the United States have done little to either eliminate or assimilate this now small but politically powerful ethnic group. From the time of the Indian Wars (1600 – late 19th century) to the Indian Removal Period (beginning with the *Indian Removal Act of May 28th, 1830* until 1845) that led to such practices that became known as the *Trail of Tears* and another less-known Long Walk of the Diné (Navajo), to the Indian Boarding School Period (established by the *Compulsory Indian Education Act of 1887* (since repealed) (as discussed in Laurence, 1977) – only recently ending decades ago via- a-viz the *Indian Reorganization Act of 1934* then, finally, by the *Indian Self- Determination and Education Assistance Act of 1975*. These Indian boarding schools, often operated by religious sects, were to 'civilize' and 'assimilate' Indian children into White culture (see, *e.g.*, *Annual Report of the Commissioner of Indian Affairs, Sept. 21, 1887*, "one of the chief tools of bringing White civilization to the Indians was the English language" (as reported in Prucha, 1990: 174). Using force with horrific physical and sexual violence to strip Native culture and language away from children, including: changing birth names to numbers, forbidding use of Native languages, hair styles, clothing and other basic accoutrements of human culture – the lasting effects of which can be seen in myriad social pathologies with which Native people must now disproportionately contend: domestic violence, substance abuse, child maltreatment, suicide, homelessness, and myriad other social diseases associated with generational poverty - effects

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most Native people have come to regard as intrinsic to modern Indian-*ness* and well-discussed in varied scientific literatures, as well as in national rhetoric. Centuries of these federal governmental practices effectuated against Native people of the United States – wars, starvation, relocation, the reservation system, kidnapping Native children, and forced removal of cultural icons from these same children – certainly left an indelible mark on the collective psyche of Native American Indian people today.

Unfortunately, one such deleterious psychological mark remaining on many Native psyches are the societally-created negative connotations of Indian-*ness* that likely led to the denial of oneself … of who we are as descendants of the original indigenous people of this land now called the United States. Many Native people, including this author, survived a time in United States history of the 20th century when being called "Indian" was meant as a degrading insult. It should, therefore, be no surprise that Native people – 'real' Indians – might be hesitant to self-identify as a Native American Indian. In the past, derogatory racial slurs such as "half-breed" or "mixed-blood" may have caused some Native Americans to deny their own identity. Internalized negative meanings from concepts such as "half-breed" or "mixed-blood" may have indeed been too painful for some people that they might simply have 'forgotten about that part' of their identities.[2] As a result, many American Indians may have claimed attachment to a racial or ethnic identity other than that of Indian, an identity that might well have corresponded to the public's image of who they 'appear' to be based on their skin tone. Indeed, evidence of this practice was found during the earlier O.R.W. prisoner study (Abril, 2002*r*, 2003*q*, 2007*o*) but was not found within the more recent S.U.I.C.S.S. (Abril, 2005*p*). Fortunately, toxic societally-imposed connotations of Indian-*ness* may not be the situation present in the modern United States of the 21st century. Some American Indian people, like what this author has herself accomplished, might have found a sense of *cultural pride* in once disparaging racial and ethnic epitaphs of the recent past.

The purpose of this paper is to report early findings from an ongoing national study of the concordant validity of American Indian identity measures, which began thirty years ago. Using data first collected in 1997 from an imprisoned Native population, and again in 2001 from a federally-recognized American Indian tribe, and, once more, in 2025 from a national sample of American Indian tribal leaders, it is demonstrated that external identity markers and scientific measures of a *legal* American Indian identity remain just as strong, reliable and statistically valid today in 2025, as they were hundreds of years ago when these were first constructed for use by federal bureaucrats to subject Native people to varied federal policies (Abril, 2025*abcd*). Within modern 21st-century United States society, however, the public policies proposed for modification using these valid measures of Native identity are less harmful and, hopefully, more beneficial to both Native and non-Native populations alike, as will be discussed later in this report.

**Methodology**

Three (3) distinctive studies - directed over 30 years, indeed, a generation – were conducted to obtain the data used within this report: The

[2] This author is herself a self-described 'half-breed' of dark-brown skinned Yaqui Native (paternal) and fair-skinned Cherokee Indian (maternal) descent, although the label as such was applied to her by others early in her life to her great dismay. "I wish I could cut that (Indian) part of me out" was a chorus often repeated by the author early in her life.

*Southern Ute Indian Community Safety Survey*, a USDOJ-sponsored study of crime and violence on an American Indian reservation located in rural southwest Colorado beginning in 2001, the *Native American Indian Women in Prison in O.R.W*. study conducted in the only women's prison in the state of Ohio during the summer of 1998 and, the *Culturally-Based Offenses in Indian Country* study, an on-going national study of all federally-recognized American Indian tribes, with a comparison sample of Canadian First Nations, Métis, and Inuit Native groups, located within rural areas of Canada.

*Culturally-Based Offenses in Indian Country* (CBO)

The *Culturally Based Offenses in Indian Country* (CBO) study is an ongoing national exploratory prevalence rate investigation of crime, violence, and other culturally-based offenses occurring in and around Indian reservations and other areas of concentrated Native American Indian populations across the United States beginning in late March 2025. Instances of violent victimization where victims are targeted for crime/violence[3] based on characteristics defined by one's culture are the primary focus of the larger CBO research effort.[4] The first phase of the CBO study involved sending letters

[3] This is a form of violent victimization often re-categorized by non-Native officials within official police reports as "substance-involved domestic violence," or mental illness or any other category to cloud the actual cause reported by tribal members to authorities who are likely outsiders to the tribal culture, such as non-tribal police officers. It is hypothesized that much of the rhetoric surrounding the rate, prevalence and severity of domestic violence and child abuse occurring within Indian Country might simply be based on violence stemming from witchcraft/sorcery allegations. Indeed, initial data collected during this study supports this idea.

[4] The United Nations (Howard, 2025) and other researchers around the world (see, *e.g*., Forsyth, 2021; Forsyth *et al*., 2021) have identified these forms of crime as "sorcery-accusation-related violence" (SARV). The word 'sorcery' (meaning related to the occult) is not well-used within the United States and is less congruent with modern American English cultural lexicon, as is the term "witchcraft," (also meaning related to the occult), which has a long history of use in the U.S., beginning with the Salem Witch Trials of 1692 and other similar events (see, *e.g.,* Geis and Bunn, 1997). Yet, these forms of crime and violence – based on accusations and/or beliefs about occult-like behaviors and/or mannerisms - are well-evident in all parts of the United States (see, *e.g*., Tanet, 2004; Richards, 2025; Farberov, 2023; United States Attorney's Office, 2024) and found within many tribal cultures, such as Diné (Navajo) (Kluckholn, 1944), Apache (Basso, 1967), Hopi (Waters, 1965), Zuñi (Simmons, 1974), Ute (Abril, 2009*m*) and Yaqui (Spicer, 1980) people present in modern southwestern United States (Walker, 1989), as they are around the world (see, *e.g.,* Associated Press, 2025; Evans-Pritchard, 1976). To be more congruent with modern American English lexicon, and to prevent any confusion about the meanings of terms used, this author uses the term, "culturally-based offenses" in place of "sorcery-accusation related violence." Moreover, the new term used by the author encompasses other crimes committed based on cultural characteristics of the victim(s), such as ethnic group membership, cultural beliefs, and those behaviors by cultural

of inquiry with an Introduction to the study and requesting documentation and case number citations for these types of offenses to all United States Assistant Attorney's Offices with jurisdictions located west of the Mississippi River (*N* = 48, 51.6%).[5] Confidential telephone discussions and e-mail exchanges were conducted with U.S.A.A.s who have jurisdiction over prosecution of crimes occurring on Indian reservations. Next, all of the Regional Directors of the United States Bureau of Indian Affairs (BIA) regions (*N* = 13, 100.0%), all of the BIA Agency Superintendents for the various Indian Agencies of the Bureau of Indian Affairs field offices (*N* = 80, 100.0%), all of the Chief Justices of the Courts of Indian Offenses (also known as C.F.R. Courts or Courts of Federal Regulations) of the Bureau of Indian Affairs (*N* = 5, 100.0%) were queried via U.S. Mail and requested to respond to an anonymous survey questionnaire form which asked about culturally-based types of offenses. Next, all (*N* = 574, 100.0%) federally-recognized American Indian tribes (including Native Alaskan groups) were identified with the name and official tribal business mailing addresses of each current democratically-elected tribal leader (*e.g.*, Chairman/woman of the Tribal Council) who is currently recognized under federal law to represent each tribe in governmental and other external affairs of each tribe. Each Tribal Council Chairman/woman was mailed via U.S. Mail a one-page Letter of Introduction, a two-page (front and back) 46-item anonymous survey form requesting information about "Culturally-based Offenses," which included a definition for and examples of culturally-based offenses, a stamped and addressed return envelope was provided. The definition for culturally-based offenses provided to all survey respondents was as follows:

> **Definition of Culturally-based Offenses:** Crimes where the victim(s) are targeted based on characteristics defined by one's culture. Examples include: "witches (*bruja/o)*," "witchcraft (*brujarea*)," "Bad Medicine," "Medicine Men/Women/People," "shaman" or any form of 'evil' or 'evil-ness.' A person of any age or tribal affiliation being targeted for crime / violence because they are perceived by others to be practicing witchcraft or are themselves considered to be a "witch" or otherwise "evil."

Next, all (*N* = 222, 100.0%) tribal Chiefs of Police (or Directors of Public Safety) for federally-recognized American Indian tribes across the United States (including Alaska) who maintain tribal police departments or house a Bureau of Indian Affairs law enforcement agency providing police services to

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group outsiders that violate the cultural values and norms of any fragile Native culture (see, e.g., Abril, 2024*i*; 2008*n*).

[5] The U.S.A.A.'s located west of the Mississippi River were chosen because most American Indian reservations are located west of the Mississippi River, an unfortunate lasting effect of the Indian removal and relocation policies of the previous centuries beginning around 1750 (Getches, D.H., Wilkinson, C.F., Williams, R.A. (1993). *Federal Indian Law: Cases and Materials*, West Publishing Co.: St. Paul, Minn. pg. 120-128). The U.S. Island territories of Guam and Northern Mariana, Puerto Rico, and the Virgin Islands were also included in the initial sampling strategy, as was the state of Hawaii, although no Indian reservations are in Hawaii or on the other Islands nor are Native Hawaiian groups federally-recognized.

an Indian reservation or tribal community were also surveyed via U.S. Mail. The questionnaire sent to tribal Chiefs of Police had the same first 46-items sent to Tribal Council Chairmen/women but also included an additional 32-items focused on police command responsibilities of tribal law enforcement within each reservation. All ($N$ = 100, 100.0%) Alaskan Village Public Safety Officers (VPSOs) for Alaskan Native villages were also surveyed via U.S. Mail with the same survey questionnaire sent to tribal Chiefs of Police.[6] Finally, all ($N$ = 33, 100.0%) command officers for the Alaska State Troopers who serve rural Native Alaskan villages were also surveyed with the same survey questionnaire sent to tribal Chiefs of Police. Finally, Freedom of Information Act (FOIA) requests were submitted to the Federal Bureau of Investigation (FBI) requesting information about the same matters occurring on Indian reservations. As each individual entity queried in the CBO study were official government agents empowered to speak on behalf of their tribal government[7] or employed to represent their law enforcement agency, Human Subjects Research Review and Approval was not required. Future research, however, to delve deeper into culturally-related matters of crime and violence uncovered during this exploratory study, will mandate Human Subjects Research Review and Approval, as the potential future study participants, i.e., tribal members, are considered a highly vulnerable population subject to researcher misconduct.

*CBO Control Sample*

To understand if the phenomena in question were present in another yet equally-isolated rural location, a randomly-selected control sample of ($N$ = 61, 10.14%) of the 619 recognized Canadian First Nations, Métis, and Inuit groups and communities (tribes) were queried with the same Letter of Introduction and 46-item anonymous survey form sent to U.S. tribes, including an addressed stamped envelope in which to return the completed survey. The randomly-selected sample populations were drawn from the Canadian areas of Northwest Territories, Ontario, British Columbia and the Yukon, as these areas were shown to have large concentrations of Native residents (Statistics

[6] Alaskan Village Public Safety Officer (VPSO) Program is a law enforcement program operated by the Alaska Department of Public Safety to provide local and culturally-relevant law enforcement and other public safety services to the most rural, isolated Native Alaskan village communities located across the state of Alaska. VPSO's are certified law enforcement officers, firefighters, search and rescue responders, as well as emergency medical technicians (EMTs) who serve the remotest Alaskan bush areas (https://dps.alaska.gov/ast/vpso/home).

[7] Within the United States, federally-recognized American Indian tribes are legally considered to be "domestic dependent nations" with a legal status as "semi-sovereign nation" entities (*Worchester v. Georgia* (1832), 31 U.S. (6 Pet,) 515, 8 L.Ed 483). Therefore, the democratically-elected leaders of federally-recognized American Indian tribes are each, individually, legally-empowered and recognized as holding the sole authority to determine: (1) their own willingness to participate in the CBO survey and (2) are legally-recognized as equal counter-parts to state-level Governors or Presidents of other sovereign nations, who can be queried for survey purposes without Human Subjects Research Review and Approval.

Canada, 2025).[8] Additionally, a smaller sample (*N* = 61, 10.14%) of Chiefs of Police for Canadian First Nations, Métis, and Inuit reserves (reservations) who are based on or near reserves serving Native populations were also sampled with the same 78-item survey form sent to U.S.-based tribal Chiefs of Police.[9] Finally, a smaller sample (*N* = 33, unknown %) of Commanders of the Royal Canadian Mounted Police (RCMP) who provide police services to Native reserves were also queried with the same Letter of Introduction and 78-item survey form mailed to U.S. tribal Chiefs of Police, including a stamped addressed return envelope.

*Response Rate and Methodological Concerns*

As of August 1st, 2025, a combined total of twenty-eight (28) mailed survey responses were returned from the collective U.S. sample populations: Tribal Chairpersons (*n* = 574, 100%) and Chiefs of Police, Alaska State Troopers, Village Public Safety Officers (*n* = 357, 100%), whilst only 1 (one) returned written response was received from the total (*n* = 155, unknown %) Canadian control sample population (*N* = 931, .03%). Many private telephone calls, however, were received by this author from various tribal respondents (both from tribal Chairpersons and Chiefs of Police or their designees) who verbally provided much richer and more expansive data about culturally-based offenses occurring on their own reservations within their own tribal communities over which they have legal jurisdiction - data to be used to support additional future research endeavors on these and other topics.

The small response rate is likely an artifact of the methodology initially used within this exploratory study. Asking about culturally- or spiritually-based matters among a Native American population is forbidden among many tribal sub-cultures. Attempting to convey cultural or spiritual information within a written questionnaire about these matters in a written English format lends itself to providing an insurmountable barrier to participation among many varied tribal people, as the cultural customs of many tribes is such that speaking about these matters – indeed, even 'thinking about' these matters – is culturally prohibited. The cultural and social milieu of many modern Native American Indians is such that any cultural or spiritual matters are reserved for discussion only within and between other tribal members, or, at least, with other Native people of other tribal groups. For these reasons, a written mailed survey questionnaire is likely to be the worst possible methodology to use with which to gather validating quantitative data on culturally-based offenses (crimes) that occur among Native people yet was the only method available to

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[8] https://www.statcan.gc.ca/o1/en/plus/3920-canadas-indigenous-population

[9] The author is uncertain of the legal status Canadian-recognized First Nations, Métis, and Inuit people enjoy within the sovereign nation of Canada. This author treated the Canadian group leadership surveyed herein as equal participants with equal rights to decide to participate (or not) in the study. As laws and regulations surrounding human subjects research for each sovereign nation developed out of the Nuremberg Code (https://pubmed.ncbi.nlm.nih.gov/18811995/), the author worked based on the knowledge gained from her United States-based scientific training that mandates U.S.-based researchers must comply with human subjects research policies and procedures. "Official government agents and leaders," may be queried by the public (including the author) as part of their governmentally-recognized leadership positions and responsibilities.

the author to obtain a nationally-representative sample of Native American Indians who are, unequivocally, American Indian.

One tribal elder man, who also serves as the Chief of Police for a large, well-known Indian reservation located within the mid-western region of the United States, reported to this author, "it is just easier to talk about this than to write about it" (personal communication with informant TCP205, 2025). This tribal government official provided rich and deeply personal cultural information about the topics on the survey questionnaire. This police official concluded our conversation by extending an invitation to this author to visit 'his' reservation. Other telephone conversations with other tribal government representatives were just as fruitful for this investigation. One tribal woman reported she called on behalf of the Tribal Council Chairwoman and the cultural preservation officer of her tribe, who both wanted to learn if the areas queried are areas that "should be included in their own Tribal Code" (personal communication with informant W565, 2025). Future research endeavors, no doubt, will be facilitated by confidential telephone conversations held between this author and various tribal government representatives during this initial phase of the investigation. Tribal groups (tribes) located in the most rural Alaskan Frontier to the United States South up to the Canadian border, and from California to New York were represented in the initial response to this study. As a token of this author's appreciation for their willingness to speak about these matters, this author mailed to each caller copies of two of her most recent books: *Cultural Values* (2024*i*) and *Bad Sprits* (2024*j*) – two books that discuss previous research on culturally-based offenses - an unexpected gift this author hopes to be useful to these tribal people.

*Southern Ute Indian Community Safety Survey* (S.U.I.C.S.S.)

The *Southern Ute Indian Community Safety Survey* (S.U.I.C.S.S.) was a study of crime and violence occurring on and around the Southern Ute Indian reservation, located in rural southwest Colorado, USA.[10] The S.U.I.C.S.S. consisted of a 72-item survey questionnaire completed by 667 residents of rural southwest Colorado and 85 structured personal face-to-face interviews conducted with American Indian tribal members, with a survey response rate of 18.2 %. The survey instrument was mailed to all adult tribal members (those over the age of 18), whilst a control sample of non-Indians was derived from the La Plata County voter registration list that contained names and addresses of adults over the age of 18 years. The sample contained 312 INDIANS (tribal members) and other people who self-identified as Native American Indian, as well as 355 non-INDIANS, who reported membership in varying ethnic groups, with the dominant group being Euro-American based.[11] [12] In the present study, only responses from the INDIAN (*n* = 312) group were

[10] USDOJ/BJA/BJS Award 2001-3277-CA-BJ USD$120,004. Also, reported earlier in Abril, 2025*efg;* 2024*h;* 2015*k*, *l*; 2005*p*.

[11] Within this report, Euro-American is generally denoted as being non-Indian, as were all others who reported an ethnic identity other than American Indian.

[12] For a complete discussion of the methodology used to gather the original data, see Abril, J.C. (2009) *Crime and Violence in a Native American Indian Reservation: A Criminological Study of the Southern Ute Indians, Forward by Gilbert Geis, Past President American Society of Criminology*. VDM Publishing House: Mauritius and, Abril, J.C. (2005). *The Relevance of Culture, Ethnic Identity, and Collective Efficacy to Violent Victimization in*

used as a comparison group. Prior to beginning any data collection for the S.U.I.C.S.S., Abril addressed the entire Tribal Council for the Southern Ute Indian Tribe to request their authorization for this study and access to their tribal enrollment roster. The Tribal Council fully approved this study, as did the Director of the Southern Ute Department of Justice and Regulatory. The Human Subjects Institutional Review Board for the University of California, Irvine Division also fully approved of this study.

*SUICSS Interviewees* (SUINTERVIEW)

Participants for the personal interview section of the S.U.I.C.S.S. were self-selected from those who received a survey packet and notice requesting participation in the personal interview phase of the study. A total of 85 personal interviews were conducted, yet only 71 (83.5%) were included in the present analysis and 14 (16.4%) were of tribal criminal justice system personnel about their tribal employment duties. Four ($N$ = 4, 4.6%) interview recordings were damaged and incomplete due to tape recorder errors. Yet, handwritten notes taken during the actual interviews in 2001 were still available and were used to input some of the missing data contained within the four (4) damaged recordings.

*Native American Indian Women in Prison (O.R.W. PRISONER)*

During the summer of 1997, the Ohio Reformatory for Women (O.R.W.) was selected as a research site for an exploratory study of Native American Indian women in prison. This was an important site to conduct this study because U.S. Census data for the state of Ohio at the time of the study indicated very few of the state's general population were Native (U.S. Census Data, 1990). The Ohio Department of Rehabilitation and Correction demographic statistics, current at the time of this study, indicated that O.R.W.'s population was predominately Black ($n$ = 1,134; 55.67%), while White was the next largest group ($n$ = 899; 44.14%). The Ohio prison agency reported that only 1 Asian and 2 Native American women were housed in ORW (personal communication with the Director of Research, 1998). U.S. Census data (1990) for Ohio indicated that the state's general population was almost all White (87.7%), with far fewer Blacks (10.6%). Other ethnic groups, according to official government statistics, constitute less than 2% of the state's residents. Yet, upon surveying the approximately ≈ 1,700 imprisoned women, 255 (≈ 40.0%), indicated they consider themselves to be, at least partially, Native American Indian, contrary to the two ($N$ = 2, .001%) Native women the state indicated it held within the prison and reflected within their demographic census records. Moreover, and of great significance to the present study reported herein, the women who maintained a Native American Indian identity provided various indications of the accoutrements of their Native identity (*e.g.*, tribal affiliation(s), enrollment status, familial enrollment status, contact with and visits to their reservation, etc.). The various measures of a Native American Indian identity used during the O.R.W. prisoner study were included in the survey instrument designed by the author during the S.U.I.C.S.S. See Abril (2002*r*; 2003*q*; 2007*o*) for complete discussions of the methodology and the study's strengths and weaknesses. Before beginning the O.R.W. study, Human Subjects Institutional Review Board approval was obtained from the University of Cincinnati and the State of Ohio Department of Rehabilitation and Correction, as well as from the then-Warden of O.R.W.

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*One Native American Indian Tribal Community*. Ph.D. dissertation, on file at the University of California, Irvine Division.

**Data Analysis**

*Quantifying Qualitative Survey and Interview Data*

The methods used to quantify qualitative data gathered during the face-to-face structured personal interviews from the S.U.I.C.S.S. were simple but time-consuming. The items were coded as dichotomous variables (0/1), where each interviewee indicated a positive or 'yes' response was coded as "1" or a negative or 'no' was coded as "0." Those interviewees declining to supply the requested information (or supplying unresponsive or undecipherable responses) were coded as "0." The latter responses were not coded as "system missing" in IBM/SPSS (v26 in 2024 v29 in 2025) because the respondent did provide some type of information, but it was unclear to the researcher what their responses meant, and the interviewer failed to seek further clarification at the time of the interview. Those respondents who did not provide any information were coded as "system missing' in IBM/SPSS (v29). The single item that requested survey participants to rate on a Likert-syle scale the offensiveness of "Indians not respecting tribal elders" (1 - 2 = not offensive, 3-4 = offensive, 3 = neither offensive nor not offensive) was recoded into a 0 / 1 variable (0 = not offensive, 1 = offensive, 3 was deleted from analysis). These same coding procedures were followed when preparing the dataset from the O.R.W. study surveys for use in the present work. Farrington and Loeber (2006) reported that dichotomization of coded variables provides some additional benefits, such as some "improved power" to detect effects and "no measurable decrease" in the strength of detected associations than when using continuous variables that rely on interpretation of the *r* statistic alone, as in regression analysis. Also, using items that required simple "yes / no" responses help control the possibility of myriad and varied responses that the researcher may or may not later be able to interpret without recontacting original survey participants from 1998, an option that was clearly not available when these data were re-analyzed for the present report in 2025.

*Variables Used in Analysis*

The twelve (12) variables used in these analyses were the following: (1) Identified self as Indian (INDIAN: 0 / 1; 0 = no, 1 = yes); (2) Named (identified) tribe (TRIBNAM: 0 / 1; 0 = no, 1 = yes); (3) Are you enrolled (in your tribe) (ENROL: 0 / 1; 0 = no, 1 = yes); (4) Any family enrolled (FAMENROL: 0 / 1; 0 = no, 1 = yes); (5) Family attend Indian school (INDSCH: 0 / 1; 0 = no, 1 = yes); (6) Any contact with tribe (CONTAC: 0 / 1; 0 = no, 1 = yes); (7) Any visits to reservation (VISREZ: 0 / 1; 0 = no, 1 = yes); (8) Age (under / over 40 years) (AGE: 0 / 1; 0 = under 40 years, 1 = over 40 years); (9) Gender (male / female) (GENDER: 0 / 1; 0 = male, 1 = female); (10) Are you a tribal elder (ELDER: 0 / 1; 0 = no, 1 = yes); (11) Use of Medicine Man/woman (Traditional Healer) (12) Harsh view toward disrespect of tribal elders (DISRESP: 0 / 1; 0 = not offensive, 1 = very offensive).

The four (4) groups in the present analysis were: CBO (NATIONAL), SUICSS survey respondents (SUICSS), the SUICSS interviewees (SUINTERVIEW), and the study participants in the Ohio Reformatory for Women study (PRISONER). The measures of identity used in all four groups are presented in Table 1 (below). Previous reports by this author detailed the validity and reliability of these individual *legal* American Indian identity measures separately, and when used together as a new identity construct for use in criminology (Abril, 2025*c*, *d*, *f;* 2003*q;* 2002*r*) – a test of internal validity, while the present analysis is a test of external validity.

| Table 1. Variables Used in Analysis | | | | |
|---|---|---|---|---|
| | POPULATIONS | | | |
| **MEASURES** | **NATIONAL** | **SURVEY** | **INTERVIEW** | **PRISONER** |
| Are you Indian? (INDIAN) | cboINDIAN | surINDIAN | intINDIAN | orwINDIAN |
| Named Tribe (TRIBNAM) | cboTRIBNAM | surTRIBNAM | intTRIBNAME | orwTRIBENAM |
| Are you enrolled? (ENROL) | cboENROL | surENROL | intENROL | orwENROL |
| Any family enrolled? (FAMENR) | cboFAMENR | surFAMENR | intFAMENR | orwFAMENR |
| Any family Indian School? (INDSCH) | cboINDSCH | surINDSCH | intINDSCH | orwINDSCH |
| Any contact with tribe? (CONTAC) | cboCONTAC | surCONTAC | intCONTAC | orwCONTAC |
| Visit rez/land? (VISREZ) | cboVISREZ | surVISREZ | intVISREZ | orwVISREZ |
| Age (under / over 40) (AGE) | cboAGE | surAGE | intAGE | orwAGE |
| Gender (GENDER) | cboGENDER | surGENDER | intGENDER | orwGENDER |
| Are you a Tribal Elder? (ELDER) | cboELDER | surELDER | intELDER | n/a |
| Harsh View of Disrespect (DISRESP) | cboDISRESP | surDISRESP | intDISRESP | n/a |
| n/a = not asked | | | | |

*Descriptives*

Table 2 (below) presents the descriptive statistics for the combined sample of American Indians in the present analysis. Only those survey respondents who indicated an American Indian identity were included in the initial analysis ($N$ = 644).

| Table 2. Descriptives | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **MEASURE** | $N$ | $\bar{X}$ | $SD$ | $\sigma^2$ | $\gamma_1$ | **SE** | $\beta_2$ | **SE** |
| Do you consider yourself to be American Indian? | 644 | 1.00 | .000 | .000 | - | - | - | - |
| Identified Tribe Name | 644 | .81 | .395 | .156 | -1.563 | .096 | .445 | .192 |
| Are you enrolled? | 574 | .62 | .486 | .236 | -.497 | .102 | -1.759 | .204 |
| Any family enrolled? | 509 | .87 | .341 | .166 | -2.160 | .108 | 2.677 | .216 |
| Any family attend an Indian school? | 501 | .59 | .492 | .242 | -.379 | .109 | -1.864 | .218 |
| Any contact with tribe? | 373 | .91 | .284 | .081 | -2.910 | .126 | 6.503 | .252 |
| Any visits to reservation? | 393 | .89 | .309 | .096 | -2.555 | .123 | 4.550 | .246 |
| Ever used a traditional healer?† | 40 | .65 | .483 | .233 | -.654 | .374 | -1.658 | .733 |
| Are you a tribal elder? † | 65 | 1.00 | .000 | .000 | - | - | - | - |
| AGE | 629 | .38 | .487 | .237 | .482 | .097 | -1.773 | .195 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| GENDER | 642 | .75 | .432 | .187 | -1.172 | .093 | -.629 | .193 |
| View of Disrespect †† | 359 | .93††† | .250 | .063 | -3.483 | .129 | 10.188 | .195 |
| †= Prisoners not asked; ††= Range 1 – 4 re-coded as "0"/"1" = "not offensive"/"offensive"; †††=.013 | | | | | | | | |

*ANOVA*

To determine whether there were significant differences between the means of the four groups, ANOVA analyses were conducted on each measure of identity. Because the ANOVA test was designed for comparing means between three or more groups, ANOVA was preferable to conducting multiple separate *t*-tests that might increase the possibly of a Type 1 error (incorrectly finding a significant difference) (Rosenthal & Rosnow, 1991; Zedeck, 2014). Tables 3A and 3B (below) present the results of the ANOVA tests conducted on each measure of identity. The ANOVA analysis results indicated significant variances between the four groups ($p < .001$) tested, i.e., the variances were not equal across the groups.[13] The effect sizes indicated on each ANOVA test reflected moderate to large effects the variances had on each measure within each group. The author decided it was best to be cautious about interpreting these ANOVA statistics.[14]

**Table 3A. ANOVA (Indians Only)**

| Measure | Sample | *N* | $\bar{X}$ | *SD* | *SE* | *SS* | *df* | *MS* | *F* | *p* |
|---|---|---|---|---|---|---|---|---|---|---|
| Is Am. Indian† | NATIONAL | 12 | 1.00 | .000 | .000 | .000 | 3 | .000 | - | - |
| (Btwn Groups) | SUICSS | 310 | 1.00 | .000 | .000 | .000 | - | - | - | - |
| | SUINTERVIEW | 71 | 1.00 | .000 | .000 | .000 | - | - | - | - |
| | PRISONER | 251 | 1.00 | .000 | .000 | .000 | - | - | - | - |
| | Total | 644 | 1.00 | .000 | .000 | .000 | - | - | - | - |
| † = all (100.0%) participants identified as American Indian | | | | | | | | | | |
| Identified Tribe | NATIONAL | 12 | 1.00 | .000 | .000 | 37.383 | 3 | 12.461 | 127.111 | <.001 |
| (Btwn Groups) | SUICSS | 310 | 1.00 | .000 | .000 | - | - | - | - | - |
| | SUINTERVIEW | 71 | 1.00 | .000 | .000 | - | - | - | - | - |
| | PRISONER | 251 | 1.00 | .000 | .000 | - | - | - | - | - |
| | Total | 644 | .81 | .395 | .016 | - | - | - | - | - |

[13] This is a significant violation of the assumption of equality of variances needed for use of the ANOVA test. However, because the potential for a Type I error was greater using individual *t*-tests (the alternative to the ANOVA), the ANOVA analysis results were retained albeit used with extreme caution herein.

[14] Advanced statistical analysis and interpretation are not the author's strong suite of research skills.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Levene = 911188.627; *df* = 3; *df*2 = 640; *p* = <.001; ANOVA effect sizes: $\eta^2$= .373; $\epsilon^2$= .370; $\omega^2$= .370*f* - .164*r*; Welch = not calculated because one group had 0 variance | | | | | | | | | | |
| Enrolled | NATIONAL | 12 | .92 | .289 | .083 | 89.338 | 3 | 29.779 | 370.070 | <.001 |
| (Btwn Groups) | SUICSS | 305 | .87 | .342 | .020 | - | - | - | - | - |
| | SUINTERVIEW | 71 | 1.00 | .000 | .000 | - | - | - | - | - |
| | PRISONER | 186 | .05 | .226 | .017 | - | - | - | - | - |
| | Total | 574 | .62 | .486 | .020 | - | - | - | - | - |
| Levene = 21.578; *df* = 3; *df*2 = 570; *p* = <.001; ANOVA effect sizes: $\eta^2$= .661; $\epsilon^2$= .659; $\omega^2$= .659*f* - .391*r*; Welch = not calculated because one group had 0 variance | | | | | | | | | | |
| Family Enrolled | NATIONAL | 11 | 1.00 | .000 | .000 | 1.997 | 3 | .666 | 5.906 | <.001 |
| | SUICSS | 288 | .86 | .350 | .021 | - | - | - | - | - |
| | SUINTERVIEW | 71 | 1.00 | .397 | .000 | - | - | - | - | - |
| | PRISONER | 139 | .81 | .000 | .034 | - | - | - | - | - |
| | Total | 509 | .87 | .341 | .015 | - | - | - | - | - |
| Levene = 34.365; *df* = 3; *df*2 = 505; *p* = <.001; ANOVA effect sizes: $\eta^2$= .034; $\epsilon^2$= .028; $\omega^2$= .028*f* - .010*r*; Welch = not calculated because one group had 0 variance | | | | | | | | | | |
| Indian School | NATIONAL | 11 | .36 | .505 | .152 | 48.619 | 3 | 16.206 | 111.382 | <.001 |
| (Btwn Groups) | SUICSS | 287 | .72 | .447 | .026 | - | - | - | - | - |
| | SUINTERVIEW | 71 | 1.00 | .000 | .000 | - | - | - | - | - |
| | PRISONER | 132 | .11 | .309 | .027 | - | - | - | - | - |
| | Total | 501 | .59 | .492 | .022 | - | - | - | - | - |
| Levene = 93.651; *df* = 3; *df*2 = 497; *p* = <.001; ANOVA effect sizes: $\eta^2$= .402; $\epsilon^2$= .398; $\omega^2$= .398*f* - .181*r*; Welch = not calculated because one group had 0 variance | | | | | | | | | | |
| Contact w/ Tribe | NATIONAL | 12 | 1.00 | .000 | .000 | 88.353 | 3 | 29.451 | 319.696 | <.001 |
| (Btwn Groups) | SUICSS | 290 | .89 | .318 | .019 | - | - | - | - | - |
| | SUINTERVIEW | 71 | 1.00 | .000 | .000 | - | - | - | - | - |
| | PRISONER | 232 | .13 | .336 | .022 | - | - | - | - | - |
| | Total | 605 | .61 | .488 | .020 | - | - | - | - | - |
| Levene = 20.746; *df* = 3; *df*2 = 601; *p* = <.001; ANOVA effect sizes: $\eta^2$= .615; $\epsilon^2$= .613; $\omega^2$= 612*f* - .345*r*; Welch = not calculated because one group had 0 variance | | | | | | | | | | |
| Visits Reservation | NATIONAL | 12 | 1.00 | .000 | .000 | 55.051 | 3 | 18.350 | 163.549 | <.001 |
| (Btwn Groups) | SUICSS | 310 | .86 | .343 | .019 | - | - | - | - | - |
| | SUINTERVIEW | 71 | 1.00 | .000 | .000 | - | - | - | - | - |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | PRISONER | 156 | .20 | .400 | .032 | - | - | - | - | - |
| | Total | 549 | .70 | .460 | .020 | - | - | - | - | - |
| Levene = ; *df* = 3; *df*2 = 497; *p* = <.001; ANOVA effect sizes: $\eta^2$= .402; $\epsilon^2$= .398; $\omega^2$= .398*f* - .181*r*; Welch = not calculated because one group had 0 variance | | | | | | | | | | |

**Table 3B. ANOVA (con't)**

| **Measure** | **Sample** | ***N*** | $\bar{X}$ | ***SD*** | ***SE*** | ***SS*** | ***df*** | ***MS*** | ***F*** | ***p*** |
|---|---|---|---|---|---|---|---|---|---|---|
| Traditional Healer | NATIONAL | 11 | .27 | .467 | .141 | 2.160 | 1 | 2.160 | 11.824 | .001 |
| (Btwn Groups) | SUINTERVIEW | 29 | .79 | .412 | .077 | - | - | - | - | - |
| | Total | 40 | .65 | .483 | .076 | - | - | - | - | - |
| Prisoners and Survey Respondents not asked; Levene = .682; *df* = 1; *df*2 = 38; *p* = .414; ANOVA effect sizes: $\eta^2$= .237; $\epsilon^2$= .217; $\omega^2$= .213*f* - .213*r*; Welch = 10.539, *df1* = 2; *df*2 = 16.275; *p* = .005 | | | | | | | | | | |
| Tribal Elder | NATIONAL | 11 | .36 | .505 | .152 | .445 | 2 | .222 | 1.538 | .216 |
| (Btwn Groups) | SUICSS | 292 | .17 | .380 | .022 | - | - | - | - | - |
| | SUINTERVIEW | 68 | .15 | .357 | .043 | - | - | - | - | - |
| | Total | 371 | .18 | .381 | .020 | - | - | - | - | - |
| Prisoners not asked; Levene 3.548 = ; *df* = 2; *df*2 = 368; *p* = .030; ANOVA effect sizes: $\eta^2$= .008; $\epsilon^2$= .003; $\omega^2$= .003*f* - .001*r*; Welch = .942, *df1* = 2; *df*2 = 25.090; *p* = .403 | | | | | | | | | | |
| AGE | NATIONAL | 10 | .80 | .422 | .133 | 8.508 | 3 | 2.836 | 12.647 | <.001 |
| (Btwn Groups) | SUICSS | 306 | .44 | .498 | .028 | - | - | - | - | - |
| | SUINTERVIEW | 64 | .53 | .503 | .063 | - | - | - | - | - |
| | PRISONER | 249 | .25 | .436 | .028 | - | - | - | - | - |
| | Total | 629 | .38 | .487 | .019 | - | - | - | - | - |
| Levene = 34.848; *df* = 3; *df*2 = 625; *p* = <.001; ANOVA effect sizes: $\eta^2$= .057; $\epsilon^2$= .053; $\omega^2$= .053*f* - .018*r*; Welch = 13.487, *df*1 = 3; *df*2 = 40.917; *p* = <.001 | | | | | | | | | | |
| GENDER | NATIONAL | 11 | .27 | .467 | .141 | 26.500 | 3 | 8.833 | 60.520 | <.001 |
| (Btwn Groups) | SUICSS | 310 | .60 | .491 | .028 | - | - | - | - | - |
| | SUINTERVIEW | 70 | .63 | .000 | .058 | - | - | - | - | - |
| | PRISONER | 251 | 1.00 | .487 | .000 | - | - | - | - | - |
| | Total | 642 | .75 | .432 | .017 | - | - | - | - | - |
| Levene = 1709.188; *df* = 3; *df*2 = 638; *p* = <.001; ANOVA effect sizes: $\eta^2$= .222; $\epsilon^2$= .218; $\omega^2$= .218*f* - .085*r*; Welch = not calculated because one group had 0 variance | | | | | | | | | | |
| DISRESPECT† | NATIONAL | 10 | .90 | .316 | .100 | .101 | 2 | .050 | .806 | .447 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| (Btwn Groups) | SUICSS | 286 | .93 | .261 | .015 | - | - | - | - | - |
| | SUINTERVIEW | 63 | .97 | .177 | .022 | - | - | - | - | - |
| | Total | 359 | .93 | .250 | .013 | - | - | - | - | - |
| Prisoners not asked; Levene = 3.458; *df* = 2; *df*2 = 356; *p* = .033; ANOVA effect sizes: $\eta^2$= .005; $\epsilon^2$= -.001; $\omega^2$= -.001*f* - -.001*r*; Welch = 1.226, *df*1 = 2; *df*2 = 23.094; *p* = .312 | | | | | | | | | | |

*Correlations*

To determine which of the measures were possibly related (positively, negatively or not at all), a *Pearson's r* correlation coefficient matrix was created. As can be observed in Table 4A (below), being able to identify (name) one's tribe is positively correlated with being enrolled in a tribe ($r = 1, p < .001$). Likewise, having contact with one's tribe is positively correlated with making visits to one's land or reservation ($r = 1; p < .001$). Moreover, being enrolled in or having a family member enrolled in a tribe is positively correlated with reporting Indian school attendance ($r = .356, p < .001$), contact with one's tribe ($r = .460, p < .001$), and visits to one's land or reservation ($r = .501, p < .001$). These findings mean that as one variable increases (indicating a positive or affirmative response), the other correlated variable increases as well. These coupled variables move in tandem. Simply, when a respondent answers positively to one item, the other (correlated) item will be answered positively as well. Not surprisingly, AGE (being over 41 years) is positively correlated with being a tribal elder ($r = .471, p < .001$) and negative views toward disrespect of tribal elders ($r = .359, p = -.011$). GENDER, however, had a mild negative correlation ($r = -.130, p = .001$). The measures HEALER (using a Medicine Man/Woman) and TRIBAL ELDER were not significantly correlated with the other measures ($p > .05$) and were deleted from further analyses.

**4A. CORRELATIONS**

| | **ID TRIBE** | **ENRD** | **FM ENRD** | **SCHOOL** | **CONTACT** | **VISITS** |
|---|---|---|---|---|---|---|
| ID TRIBE Pearson | - | - | - | - | - | - |
| Sig | - | - | - | - | - | - |
| N | 644 | 574 | 509 | 501 | 373 | 393 |
| ENRD Pearson | **1** | 1 | .356 | .630 | .460 | .501 |
| Sig | <.001 | - | **<.001** | **<.001** | **<.001** | **<.001** |
| N | 574 | 574 | 467 | 479 | 371 | 388 |
| FM ENRD Pearson | .023 | .356 | 1 | .243 | .533 | .484 |
| Sig | .608 | **<.001** | - | <.001 | <.001 | <.001 |
| N | 509 | 467 | 509 | 410 | 358 | 370 |
| SCHOOL Pearson | .395 | .630 | .243 | 1 | .374 | .285 |
| Sig | <.001 | <.001 | <.001 | - | <.001 | <.001 |
| N | 501 | 479 | 410 | 501 | 353 | 369 |
| CONTACT Pearson | - | .460 | .533 | .374 | 1 | .474 |
| Sig | - | <.001 | <.001 | <.001 | - | <.001 |

| | | | | | | |
|---|---|---|---|---|---|---|
| N | 373 | 371 | 358 | 353 | 373 | 373 |
| VISITS Pearson | .501 | .484 | .285 | .474 | **1** | -.132 |
| Sig | - | <.001 | <.001 | <.001 | <.001 | - |
| N | 393 | 388 | 370 | 369 | 373 | 393 |

| **4B. CORRELATIONS (CON'T)** | | | | | |
|---|---|---|---|---|---|
| | **HEALER** | **ELDER** | **AGE** | **GENDER** | **DSRSPT** |
| HEALER Pearson | 1 | .139 | -.108 | .410 | -.013 |
| Sig | - | .412 | .557 | .011 | .943 |
| N | 40 | 37 | 32 | 38 | 34 |
| ELDER Pearson | .139 | 1 | .474 | -.024 | -.029 |
| Sig | .412 | - | <.001 | .647 | .590 |
| N | 37 | 371 | 362 | 370 | 341 |
| AGE Pearson | -.108 | .474 | 1 | -.130 | .359 |
| Sig | .557 | **<.001** | - | **.001** | **-.011** |
| N | 32 | 362 | 629 | 629 | 349 |
| GENDER Pearson | .410 | -.024 | -.130 | 1 | .008 |
| Sig | .011 | .647 | .001 | - | .873 |
| N | 38 | 370 | 629 | 642 | 359 |
| DSRSPT Pearson | -.013 | -.029 | -.011 | .008 | 1 |
| Sig | .943 | .590 | .844 | .873 | - |
| N | 34 | 341 | 349 | 359 | 359 |

*Factor Analysis*

To reduce the number of correlated variables (measures) into a smaller set of components, a Principal Component Analysis (PCA) was conducted. After reduction in the PCA, it was revealed that being enrolled in a tribe ($\lambda = .665, \sigma^2 = 36.823$) and having a family member enrolled in a tribe ($\lambda = .699; \sigma^2 = 14.868$) were the components (variables) that accounted for most of the variance ($p < .001$). This means that these two variables (being enrolled in a tribe and having a family member enrolled in a tribe) account for about 51.7% of the variance. The Kaiser-Meyer-Olkin (KMO = .809) measure indicates the sample was adequate for this PCA. The Bartlett's Test ($X^2 = 542.438, df = 28;\ p < .001$) indicates the factor analysis was suitable for these components (measures). Because components PC3 thru PC8 have eigenvalues ($\lambda$) of less than 1.0 (extraction values), these variables (components) do not represent meaningful factors in this PCA. Table 5 (below) presents the results of the PCA conducted for this study.

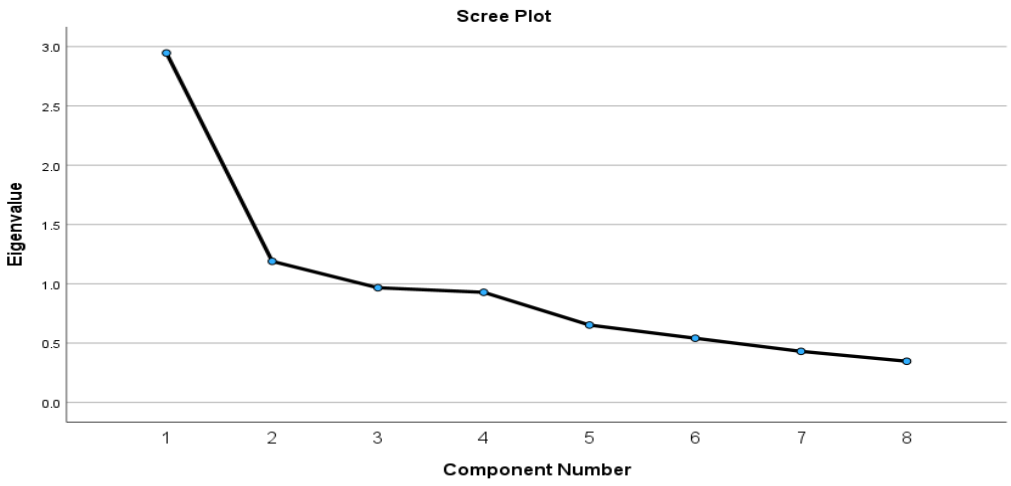
**Table 5. Factor Analysis**
**Communality ($r^2$) Values from NATIONAL, SUICSS, SUINTERVIEW and ORW Samples**

| **COMBINED** | | | **Initial Eigenvalues (λ) Total Variance Explained** | | | | | **KMO and Barlett's Test** | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Indices** | **Initial** | **Extract** | **Total** | **% $\sigma^2$** | **Extrt*SS* Total** | **% Var** | **Cum%** | **KMO** | **Bart $X^2$** | ***df*** | ***p*** |
| PC1 (Enroll) | 1.000 | .665 | 2.946 | 36.823 | 2.946 | 36.823 | 36.823 | .809 | 542.438 | 28 | <.001 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PC2 (Family Enroll) | 1.000 | .699 | 1.189 | 14.868 | 1.189 | 14.868 | 51.691 | - | - | - | - |
| PC3 (Indian School) | 1.000 | .437 | .967 | 12.082 | - | - | - | - | - | - | - |
| PC4 (Contact) | 1.000 | .597 | .928 | 11.602 | - | - | - | - | - | - | - |
| PC5 (Visits) | 1.000 | .615 | .652 | 8.156 | - | - | - | - | - | - | - |
| PC6 (Disrespect) | 1.000 | .642 | .541 | 6.761 | - | - | - | - | - | - | - |
| PC7 (AGE) | 1.000 | .164 | .430 | 5.378 | - | - | - | - | - | - | - |
| PC8 (GENDER | 1.000 | .317 | .347 | 4.336 | - | - | - | - | - | - | - |
| Method of Extraction: Principal Component Factor Analysis<br>Value 1: Do you consider yourself to be American Indian? = yes, used in analysis | | | | | | | | | | | |

The scree plot illustrated in Diagram 1 (below) indicates PC1 (being enrolled in a tribe) explains the most variance in the data (36.823%). Because the line tends to level out after the "elbow" which visually indicates the other variables contribute little to the explanatory power of these combined components, these other variables may be dropped from further consideration if time and space are significant considerations in future research efforts. However, PC2 (family enrolled) still accounts for 14.868% of the variance, while PC3 (Indian school attendance) accounts for 12.082% of the overall variance, which is why these last two components fall closer to the 1.0 line. The remaining components in the PC analysis (PC4–PC8) may be dropped from future consideration as they do not add significantly to the present overall analysis but might be significant for other testing and/or data collection situations, as will be addressed later in this report. This means that the first three components (the unreduced measures) (PC1, PC2, & PC3) of the American Indian identity construct closely 'fit' and remain valid measures of an American Indian identity. That these same eight measures were used in three (3) previous and distinctive data collection efforts (ORW, SUICSS, SUINTERVIEW) and, now, within a national survey of American Indian tribal leadership (CBO), should provide enough statistically-based empirical evidence for the use of these same measures in various national data collection efforts, including the U.S. decennial census, prisoner population demographic accounts, and other research efforts to better understand population characteristics for future improvements to healthcare delivery services, educational endeavors, housing, and other social supports and policies.

Diagram 1.




## Findings

This study found concordance between ethnic identity data collected during three distinctive studies, which were conducted over thirty years within different populations. This means data collected using the identified

Native American ethnic identity measures will collect the same data from a variety of populations over time. The national sampling strategy used to collect the data supports the external validity and robustness of the data collected using the same measures. Positive findings from this test of criterion validity of the American Indian identity measures have significant public policy implications.

Finally, the low response rate realized during the national survey of American Indian tribes is, in and of itself, a significant scientific finding. In the past, scientific researchers have been prevented from conducting tribal crime research because most funders, including the U.S. Department of Justice, have insisted on large-scale quantitative studies in their research solicitations. Methodologies to comply with federal funder requests are antithetical to the cultural milieu of tribes. Requiring written responses to sensitive culturally- or spiritually-based survey questionnaire items presents an insurmountable barrier to participation for many American Indians. In-person interviews – using an easily quantifiable personal structured interview schedule – have been demonstrated by the author to be the most effective method to obtain sensitive data from crime victims and others who may be hesitant to participate in research activities. A significant problem still exists, however. As only the federally recognized Tribal Council may authorize any research conducted on an Indian reservation, it becomes incumbent upon researchers to hone their interpersonal communication skills to best overcome the significant hesitancy many tribes express toward non-Native researchers. Not only will improved interpersonal communication skills promote improved access to tribal populations, but they will also greatly improve the quality of data collected during such endeavors.

## Public Policy Implications

*United States Decennial Census*

Future iterations of the U.S. decennial census must be revised to include additional items to measure American Indian identities found within the general U.S. population who reside outside Indian reservations. Hundreds of years of federal Indian policies and changing economic circumstances faced by American Indian individuals over the previous decades have forced many people who once resided in rural Indian reservations to relocate to larger urban communities, as seen among large urban populations of Native Americans within the cities of Chicago, Illinois and San Jose, California, for example.

Adjustments to current census data collection instruments and implementation modalities need not be extensive nor costly. Simply asking citizens if they consider themselves to be, at least partially, Native American Indian and obtaining a positive or affirmative response, may simply require further inquiry on their tribal enrollment status, that of family members, past Indian school attendance by any family member, and contact or visits to tribal land or reservation. Any additional interview items may be sued for statistical validation purposes, if needed or desired. All other citizens who do not respond affirmatively may not be affected by these additional steps.

It is critical, however, to inquire about Native American Indian heritage because this heritage is part of the total overall heritage of the United States. Native American Indians, as the original inhabitants of this land now called the United States, represents what America has been in the past, is now in the present and what we as Americans will be in the future. Certainly, other ethnic groups contributed to the great American heritage, but none paid so dear a price to belong – to remain on this land of our ancestors – as Native American

Indians have. If one ethnic group is to be given priority for special census consideration, then it must be Native American Indians.

It is important to account for bi- and multi-racial identities held by individuals because these folks may face multiple hardships on account of their mixed identities. For example, a person with an olive or black skin tone may also face generational hardships brought by attachments to ethnic or cultural groups that have historically been precluded from full participation in American society, as have many American Indian individuals. There are more than just social justice costs associated with accounting for bi- or multi-racial people. Recently, the state of Arizona reported it has potentially lost nearly "$30Billion dollars" in federal funding and the loss of one Congressional seat because the recent United States census of its Native and Hispanic populations is likely inaccurate (Hansen, 2022; Kissam, 2023). As the distribution of federal funds to states is often based on ethnic characteristics of the populations they serve, it is incumbent upon stakeholders and policymakers alike to *demand* accuracy in census data.

*Prisoner Intake*

Effective and culturally-responsive rehabilitative programs may be tailored to the unique needs of prisoner populations, both youthful and adult offenders. However, the culturally-based needs cannot be evaluated if the actual size of the Native American prisoner population is inaccurately measured; the results from mis-measuring are reflected within demographic statistics. There is mounting evidence that identity-based constructs used within criminological research, for example, show promise for a better understanding of both the etiology and prevention of crime and delinquency (Abril, 2025*abef*; La Vigne & Harold, 2025).

*Additional Social Science Research Efforts*

Growing literature reports that programs and policies tailored to the identities and cultures of special populations are more effective in reaching the intended targets. Healthcare service delivery and outreach efforts, for example, often seek out those oft-ignored populations who tend to have greater medical needs. Perhaps when populations are accurately measured to account for bi- and multi-racial individuals, then treatment modalities may be modified to better serve the needs of these populations. Likewise, there is growing evidence that children, teens, and college students do better in educational programs that target their cultural backgrounds and identities. Such targeting efforts are stymied when the demographic statistics the efforts rely upon are inaccurate.

Social science research efforts must then acknowledge and include the growing body of evidence that standardized racial/ethnic categories of White, Black, Asian, or Other hide the cultural nuances that exist within populations - nuances that may be the critical knowledge points needed to explore for relevance to the social phenomena in question. As this author has previously reported, standardized racial/ethnic categories of the previous hundreds of years have blinded researchers to the potential solutions to phenomena currently perplexing many policymakers (see, e.g., Abril, 2025*a*,*b*,*e*,*f*,*g*; Abril, 2024*h*).

## Conclusion

This Research Note has provided the empirical social scientific evidence needed upon which to base modifications to public policies that use racial and/or ethnic identity data. Distortions evident within most demographic datasets, such as the U.S. census data and those reporting on prisoner population characteristics, might be better addressed and alleviated when survey items used to collect those data are more reflective of the legal, social, and historical realities of populations, especially those experienced by the American Indian population. It is not unreasonable to foresee the actual population of American Indians rising because of rapidly deteriorating derogatory connotations attached to American Indians and improved data collection efforts to account for mixed and bi-racial individuals of American Indian descent. As many young American Indians are now fond of publicly declaring, "We are still alive!"

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