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Native American Cultural Participation And Post-Traumatic Stress Symptom Reduction

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NATIVE AMERICAN CULTURAL PARTICIPATION AND POST-TRAUMATIC
STRESS SYMPTOM REDUCTION

by

Royleen J. Ross
Bachelor of Arts, University of New Mexico, 2002

A Thesis

Submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the degree of

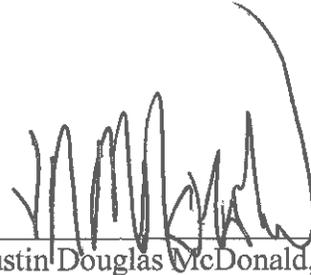
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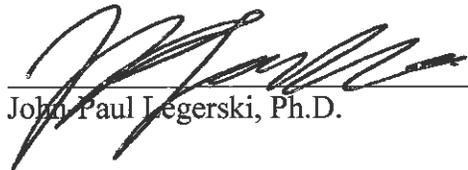
This thesis, submitted by Royleen J. Ross in partial fulfillment of the requirements for the Degree of Master of Arts from the University of North Dakota, has been read by the Faculty Advisory Committee under whom the work has been done and is hereby approved.



Justin Douglas McDonald, Ph.D.

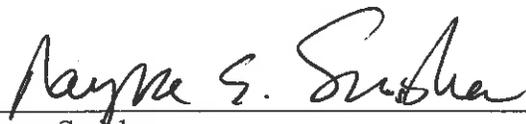


Alan R. King, Ph.D.

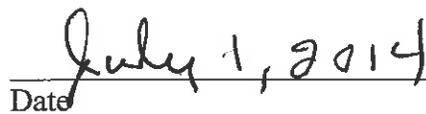


John Paul Legerski, Ph.D.

This thesis is being submitted by the appointed advisory committee as having met all the requirements of the School of Graduate Studies at the University of North Dakota and is hereby approved.



Wayne Swisher
Dean of the Graduate School


Date

PERMISSION

Title Native American Cultural Participation and Post-traumatic Stress
 Symptom Reduction

Department Psychology

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Royleen J. Ross

July 1, 2014

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To my daughters, my grandparents, my auntie
Amanda Royce Josannarae, Maredyth Benjamine Raynelle,
Benjamin and Edythe Lorenzo
“Auntie Ovie”
and all my parents

ABSTRACT

Native Americans experience a disproportionately high incidence of many medical and mental health conditions including post-traumatic stress disorder as a result of physical and sexual abuse. Thus, it is critical to conduct valid therapeutic assessments if we are to accurately diagnose and treat the effects of abuse. However, current therapeutic tools were developed and normed on the White majority population and may not be as valid for Native Americans.

The purpose of this study was to determine if cultural participation reduced post-traumatic stress symptom reduction in Northern Plains American Indian adults. This study used the Adverse Childhood Experiences (ACE) Questionnaire, the American Indian Biculturalism Inventory – Northern Plains (AIBI – NP), and the PTSD-8: A Short PTSD Inventory (PTSD-8), as measures. It was hypothesized adult American Indians, participating in traditional cultural events and activities, would have lower scores on the ACE questionnaire and PTSD-8 than adults that do not participate in traditional activities. It was also hypothesized adult American Indians, having minimal or no participation in traditional cultural events and activities and having higher scores on the ACE questionnaire, would have higher PTSD-8 scores than adults that participate in traditional activities. Further, it was hypothesized Native American men obtaining higher scores on the AIBI-NP would have lower PTSD symptom scores when compared to females scoring high on the AIBI-NP.

Northern Plains American Indian adults (N = 44, age 18 to 59) were administered the ACE, AIBI – NP, and the PTSD-8 during the 2014 University of North Dakota Indian Association Time Out *Wacipi* Powwow in Grand Forks, ND. Results suggested those participants over 30 years of age having high American Indian identification have lower PTSD than individuals over 30 with low American Indian identification and those 30 and under who had high cultural identification. The present study provided insight into age differences and cultural identification, which may serve as a protective factor in Northern Plains American Indian adults.

CHAPTER I

INTRODUCTION

According to the 2010 United States (U.S.) census, approximately 2.9 million American Indian & Native Alaskans represent 0.9% of the U.S. total population. The Bureau of Indian Affairs (2012) documents 566 federally recognized tribes, which are sovereign entities; however, there are other tribes recognized only at the state level and “about 125 or more tribes... seeking federal recognition” (Trimble, 2000). The median age of the Native American population is 31.3 years (U.S. Census, 2012). Approximately eight percent of the Native American population is 65+ years old (U.S. Census, 2010). The annual median income is reported at \$35,192 as compared to \$50,502 for the nation as a whole (U.S. Census, 2012). As of 2011, nearly 1:3 Native Americans live in poverty, which is approximately 29.5% (U.S. Census, 2012) and nearly 1:4 are without health care coverage, which is about 27.6% of the population (U.S. Census, 2012).

Thirty percent of the United States Native American population is under the age of eighteen (US Census, 2010). Alcohol related deaths amongst the 5-14 year old Native American population occurs at the rate of .3% per 100,000 as compared to no alcohol-related deaths (0.00% reported which is more than zero but less than .05) in the same age group when compared to the national average (Trends in Indian Health, 2002-2003). The suicide rate for Native American males between the ages of 10-18 accounts

for 10.37 per 100,000 deaths, as compared to 3.95 per 100,000 in the American population (Surgeon General's report, 2012).

The Bureau of Justice Statistics (2004) report the prevalence of victimized Native American children as 2%. Currently, large disparities exist in the documented rates of occurrence of physical and sexual child abuse cases reported among the Native American population, as tribal data may not be appropriately captured at the state or federal levels (Earle and Cross, 2001), however Cross and Simmons (2008) report data pertaining to Native American child neglect and abuse as occurring at the rate of 16.5 per 1,000 children. These data are alarming as they pertain to the current condition of Native American children, although in a tribal community, one does not need to look far beyond the front door to observe this statistical data unfolding.

In addressing the issue of child sexual and physical abuse within Native American communities, a hesitancy to publicly discuss this topic persists. This hesitancy may be attributed to the denial of abuse by the family and/or the greater community, strong community and family pressures to maintain silence, or leaders of the community not being knowledgeable in effectively contending with the problem (Heath, 2012). There is also "confusion over the roles and responsibilities of investigators [which] may lead to a failure to adequately prosecute these crimes" (Trope, 2008, p. 275) which may result in a child victim being subjected to multiple interviews in the various lawful jurisdictional arenas, potentially increasing the impact of victim trauma. According to EchoHawk (2001):

"[W]ith conflicting jurisdictions, it's easy for children to fall through the cracks." Having federal, tribal and state governments split jurisdiction over

offenses occurring in Indian country often leads to duplication, delay, or complete failure in the investigation and prosecution of child sexual abuse cases in Indian country (p.97) .

Further compounding this problem, child victims in some cases in Native American communities can be jostled between the community social service system where the child is relinquished to a social services entity and bounced from family to family, a mental health service system, and the judicial system, without ever receiving treatment for the trauma sustained in the abuse. This shuffling is attributed, in part, to navigating a “system of services for treating mental health problems among American Indians and Alaska Natives [which] is a complex and often fractured web of federal, state, local, tribal, and community based services” (Manson, 2004, p. xiv). This navigation has implications within all levels of services.

In resolving crimes committed against a child, the appropriate prosecutorial jurisdictional venue of the offender must be first determined. This determination can also dictate the tribal, state, or federal mental health treatment services to which the child victim may be entitled, which may also be in concurrent entities. “American Indian law is... one of the most complicated subjects in the entire legal area” (Deloria & Lytle, 1983, p. 111) and “[t]he task of successfully prosecuting child sexual abuse offenses in Indian country is not easily accomplished” (EchoHawk, 2001, p. 96). When crimes are committed against a Native American child victim, occurring on tribal lands and deemed to be categorized as a misdemeanor offense, tribal jurisdictional venue is applicable, as the tribal courts are responsible for the prosecution of misdemeanor

criminal offenders (Deloria & Lytle, 1983). Thus, the case remains in the tribal system, and the child receives mental health services at the tribal level.

“The serious felonies all fall under the Major Crimes Act, which is a federal and not a tribal jurisdictional matter. Only with lesser crimes and misdemeanors does the Indian judicial system enter the picture” (Deloria & Lytle, 1983, p. 227). The Major Crimes Act (18 U.S.C.A. 1153) was passed in 1885 by Congress “which permitted the federal government to assume criminal jurisdiction over major felonies committed in Indian Country” (Deloria & Lytle, 1983, p. 11). There are fourteen felonies classified within the purview of the Major Crimes Act. The majority of crimes committed against Native American children on tribal lands meet criteria for federal prosecution, thus the child is eligible to receive mental health services at the federal and tribal levels.

Deloria & Lytle (1983) cite the Major Crimes Act as it currently reads:

Any Indian who commits against the person or property of *another Indian or other person* any of the following offenses, namely, murder, manslaughter, kidnapping, rape, carnal knowledge of any female, not his wife, who has not attained the age of sixteen years, assault with intent to commit rape, incest, assault with intent to commit murder, assault with a dangerous weapon, assault resulting in serious bodily injury, arson, burglary, robbery, larceny *within the Indian country*, shall be subject to the same laws and penalties as all other person committing any of the above offenses, within the exclusive jurisdiction of the United States. (Emphasis added) (p. 170)

In 1986, Congress amended the Major Crimes Act to include “felonious sexual molestation of a minor” (EchoHawk, 2001, p. 107). The Act was further amended to

delineate child sexual abuse provisions, identified as Chapter 109A felonies, which include aggravated sexual abuse with children, sexual abuse, sexual abuse of a minor or a ward, and abusive sexual contact (EchoHawk, 2001).

Adjudication of child sexual abuse cases at the federal jurisdictional level do not fare well, as the United States Attorney's Office, a prosecutorial entity of the U.S. Department of Justice responsible for prosecuting major crimes committed upon tribal lands, "turn(ed) down nearly two-thirds of sexual assault cases" in 2012 (Williams, 2012, para. 1). These cases included rejection of "61 percent of cases involving charges of sexual abuse of children" (Williams, 2012, para. 14). Between the fiscal years 2005-2009, the U.S. Attorney's Office declined 68% of sexual abuse and related offense violent crimes cases (Maurer, 2010). Within the federal judicial system, the child is not referred for mental health services, or eligible to receive services at the federal level, until the opening of a criminal case has commenced.

According to Deloria and Lytle (1983):

one of the basic complaints emanating from tribal officials regarding the U. S. attorneys relates to the lack of articulated standards used by them in determining when a case will be pursued and when it will be dropped... Grounds for deciding not to pursue a case are not always given by the U.S. attorneys...

Declination of cases becomes important to tribal officials, for in some instances, if the federal government decides not to prosecute, the tribal government may initiate legal action. (p. 186)

According to EchoHawk (2001), "U.S. Attorneys often decline to prosecute Major crimes Act cases on the reservation because of a mixture of factual, legal, practical, or

logistical problems” (p. 100). With regard to evidence gathered in federal cases, “[o]nce federal prosecutors do decline a case, they seldom hand over evidence to tribal courts, according to the Government Accountability Office” (Williams, 2012, para. 15). Further complicating matters, “[a]n office report last year also found that federal prosecutors fail to tell tribes that they have declined cases until after the tribe’s statute of limitations has expired” (Williams, 2012, para 15). Under these circumstances, the child victim may not receive mental health services until legal venue has been established, thus the child can be caught in a no-man’s land for an indefinite amount of time until jurisdictional issues are settled. “...Indian child victims must not themselves be victimized in the process of prosecution” (EchoHawk, 2001, p. 96).

There are some states wherein criminal offenses are subject to state prosecution. In August 1953, Congress enacted Public Law 280, which authorized the states of California, Minnesota, Nebraska, Oregon, Wisconsin, and the Alaska territory to assume responsibility of criminal jurisdiction over the tribes located in their respective areas (Deloria & Lytle, 1983). These tribes are known as P.L. 208 tribes and Native American criminal matters are adjudicated within the state court system. Generally, in these cases, the states are charged with providing mental health services for these Native American child victims.

With respect to Native American traditional law, “tribes have always had systems for addressing internal conflicts and relationships” (Trobe, 2008, p. 265). Native American traditional courts adjudicated disputes amongst tribal members and the goal of resolving criminal problems was restitution, not retribution (Deloria &

Lytle, 1983). These traditional courts preceded current Western society's criminal and civil law. Social welfare was:

handled through clan and family... with an emphasis on responsibility...Some tribes, such as those on the northern plains, had elaborate customs that dictated the behavior to be expected between close relatives, and violating a kinship custom meant serious social consequences. The family was significantly extended... linkage of blood families by kinship ties and responsibilities generally extended to include everyone in the tribe in one way or another.

(Deloria & Lytle, 1983, p. 196)

In this same context, "banishment, not execution, was regarded as the most serious punishment since an individual without a community or relatives literally did not exist as a human being for many groups" (Deloria & Lytle, 1983, p. 162). Thus, disharmony among tribal members was minimal as "many tribes... relied upon social pressures, particularly the individual's fear of embarrassing his or her relatives and clan members, as their means of determining the proper social response and penalty for violation of the tribal customs" (Deloria & Lytle, 1983, p. 82). The welfare of all tribal members was paramount, adult and child alike, but unfortunately these traditional courts rarely exist any longer within tribal entities.

Regardless of jurisdictional issues, the stakeholders at the federal, state, and tribal governments all have roles to play in the determination of how incidents of abuse and neglect of Indian children are handled (Trope, 2008). In contemporary times, the avoidance of addressing physical and sexual abuse of Native American children only serves to exacerbate the problem. The days when sticking a Band-Aid on a victimized

child are over. The residual effect of the trauma the child sustained reverberates beyond the individual child, affecting the family unit, the collective tribal community, and future generations at the core spiritual, emotional, physical, and mental levels (Heath 2012). The children suffering the trauma of abuse in silence merit a voice, and advocates, for their life long plight.

Definition of Key Terms

Native American/American Indian. These terms will be used interchangeably throughout this document. McDonald, Morton, and Stewart (1993) defined the terms as an individual belonging to a federal, state, or locally recognized tribe by blood quantum, descendency, or adoption through a ceremony, and the individual has strived to preserve the traditional Indian fashion. However, there are also political implications associated with these terms:

In 1977, the National Congress of American Indians and National Tribal Chairman's Association issued a joint resolution that, in the absence of specific tribal designation, preferred the term American Indian rather than Native American when referring to the indigenous population of the "lower 48." Alaska Native is reserved for the indigenous population of that state. Native Hawaiians are not included in either of these groups (LeMaster, P., Beals, J., Novins, D., Manson, S. & AI-SUPERPPF Team, 2004, p. 244)

Indian Country. The definition is contained within federal law 18 United States Code (U.S.C.) § 1151

(a) all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and,

including rights-of-way running through the reservation, (b) all dependent Indian communities within the borders of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State, and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same (Tribal Court Clearinghouse, n. d., para. 4)

Post-traumatic Stress Disorder (PTSD). Related to pathological stress response syndromes requiring:

(A) Exposure to a traumatic event that is “outside the range of unusual human experience”; (B) reliving the experience nightmares, flashbacks, or intrusive thoughts; (C) numbing or avoidant symptoms; and (D) hypersensitivity, either as indicated by general signs and symptoms of autonomic arousal or by hypersensitivity to cues reminiscent of the trauma. These symptoms must persist for at least 1 month (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995, p.1048)

Culturally congruent. Culturally congruent as defined by Villanueva (2003), “encourages conceptual mapping and juxtaposition of constructs from different worldviews in determining whether a proposed intervention fits a culture” (p. 1376).

Worldview. Worldview may be defined as the pattern of perceptions and values about the world a group holds (McDonald, 2013). This definition may be expanded to include “*World view* embraces shared group and individual identity components, consensual values and beliefs, and common language” (Dana, 1995, p. 60). Further, according to Hwang (2013), “worldview describes not only human nature, but also the

relationship between an individual and the external environment, as well as the historical situation in the world (p. 107)... As people of a given culture contemplate the nature of the universe and the situation of mankind, they gradually formulate their worldviews with original thinking over the course of their history” (Hwang, 2011, p. 128).

Adverse Childhood Experiences

Post-traumatic Stress Disorder as a Result of Childhood Abuse

Several studies have been conducted wherein childhood physical and sexual abuse have been correlated with post-traumatic stress disorder (PTSD) symptoms in both children and adults in the non-Indian population. The U.S. Department of Health and Human Services (1996) reported approximately 905,000 U.S. children were found to have been maltreated. Of these children, 6.6% were psychologically or emotionally abused, 8.8% were sexually abused, and 16% were physically abused. Giardino et. al. (2011) assert these aforementioned children may experience long-term physical and emotional consequences, including PTSD. Weinstein, Staffelbach, and Biaggio (2000) report PTSD as one of the most commonly diagnosed disorders in sexually abused children. In a study conducted by Deblinger, Lippmann, and Steer (1996), where they had 90 sexually abused child participants (mean age 9.84 years) from various ethnic groups, 71 % met DSM-III-R diagnosis for posttraumatic stress. In a study conducted by McLeer, Deblinger, Henry, and Orvaschel (1992), where they had 92 sexually abused child participants (mean age 8.9 years), 43.9% of their sample met DSM-III-R PTSD criteria and those not meeting the full PTSD criteria, exhibited partial PTSD symptoms. Giardino and his colleagues (2011) reported rates of PTSD in at-risk

pediatric and adolescent populations being as high as approximately 90% in sexually abused children.

In Arkansas, research was conducted on Caucasian and African-American children by Ackerman, Newton, McPherson, Jones, and Dykman (1998), where sexually abused children (N = 127), physically abused children (N = 43) and both physically and sexually abused children (N = 34) were studied. While sexually abused children and physically abused children were at risk and experienced PTSD symptoms, the group experiencing both physical and sexual abuse was at greatest risk, as the results yielded 36% of the participants had PTSD diagnoses, but PTSD was also found to exist comorbidly with other affective disorders. Goodwin (1988), as cited in Deblinger et al. (1996), reported children developing PTSD as a result of sexual abuse may experience ongoing symptomology throughout their lifetimes. The meta-analysis conducted by Chen, et al. (2010) also found the negative outcomes of childhood sexual abuse, including PTSD, transcend into adulthood.

In Native American PTSD territory, studies have been conducted wherein PTSD symptoms and diagnosis have been documented; however, the majority of PTSD research in Indian Country pertained to military veterans, historical trauma, or as Sealy (2008) identified, “PTSD can all be linked to a historically-born exclusionary poverty” (p. 22). According to Morsette, van den Pol, Schuldberg, Swaney and Stolle (2012), empirical study evaluations of mental health treatment programs conducted by Gone and Alcantara (2007) are underrepresented. “No studies with outcome data in this review addressed treatment of PTSD or PTSD symptoms in American Indians of any age” (Moresette et al., 2012, p. 52).

In conducting literature reviews, a dearth of studies documenting PTSD in Native American participants exists and the few studies that were found did not delineate the genesis of the traumatic event(s) preceding the PTSD symptomology of the participants. A study was conducted by Beals et al. (2005) on a Plains Indian tribe wherein 1638 participants (males = 790, females = 848) between the ages of 15 and 54 were surveyed. The results yielded the rate of post-traumatic stress disorder, as defined by the DSM-IV, as 14.2% overall. The rate of occurrence for females (19.2%) was almost twice the rate of males (8.9%). Morsette et al. (2012) also conducted a study which included screening 302 northwestern USA Native American 5th -8th grade students and assessed PTSD within this population. According to the published data, 52% of these students had significant PTSD symptoms. Some of these students reported loss of a loved one, house fires, car accidents, and alcohol poisonings as the reasons for their symptoms.

In another study regarding a southwestern tribe, conducted by Robin, Chester, Rasmussen, Jaranson, and Goldman (1997), they reported the lifetime prevalence rate for PTSD was 21.9% for males and 25.4% for females, which is high, as compared to the national average of 7.8%, according to Kessler et al. (1995). In the study by Robin et al., the tribal community had a high rate of trauma exposure, including incidents of child sexual abuse. In addition, individuals experiencing multiple traumatic events significantly placed those individuals at greater risk for developing PTSD. One of the research implications suggested the prevalence of PTSD was attributed to “a high rate of exposure to trauma and the types of traumatic events than to any specific vulnerability to PTSD” (p. 1585-1586).

Pole, Gone, and Kulkarni (2008) suggested PTSD may manifest itself in different conceptualizations and presentations in Native American communities or may be masked within other social maladies, which may make symptom detection difficult to discern. In consideration of the previous studies cited, regarding American Indians and PTSD, Felitti's (2009) commentary reverberates loudly, "what happens in childhood – like a child's footprints in wet cement – commonly lasts throughout life. Time does not heal; time conceals" (p. 131).

Cultural Implications, Protective Factors, and Resilience

Participation in traditional ceremonies, events, and activities has been known to produce positive outcomes for Native Americans in different arenas relating to protective factors, resiliency, adaptation, acculturation, and assimilation. However, according to LaFramboise Hoyt, Oliver, and Whitbeck (2006), empirical research is limited in addressing the correlation between protective factors and individuals participating in cultural practices. Korbin (2002) stated "culture is not monolithic or static but variable and dynamic... populations continually adapt to changing circumstances... interpretation and interaction are fluid" (p. 638). Hawkins, Cummins and Marlatt (2004) discussed risk and protection in a linear fashion with each dimension on opposite ends and they further concluded:

a protective factor, then, is the absence of or a low level risk... [or] the concept of protection is orthogonal and extends beyond the mere absence of risk... [and] protective factors specific to the culture and community context of American Indians are still unknown" (p. 309).

Giardino et al. (2011) defined resiliency as “the ability to adapt positively to adversity” (Resilience, para. 1).

In the study previously mentioned conducted by Morsette et al. (2012), 43 students were treated with Cognitive Behavioral Intervention for Trauma in Schools (CBITS) wherein a traditional cultural component was included. At the end of the study, PTSD symptoms in the students completing the treatment were reduced from 8.91% at screening to 5.17% at completion. Similar results were obtained across several different types of schools and tribal members from different tribes.

In research conducted by Villanueva (2003), he studied the correlation between PTSD and alcohol in a southwestern Native American tribe. In his research, he was able to correlate PTSD in male tribal members with the Mississippi Scale and the Minnesota Multiphasic Personality Inventory-2, which are both PTSD instrumentation. His study yielded exciting data, as those males that had been “initiated into the highest (traditional) religious societies had the lowest scores on any measure of PTSD” (p. 1375).

Furthermore, in research conducted by Ogle, Kyle, and West (2010), 35 (N = 34 males; 1 female) Native American Veterans were interviewed and likert-scale surveyed about their sobriety, PTSD symptoms, and their participation in Pow Wow gatherings and Sweat Lodge ceremonies. Eighteen participants indicated they experienced PTSD symptoms and participated in Pow Wows. The findings indicated 47% of these participants “agreed” and 42% “strongly agreed” participation in Pow Wows positively impacted their PTSD symptoms. Fourteen participants indicated they experienced PTSD symptoms and participated in Sweat Lodge ceremonies. The findings indicated

14% of these participants “agreed” and 79% “strongly agreed” participation in Sweat Lodge ceremonies positively impacted their PTSD symptoms.

Research and Treatment Obstacles

Specific obstacles are associated with conducting research and providing mental health treatment to American Indian adults and children. Morsette et al. (2012) discussed the existence of mistrust between providers and the participants and family members, which was potentially attributed to a low number of participants in their study. Gone and Alcantara (2007) discussed mental health practitioners providing services based upon “conventions derived from their professional training, theoretical orientation, accumulated experience, clinical intuition, and/or personal preference” (p. 357). This approach has a built in barrier to clinical treatment of Native Americans as, historically, Native peoples have been grouped indiscriminately into one category, with the loss of the individual. The group is treated homogeneously with a cookie cutter, one- size-fits-all Pan-Indian model, which encapsulates some of these nomothetic concepts. “Pan-Indianism” refers to generalized statements inclusive of all Native Americans (McDonald, 1998).

Tsai, Butcher, Munoz and Vitousek (2004, p. 105) contend, “most studies in psychology and psychiatry have focused on White populations of European descent and assume that what is true for White European samples is true for other cultural groups.”

Dana (1995) asserts:

The standard psychological assessment instruments were constructed on the basis of unquestioning acceptance and use of a psychometric paradigm that has been applied in the United States and Western Europe primarily by White male

psychologists. As a result, these tests are culture-specific and usable only in a European-American cultural context with English speaking persons who have a European-American cultural context with English-speaking persons who have a Eurocentric world view. (p. 60)

Furthermore, according to Duran and Duran (1995), “the use of modern Western psychology continues to be the main method of trying to understand the problems within Native American country” (p. 99).

In some cases, mental health services provided to tribal members are minimal. Tribal programs in existence are responsible for treating and caring for abused children; however, they are inadequately staffed, staffed by culturally incompetent individuals, or staffed by individuals providing grossly deficient mental health therapeutic services. These children are also confronted with systems that provide services at a level consistently less than the established standards of care for the population (Bigfoot & Schmidt, 2010). Duran (2006) contends:

It is remarkable that deficiencies exist when one considers that most clinicians who work in Indian country also work in what are known as mainstream health care settings... None of these clinicians would ever think about getting away with such inadequate clinical work in a ‘White’ agency or hospital... Viewing people in a dehumanizing manner can only be described as racist, and because clinical practice is the issue, it makes sense to apply the term *clinical racism*. (p. 36)

As an alternative, American Indians living on reservations may opt to receive mental health services through an Indian Health Service (IHS) facility, an entity of the

United States federal government system, which is “regulated by a severely underfunded and understaffed arm of the Public Health Service (Indian Health Service)” (McDonald & Chaney, 2003, p.45). In addition, maintaining competent IHS professionals is a struggle, as according to Olsen and Wahab (2006), mental health professionals are difficult to recruit and maintain due to salary constraints, rural geographic conditions, and cultural inexperience. Thus, a majority of mental health services are provided by non-native professionals, contracted by the tribe, and may be located great distances from the reservation, making services inaccessible and sometimes nearly impossible to obtain.

In some cases, Native Americans will seek treatment from a traditional healer as a first option rather than obtain services from a Western mental health or medical professional. Thus, in the atypical case when mental healthcare by culturally competent professionals is available to Native American families, caretakers may shun services for their children. Olson and Wahab (2006) have reported American Indians have a tendency not to use available services, terminate treatment at rates higher than any other ethnic group, and possess negative views about non-native providers. According to McDonald and Gonzalez (2006), the first session for American Indians is essential in the patient determining whether to trust the therapist and engage in treatment.

In serving a Native American patient, the provider must acknowledge the worldview of the client, as their perspectives may differ, especially in the case with a non-Native provider. Duran and Duran (1995) asserted:

One of the most important factors in the failure of the mental health delivery system is an inability of therapists to provide relevant forms of treatment to ethnic populations... Most providers are trained only in delivering services to the majority/dominant population. Usually therapists are completely unaware of the life experiences of the ethnic minority patient. (p. 8)

The level of acculturation should also be assessed, which may present an inadvertent confound in conducting empirical research. Wohl (1995) stated:

With any American ethnic or subcultural minority group, the therapist must consider the patient's degree of assimilation by the majority group. United States society is pluralistic, but most members of subcultures participate to varying degrees in the larger culture, and the psychotherapist will want to ascertain the degree of acculturation to that larger culture. This issue of multiple cultural identities can itself be a major component of the psychological difficulties besetting the patient. (p. 83)

Service providers may also discount Native American traditional practices as being instrumental to health and well-being (Bigfoot & Schmidt, 2012). One additional significant consideration pertains to spirituality and religion within Native American culture. "Spirituality is a core system of belief – focusing on intangible elements imparting vitality and meaning to life's events – that is so essential to Indians and other Natives and is pointedly absent from the perspectives that guide the bulk of available mental health care" (Manson, p. xv, 2004) and is a sensitive topic, closely held to most tribal members. According to Sando (1992, p.2), "religion... [i]s not a causal Sunday morning incident... It [i]s life itself." Sando further explained some tribes do not have

a word which translates as religion, “[t]he knowledge of a spiritual life is part of the person twenty-four hours a day, every day of the year” (p. 30). There are historical implications associated with these Native American traditional practices and some tribes were forced to take their religious practices underground, due to harassment and attempted genocide, while others had to revive their religion in a new homeland due to forced relocation. As a result, in contemporary times, Native Americans may deflect and avoid in-depth open discussions and revelation of cultural traditions, practices, and beliefs; thus, conversations about these topics are rare, if not non-existent, between an American Indian patient and provider.

Potentially, the solution to these obstacles may be found in Villanueva’s (2003) concept of a culturally congruent approach. In this model, all the stakeholders involved in the research process are equal partners. The responsibility of healing and protecting rests on the shoulders of the community, health care providers, scientists, and practitioners.

Historical Implications and Geographical Considerations

American Indians of the Northern Plains

According to Graham (2002), prior to European contact approximately 500 years ago, the United States indigenous population may have been as high as 18 million and consisted of at least 600 different tribes, with a plethora of languages and dialects. In the movie *Dakota 38*, Chris Mato Nunpa, retired professor of Dakota Studies, reports there were still 16 million Native Americans in 1500 in the U.S., and four centuries later in 1900, there were 237,000 left (Hagerty, 2012). As mentioned, there are approximately 2.9 million Natives in the United States today (U.S. Census, 2010).

As previously cited, according to the Bureau of Indian Affairs (2012), there are currently 566 federally recognized American Indian tribes and Alaskan Native villages, each possessing distinct cultural characteristics. Duran and Duran (1995) assert, “Native American culture is not a single entity. There is a tremendous amount of variation linguistically, culturally, and religiously among Native American nations in the United States” (p. 104). To illustrate the diversity among tribes, McDonald (1998) emphasized a uniqueness of tribal traditions, practices, and customs which exist within each tribe. Because of the differences, he also discourages Pan-Indianism.

However, there are some similarities between tribes living in the same region. According to Lear’s (2012) American Indian Culture Areas, tribes living within the same region share a significant number of cultural traits, creation stories, and history. Thus, tribes located in Iowa, Minnesota, South Dakota, Wisconsin, Montana, Wyoming, and North Dakota, identified as the Northern Plains Tribes, would share some similar characteristics.

Purpose

In clinical psychology work, psychologists treat Native Americans exposed to various types of trauma and subsequently formulate a DSM-IV post-traumatic stress disorder (PTSD) diagnosis regardless of the origin of trauma. In consideration of a Native American traditional worldview and viewpoint, a diagnosis may be perceived as a quasi-naming ceremony. Duran (2006) states:

Naming ceremonies are part of Native traditions and are used to assign spiritual identities to those receiving a name. Therefore, the naming ceremony performed by a healer or therapist has deep implications to the individual and

community... The patient goes through a diagnostic process that she perceives as a naming ceremony that literally gives her an identity of pathology... [thus the importance of] diagnosis within a proper cultural context. (p. 31)

In the process of trauma to diagnosis, the existing literature does not address the relationship between Native Americans diagnosed with PTSD and childhood abuse, much less specific correlations with Northern Plains tribal members.

Research on participation in traditional ceremonies and the effect on post-traumatic stress disorder, as a result of physical or sexual abuse, in American Indian adults is needed. An “uninvestigated use of culture... would be to strengthen those mechanisms within the culture which work to sanction or control what is consensually considered acceptable or deviant behavior” (Duran & Duran, 1995, p. 105). Thus, the results would assist native communities in developing and strengthening effective prevention programs integrating traditional cultural activities as a protective factor.

Given the limitations of previous PTSD studies and underlying origins of symptomology, this study focused on traumatic adverse exposures, including physical or sexual abuse, American Indian adults may have experienced before the age of 18. The purpose of this study was to determine if participation in traditional ceremonial events and practices mitigated the overall reported post-traumatic symptomology as measured by the Adverse Childhood Experiences questionnaire (Felitti, et al., 1998), the PTSD-8: A Short PTSD Inventory (Hansen, Andersen, Elklit, Palic, & Mackrill, 2010), and the American Indian Biculturalism Inventory – Northern Plains (McDonald, Ross, & Rose, 2014).

Through the identification and understanding of PTSD diagnostic criterion, pertaining specifically to Native Americans, the child, the family, and the community can begin to heal and are thereby strengthened. Overall, early treatment and intervention feasibly assists in the reduction of mental health and medical maladies particular to the Native American population. Ultimately, the result in the healing correlates with an improved quality of life and the restoration of a healthy tribal community (Heath, 2012).

Hypotheses

- I. Adult American Indians participating in traditional cultural events and activities will have lower scores on the ACE questionnaire and PTSD-8 than adults that do not participate in traditional activities.
- II. Adult American Indians having higher participation in traditional cultural events will have a stronger relationship between the ACE questionnaire and the PTSD-8 scores.
- III. Native American men obtaining higher scores on the AIBI-NP will have lower PTSD symptom scores when compared to females that score high on the AIBI-NP.

CHAPTER II

METHODOLOGY

Participants

Participants were of Northern Plains American Indian tribal descent. For the purpose of this study “Native American/American Indian” status was established by either a) enrollment in a federally recognized tribe, or b) family lineage and community recognition. The participants for this study consisted of 44 Native American male (n = 22) and female (n = 22) participants, between the ages of 18 and 59 years of age. The participants were in attendance of the 44th 2014 University of North Dakota Indian Association (UNDIA) Time-Out Wacipi Pow Wow, held at the Hyslop Center on the UND campus. The amount of participants needed was calculated, using the Gpower 3.1.2 program and using a medium effect size for the Univariate Analysis of Variance.

Participants were recruited through fliers and word of mouth. Those individuals electing to participate were compensated \$10.00 for their time. Eligibility for participation required written consent, which was dispersed to each individual before survey administration.

Instrumentation

Several instruments were administered to each participant. The materials assessed demographic information, informed consent, cultural practices/beliefs, childhood adverse exposures, and post-traumatic stress disorder symptomology. These

instruments included the demographic questionnaire, the informed consent form, the Adverse Childhood Experiences (ACE) questionnaire, the American Indian Biculturalism Inventory – Northern Plains (AIBI - NP), and the PTSD-8: A Short PTSD Inventory (PTSD-8).

Demographic Questionnaire

Participants were given a questionnaire which documented demographic information. The demographic questionnaire was developed by the lead investigator to ascertain factors rendering individuals eligible to participate in the study. Demographic questionnaires were coded and matched to questionnaire packets. The questionnaire was based on the following categories: age, gender, tribal affiliation, Degree of Indian Blood, boarding school attendance, family encouragement of cultural teachings, and culturally based intervention. The information obtained from the questionnaire provided general characteristics of the sample.

Informed Consent

Participants received an informed consent form. This form required the participant's signature, indicating the individual's voluntary consent to participate in this study. Participants were verbally advised their participation in the study was voluntary and they were free to terminate their participation at any time. All participants' information remained anonymous and confidential. All participant questionnaires were coded and maintained in a separate location from informed consent forms for the purpose of preventing any participant's association with the study. The informed consent forms were developed according to the guidelines of the University of North Dakota Institutional Review Board (IRB).

Adverse Childhood Experiences (ACE) Questionnaire

Participants completed the Adverse Childhood Experiences (Felitti, et al., 1998) self-report questionnaire, which examined ten dimensions of childhood maltreatment and family dysfunction, including potentially traumatic events, such as childhood sexual abuse and physical abuse. The survey has been administered to over 17,000 participants. On the ACE scale, each item endorsed by the participant earned one point toward an overall score. Elevated ACE scores correlated highly with physical and mental health status, quality of life, and negative lifetime adjustment (Felitti et al., 1998).

American Indian Biculturalism Inventory – Northern Plains (AIBI - NP)

All participants received the American Indian Biculturalism Inventory - Northern Plains (McDonald et al., 2014), which is a 24 item self-administered questionnaire based upon a four point Likert scale, assessing social behaviors related to cultural practices, worldviews, beliefs, and acculturation. The AIBI – NP is of orthogonal design and measures four levels of cultural orientation: traditional, assimilated, bicultural, and marginalized. According to Baker (2005), individuals identifying as culturally traditional highly identified with American Indian (AI) culture and minimally identified with European American (EA) culture. Individuals, identifying as assimilated highly identified with EA culture and have low identification with AI culture. Bi-culturally affiliated individuals highly identified with both EA and AI cultures. Individuals classified in the marginalized area have low identification with both EA and AI cultures.

The AIBI – NP was developed in 2014. The Northern Plains Biculturalism Inventory – III (NPBI – III) and Northern Plains Biculturalism Inventory – Revised (NPBI – R) preceded the AIBI – NP, which were developed in 2011 and 2005 respectively. Both inventories underwent psychometric testing and resulted in efficient measures of cultural identification among Northern Plains American Indians (Baker, 2009).

Overall, there are 15 questions used to measure American Indian Cultural Identification (AICI) and nine questions measuring European American Cultural Identification (EACI). For the purposes of this study, four questions were extracted from the AICI to measure cultural participation, while eleven questions were used to measure AI culture identification.

PTSD-8: A Short PTSD Inventory

The participants completed the PTSD-8: A Short PTSD Inventory (Hansen et al., 2010), which is a short, eight item, self-administered questionnaire used to assess post-traumatic symptoms. According to Hansen et al. (2010), the PTSD-8 performed well in all samples, indicative of being a sound instrument to use for screening for PTSD in different trauma populations across various time periods. The PTSD-8 represents a more precise yet brief measurement of PTSD than existing instruments and includes all three symptom clusters of the DSM-IV PTSD diagnosis. It is also advantageous over other screening measures as it assessed symptom severity. In addition, the PTSD-8 was validated in three large heterogeneous trauma samples with high proportions of PTSD cases. The PTSD-8 had shown good psychometric properties and may be used by various health professionals without trauma specialties.

Procedure

The study was conducted at the University of North Dakota Hyslop Sports Center during the 2014 UNDIA Time Out Wacipi Pow Wow. Fliers advertising the study and word of mouth were used to recruit potential participants. The primary research investigator and research assistants carried out the research procedures. The lead investigator was on site for the duration of the study to address any questions or concerns about the research.

Participants were provided a copy of the informed consent form to read in an area set aside from the main traffic at a table equipped with cardboard dividers for the purpose of providing privacy and confidentiality. The participants were given the opportunity to ask any questions or express concerns they may have had. They were informed their participation was voluntary and that they may withdraw from participation at any time without penalty. Once they read and understood the informed consent, they were asked to sign the consent form indicating their willingness to participate. Upon signing the Consent to Participate form, the participants received a comprehensive list of mental health resources. Participants were offered a pair of ear plugs.

Participants subsequently received scripted instructions on the completion of questionnaires. Each participant was initially given the demographic questionnaire to complete. Once their tribal affiliation as a Northern Plains American Indian was established, the PTSD-8: A Short PTSD Inventory was given to the participant for completion. The participants who met eligibility and endorsed PTSD symptomology were administered the American Indian Biculturalism Inventory - Northern Plains

(AIBI-NP) and the Adverse Childhood Exposure (ACE) survey. Participants endorsed their answers directly on the ACE, PTSD-8, and NPBI-III questionnaires in pen.

Upon completion, participants were thanked for their participation in the study. Participants received monetary compensation in the amount of \$10.00. Participants' surveys were placed into the coded envelope and the envelope was returned to the lead investigator. Completion of all the questionnaires by the participants took an estimated 15-20 minutes.

The participant's name was recorded only on the informed consent document to ensure there was no link between the informed consent forms and completed questionnaires. The demographic questionnaire, completed by each participant, was assigned a coded number, which corresponded to the packet which they completed. The packet included the PTSD-8 Inventory, the AIBI-NP, and the ACE questionnaire. The coded number was used for the purposes of coding the raw data.

Records were transported to, and maintained in, the Indians into Psychology Doctoral Education office, Northern Plains Behavioral Center for Behavioral Health, University of North Dakota (UND), in a secure filing box. Records containing informed consent were isolated from the questionnaire packets for the purpose of protecting the confidentiality and anonymity of the participants. In accordance with the UND Institutional Review Board (IRB) guidelines, all records will be kept for a maximum of five years, at which time they will be shredded. Access to all data will be limited to the primary investigator, the research supervisor, the individuals responsible for auditing IRB procedures, and research assistants.

Data Analysis

The study used SAS Version 9.4 statistics software to code and analyze the data collected from participants. Descriptive statistics were examined for the entire data set for the purpose of evaluating the characteristics of the sample. Descriptive statistics included frequencies, means, medians, standard deviations, minimums, maximums, range of scores, skewness, kurtosis, missing data, percentages of demographic variables, and percentages of questionnaire variables. Correlations between key variables were also reported.

SAS Version 9.4 statistics software was used to analyze the data from the PTSD-8, ACE questionnaire, the AIBI-NP, and the demographic questionnaire. SAS statistic software had the capability to analyze the complex design of the study, including point estimates, standard errors, and confidence intervals.

Data analysis was conducted using independent t-tests to determine whether the average ACE score and PTSD score was lower or higher for those who participated more in traditional activities. Independent t-tests were also conducted to determine whether the average ACE score and PTSD score was lower or higher for those who identified more with American Indian culture. Two regression analyses were conducted to estimate the relationship between ACE score and PTSD score for Native Americans with high and low levels of traditional participation and Native American culture.

Data analysis was conducted using a two-way ANOVA to determine how gender and traditional activity levels affect PTSD. Additionally, a Type III Sum of Squares was used since interaction was a key part of the hypothesis.

CHAPTER III

RESULTS

Descriptive Characteristics of the Sample

The 44 (male = 22, female = 22) participants in this study were required to be of Northern Plains descent. Based on the median split technique, participants were classified as identifying with American Indian Cultural Identification (AICI) or European American Cultural Identification (EACI). The median for AICI was 40 and the median for EACI was 24. AICI included participants identifying as traditional or bicultural. EACI included participants identifying as marginal or assimilated. Based upon group affiliation, 68.18% (traditional n = 15; bicultural n = 15) identified as AICI and 31.82% (marginal n = 5; assimilated n = 9) identified as EACI (Figure 1).

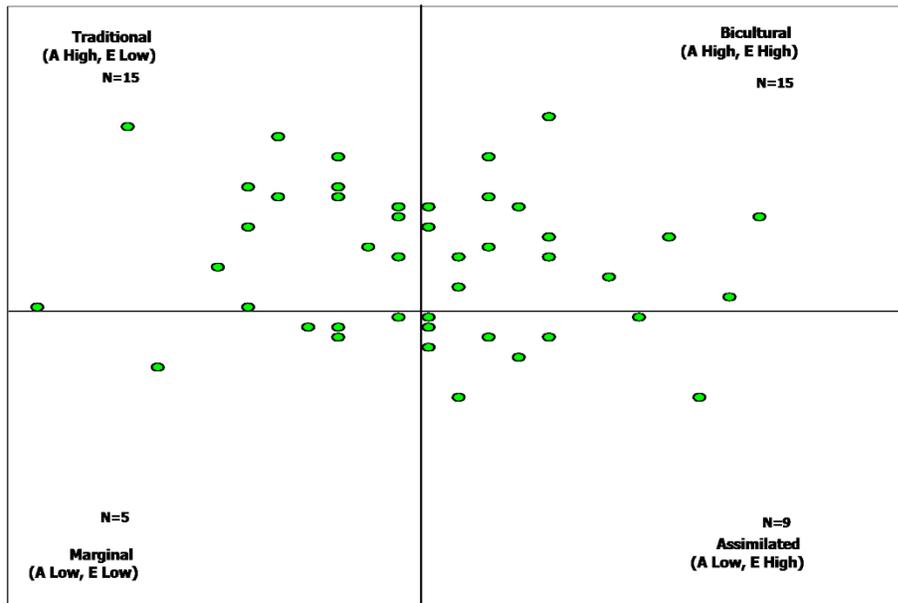


Figure 1. Distribution of AIBI – NP cultural identification.

The means and standard deviations were calculated for the surveys (see Table 1) and the demographic questionnaire.

Table 1

Descriptives and Means Frequencies for Categorical Variables and Continuous Variables

	N	Mean	SD	%
PTSD	44	17.68	5.48	
ACE	44	16.36	3.82	
Age	44	33.02	11.90	
18-30	21			54.55
31-40	7			15.91
41-50	12			27.27
51-60	4			9.09
Cultural identity				
AICI	30			68.18
EACI	14			31.82
Traditional	15			34.09
Bicultural	15			34.09
Assimilated	9			20.45
Marginal	5			11.36
Demographic questionnaire				
Attend boarding school	6			13.64
Caregiver attend boarding school	11			25.00
Caregiver encourage cultural teachings	31			70.45
Culturally based therapy intervention for NA children in community	30			68.18
Self or child participate in culturally based therapy intervention	42			95.4
Community leaders implement culturally based therapy intervention for abused NA children in community	44			100.00

The correlations were calculated for the relationships between PTSD, ACE, cultural identification including the four levels of AIBI-NP cultural identity, and demographic information (See Table 2).

Table 2

Correlations between PTSD, ACE, Cultural Identity, and Demographics

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. PTSD		-.439	.028	.017	.014	-.020	-.064	.051	.078	-.085	.008	.115	.036
2. ACE			-.054	.030	-.141	.076	-.018	.115	-.120	.060	-.217	-.076	-.124
3. AI				-.138	.790	-.196	.321	-.620	.455	-.372	-.187	.087	.597
4. EA					-.081	.780	.563	.301	-.642	-.264	.185	.103	-.100
5. AI Scale						-.134	.491	-.742	.491	-.524	-.293	-.024	.454
6. EA Scale							.657	.463	-.788	-.392	.091	-.002	.023
7. Bicultural								-.365	-.517	-.258	-.144	-.001	.132
8. Assimilated									-.365	-.182	.282	-.001	-.126
9. Traditional										-.258	-.144	-.022	.319
10. Marginal											.072	.036	-.518
11. Gender												-.168	-.067
12. Age													.063
13. PerInd													

The correlations were calculated for each AIBI-NP item and PTSD and ACE

(See Table 3).

Table 3

Correlations between PTSD, ACE and AIBI-NP Items

	2	3	4	5	6	7	8	9	10	11	12	
PTSD	-.042	.039	-.005	.083	-.019	.080	.081	.114	-.040	-.085	.138	
ACE	-.083	-.090	-.066	-.006	.072	.017	-.127	.088	.100	-.046	-.138	
	13	14	15	16	17	18	19	20	21	22	23	24
PTSD	.041	-.039	-.043	-.029	-.093	-.037	-.042	-.018	.208	.200	.160	-.085
ACE	.001	-.080	.049	.042	.001	.141	-.049	-.082	-.014	-.120	-.112	.008

Group Comparisons

In the evaluation of Hypothesis I, (Adult American Indians participating in traditional cultural events and activities will have lower scores on the ACE questionnaire and PTSD-8 than adults that do not participate in traditional activities) an independent t-test was conducted to determine whether the average ACE score was lower or higher for those who participated more in traditional activities. The results did not yield any statistical significance, $t(41) = -0.18, p = 0.431$. An independent t-test was conducted to determine whether the average PTSD score was lower or higher for those who participated more in traditional activities. The results did not yield any statistical significance, $t(42) = -0.50, p = 0.308$.

Further, an independent two-tail t-test was conducted to determine whether the average ACE score was lower or higher for those who identified more with American Indian culture. The results did not yield any statistical significance, $t(41) = 0.62, p = 0.269$. An independent two-tail t-test was conducted to determine whether the average

PTSD score was lower or higher for those who identified more with American Indian culture. The results did not yield any statistical significance, $t(42) = -0.09, p = 0.464$.

In the evaluation of Hypothesis II, (Adult American Indians having higher participation in traditional cultural events will have a stronger relationship between the ACE questionnaire and the PTSD-8 scores), for American Indians with low traditional activity level, the ACE was significantly negatively related to PTSD (PTSD = $32.43 - 0.902*ACE$; $t = -2.58; p = 0.008; R^2 = 0.198$). For American Indians with high traditional activity level, the ACE was significantly negatively related to PTSD (PTSD = $38.88 - 1.230*ACE$; $t = -3.84; p = .001; R^2 = 0.552$). One observation was missing due to a non-reply for the ACE score.

For American Indians with low American Indian identification level, the ACE was not significantly related to PTSD (PTSD = $23.53 - 0.348*ACE$; $t = -0.51; p = 0.309; R^2 = 0.021$). For American Indians with high American Indian identification level, the ACE was significantly negatively related to PTSD (PTSD = $37.01 - 1.169*ACE$; $t = -4.43; p = <.001; R^2 = 0.421$). One observation was missing due to a non-reply for the ACE score.

There is a negative relationship between the ACE and PTSD scores (See Figure 2). As the scores for the ACE increase, the scores for PTSD decrease. This relationship is slightly stronger for people who have higher traditional scores.

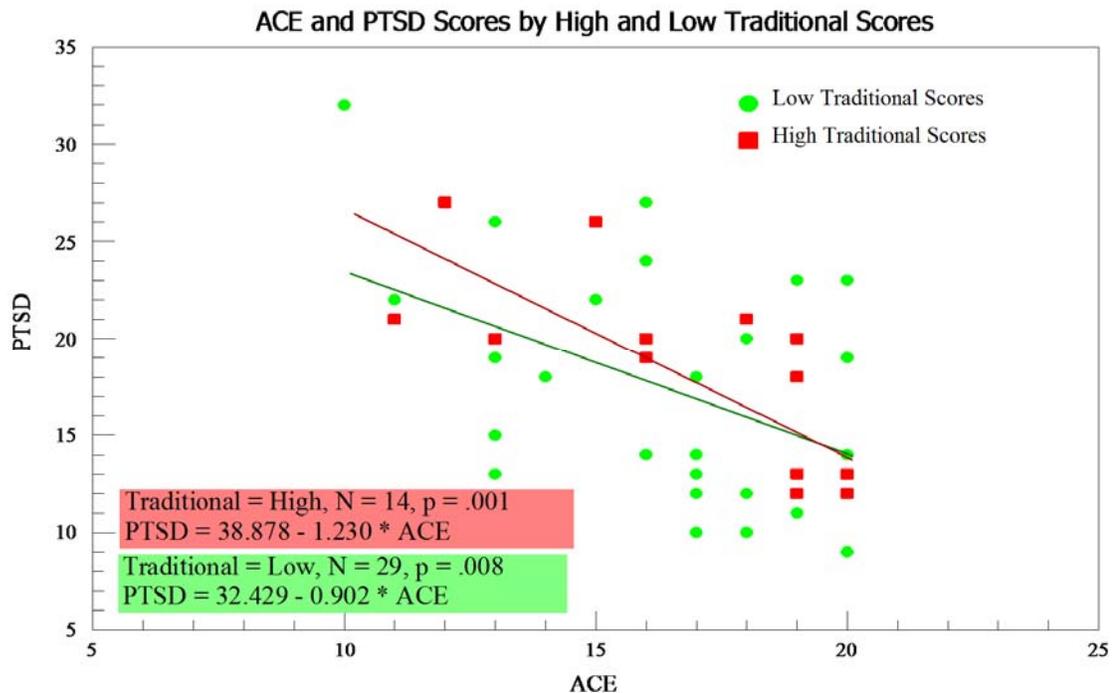


Figure 2. ACE and PTSD scores by high and low traditional scores.

In the evaluation of Hypothesis III, (Native American men obtaining higher scores on the AIBI-NP will have lower PTSD symptom scores when compared to females that score high on the AIBI-NP), two two-way ANOVAs were conducted to determine how gender and traditional activity levels affect PTSD. Additionally, a Type III Sum of Squares was used since interaction was a key part of the hypothesis.

The two-way ANOVA resulted in no gender effect, $F(1, 40) = .05, p = 0.8288$, no traditional effect, $F(1, 40) = .28, p = 0.5969$, or interaction, $F(1, 40) = .09, p = 0.7663$.

In modifying traditional activity level to American Indian cultural identification, the two-way ANOVA resulted again in no gender effect, $F(1, 40) = 0.17, p = 0.6783$, no AI culture effect, $F(1, 40), p = 0.8588$, and there was minimal interaction, $F(1, 40) = 1.31, p = 0.2600$.

The results of the mean differences are represented in Figure 3.

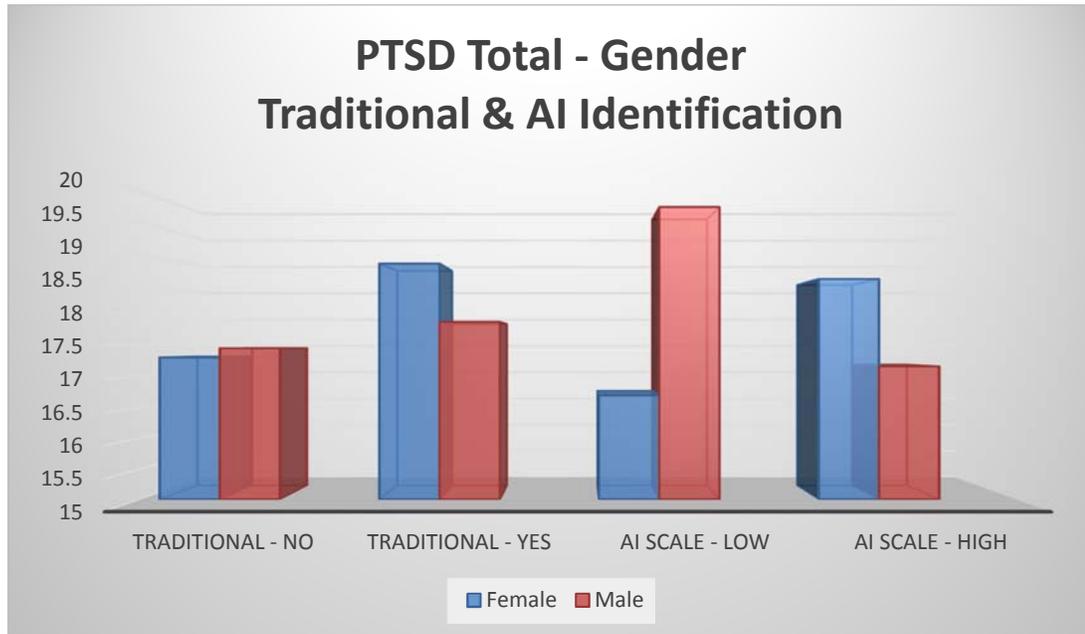


Figure 3. Mean differences between Traditional and American Indian culture identification based upon gender.

A third two-way ANOVA analysis was conducted to determine whether there was a difference between younger individuals (<30, $n = 21$), with low participation in traditional activities, having higher PTSD scores than individuals above the age of 30 ($n = 23$), who had more participation in traditional activities. The results yielded no age effect, $F(1, 40) = 0.10, p = 0.7562$, no traditional effect, $F(1, 40) = 0.32, p = 0.5762$ and there was no interaction, $F(1, 40) = 2.31, p = 0.1360$.

In modifying traditional activity level to American Indian cultural identification, the two-way ANOVA resulted in no gender effect, $F(1, 40) = 2.31, p = 0.1363$, no AI culture effect, $F(1, 40) = 0.12, p = 0.7297$, and yielded a significant interaction, $F(1, 40) = 4.22, p = 0.0465$. These differences are depicted in Figure 4.

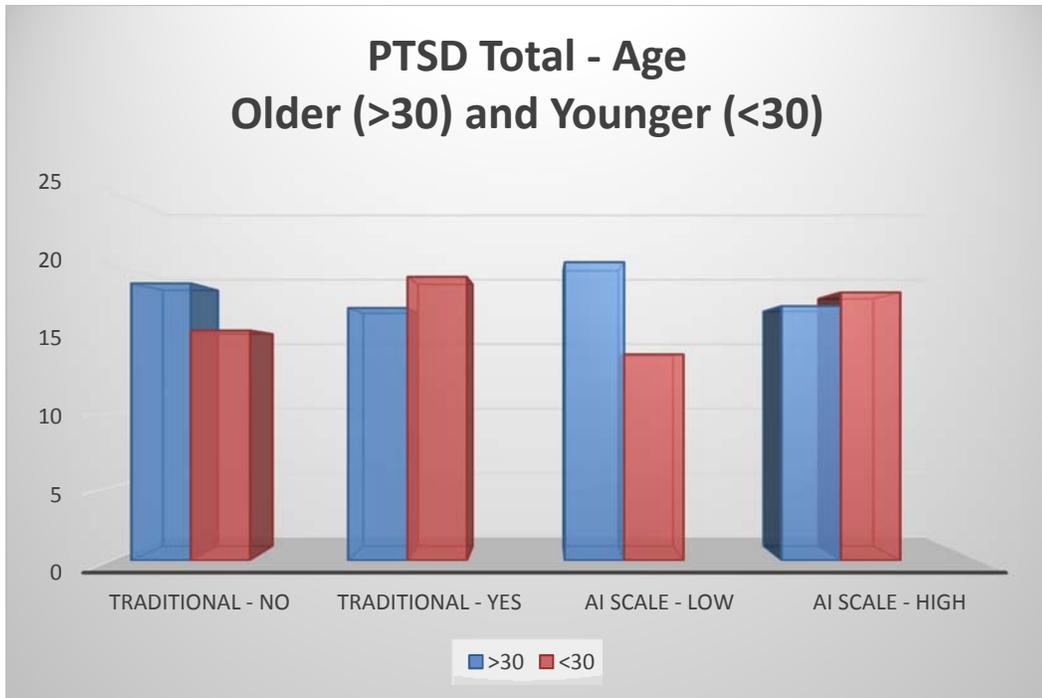


Figure 4. Mean differences between Traditional and American Indian culture identification based upon age.

CHAPTER IV

DISCUSSION

It was hypothesized adult American Indians, participating in traditional cultural events and activities, would have lower scores on the ACE questionnaire and PTSD-8 than adults that do not participate in traditional activities. It was also hypothesized adult American Indians, having minimal or no participation in traditional cultural events and activities and having higher scores on the ACE questionnaire, would have higher PTSD-8 scores than adults that participate in traditional activities. Further, it was hypothesized Native American men obtaining higher scores on the AIBI-NP would have lower PTSD symptom scores when compared to females scoring high on the AIBI-NP.

In consideration of the results of Hypothesis I, the ACE and PTSD scores do not reflect a statistical significance between American Indians of different traditional activity levels. The ACE and PTSD scores also do not reflect a statistical difference between American Indians having different levels of association with American Indian culture. Although there is not statistical significance, there is a difference in scores.

In consideration of the results of Hypothesis II, the R-square was much higher for high traditional, and the p-value was lower. This result indicated the relationship between ACE and PTSD was stronger for American Indians with high traditional activities scores. With those individuals having a higher traditional score, the R-square

value, 55%, indicates if the ACE score is known, over half of the variance in the PTSD total can be explained. In those individuals with low participation in cultural activities, there is much less assurance as only 20% of the variance is explained.

Additionally, the R-square was much higher for high American Indian identification, and the p-value was lower, indicating the relationship between ACE and PTSD was stronger for American Indians with high American Indian identification. Cultural identification was a strong factor in understanding the relationship between ACE and PTSD. In the population with low American Indian identification, a better measure needs to be identified to assist in understanding the relationship between ACE and PTSD.

In consideration of Hypothesis III, it was hypothesized men and women would have different relationships of traditional culture to PTSD. The two-way ANOVA yielded no gender effect, no traditional activity level effect, and no interaction. The gender means were similar and not significant, however the mean score for the females with traditional culture were slightly higher than for males. Traditional has higher means for both males and females.

In modifying the traditional activity level to American Indian cultural identification, the two-way ANOVA resulted in no gender effect, no AI culture effect, and a minimal interaction. There was a difference in the gender and American Indian culture means, however the difference was not statistically significant. Interestingly, females with high American Indian culture have higher PTSD, while men with lower American Indian culture have higher PTSD, although the interaction is not statistically significant. In females, there is a difference in PTSD scores whether they identify with

American Indian culture. These differences are larger when compared to the male low and high groups.

With respect to age, the two-way ANOVA yielded no age effect, no traditional culture effect, and no interaction. In examining the difference between the younger participants (<30) in comparison to the older participants (>30), there was not a significant difference between the two groups in the relationship of traditional culture to PTSD. There were differences within both group means, however they were not statistically significant. Those individuals over the age of 30 that do not participate in traditional cultural have higher PTSD while those under the age of 30 that participate in traditional culture have higher PTSD.

In modifying the traditional activity level to American Indian cultural identification, the two-way ANOVA resulted in no age effect and no AI culture effect, however there was a statistically significant interaction. Those individuals over thirty years of age having low American Indian identification have higher PTSD than individuals under the age of 30 who had more cultural identification. This may be interpreted to mean those individuals over the age of thirty that do not identify with their American Indian culture have higher PTSD and cultural identification may serve as a protective factor with those individuals that do identify with their culture. Interestingly, those individuals thirty years of age and under that had low cultural identification had the least PTSD.

In this study, there was a stronger correlation between ACE and PTSD with those individuals identifying with American Indian culture identification than those

individuals participating in traditional cultural activities. This was significantly stronger in the age model.

Limitations of the Current Study

Limitations of this study include the lack of surveys and instruments normed on the Native American population, which are extremely limited, as well as deemed empirically valid. For the purposes of this study, although the AIBI-NP was normed on the American Indian population, the survey's utility may be more relevant to a measure of self-identification than as a measure of participation in traditional cultural activities. There were four items extracted from the AIBI-NP for use as participating in traditional culture/ activities in the analysis. The other items from the AIBI-NP identifying cultural identification were used as the AI scale in the analysis. Currently, the AIBI-NP is the only instrument with empirical support that measures cultural identification, inclusive of traditional participation. For this reason, another measure must be developed to accurately measure cultural participation for research purposes. Additionally, the PTSD-8 Inventory and ACE questionnaire were significantly correlated in a negative direction, thus identifying surveys which complement these areas of study is needed.

Another consideration would be the self-report surveys and trauma measures used in this study. The Likert-type surveys and instruments limit the participants' responses to the questions asked. Further, the participants may not have fully disclosed information pertaining to the material sensitivity of the questions surveyed. Response bias may have also resulted in endorsing items reflective of a positive self-image.

Furthermore, the trauma measures used in this study were retrospective self-reports, which captured events which may have occurred 40+ years prior.

The setting in which the surveys and instruments were administered was not optimum for the types of information requested from the participants. Although the procedures accounted for the physical location of the study area which was conducted on the second floor mezzanine, there were distractions including loud background noises and foot traffic. In addition, the individuals in attendance of the cultural event may have higher acculturation or traditional orientation, thus the non-statistically significant outcomes of the study.

The results of this study must be interpreted with caution. The participant sample was small and the data was collected at a cultural event. The concept of “Pan-Indianism” is not appropriate in that this study is not applicable to all Northern Plains tribal members, nor is appropriate to apply these findings to all Native Americans.

Implications for Further Research

Although not a significant result, the difference in women with high American Indian culture having higher PTSD while men with lower American Indian culture having higher PTSD may warrant further investigation into this effect. Further research on the relationship between participation in traditional ceremonies and PTSD as a result of adverse childhood experiences in American Indians is in need of examination in order to provide effective psychological services specifically for Native peoples.

Further research must be conducted, with a larger sample size, to control for age and how cultural identification affects PTSD, however there may be difficulty in

calculating the power based upon these findings. Additionally, a clinical PTSD Native American sample may yield different study outcomes.

Furthermore, research is also needed to address the manifestation of PTSD in the Native American population in both the adult and child populations. Villanueva (2003, p. 1379) asserts, “What if we examined congruence among the symptom type, the epistemology, and the proposed intervention? If we, on the basis of a cultural analysis, matched the symptom to the epistemology and to the intervention, we might engender culturally congruent change.”

Utilizing the culturally congruent change approach may yield significant results in the population examined. Being of a collectivistic societal orientation, members of Northern Plains Native communities could potentially benefit from further research into this area. The end result may thereby strengthen the overall Native community.

Conclusion

As explored in this study, there are many obstacles and challenges to providing effective treatment to Native Americans who have sustained abuse. EchoHawk (2001) contends:

The impact of child sexual abuse in America is devastating. The impact of child sexual abuse in Indian Country is even worse. It is impossible to accurately measure the trauma suffered by a child who is sexually abused.

However, it stands to reason that the sexual abuse of a child who already suffers from being a part of the most disadvantaged ethnic and racial group in America is likely to have a greater cumulative negative impact. Consequently an Indian

child victim of sexual abuse is likely to face a more difficult challenge in being made whole again through counseling and treatment. (p. 95)

On June 13, 2014, the president of the United States visited a reservation in North Dakota. Prior to his visit, a statement by him appeared in *Indian Country Today* (2014), wherein he addressed strengthening justice and tribal sovereignty through a joint effort as well as signing the Tribal Law and Order Act, resulting in the strengthening of the power of tribal courts to dole out criminal sentences appropriate to the crimes committed. He also mentioned fighting hard to pass the Affordable Care Act, as the Indian Health Care Improvement Act is permanently reauthorized. This legislation affords care to tribal members in many tribal communities.

Potentially, the proposed improvements in the reformation of the Tribal Law and Order Act and the Affordable Improvement Act will engender culturally congruent change which positively affects the plight of Native American child victims. “The preservation of the Seventh Generation is crucial to the continued vitality of the Indian nations in the United States. However this can only be accomplished when the guardian fulfills its responsibilities to the people whose welfare the guardian has been charged to protect” (EchoHawk, 2001, p. 127). These guardians include federal, state, and tribal collective entities. Therein lies the challenge.

APPENDICES

**APPENDIX A
CONSENT FORM**

UNIVERSITY OF NORTH DAKOTA
CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Title of study: Native American cultural participation and post-traumatic stress
symptom reduction

Principle Investigator: Royleen J. Ross (701) 777-4497
Dr. J. Douglas McDonald (701) 777-4495

Purpose

You are invited to participate in a voluntary research project that is attempting to examine the relationship between an individuals' cultural orientation and PTSD symptoms.

Duration of Study

The duration of this study is approximately 15-20 minutes.

Subjects

You have been selected to participate in this study because you identify as a Northern Plains Native American. You will be asked to complete several questionnaires consisting of three different surveys pertaining to your cultural competence, childhood exposures, and PTSD.

Procedures

Participation in this study is confidential. All names and identifying information will be removed from the data, to ensure your information remains anonymous. After signing the Consent to Participate form, you will be provided a list of mental health resources. You will then be given two questionnaires to determine your eligibility to participate in the study. If you are eligible, you will be given two more questionnaires to fill out. Once you have completed all the questionnaires, you will be offered \$10.00 as compensation for your time.

Risks

There are a few potential risks of this study. We will be asking personal questions which may be uncomfortable to answer. If for any reason you feel uncomfortable and wish to discontinue your participation, you are encouraged to inform the experimenter. You are free to discontinue participation at any time without penalty. A list of mental health resources will be provided to all participants.

Compensation/cost

If you meet eligibility requirements, you will be compensated in the amount of \$10.00. There is no cost to participate in this study.

Confidentiality

Information gathered from the questionnaires will be coded with an identification number and your name will not be associated with the data. Consent forms will be kept separately from the data. All materials gathered during this study will be kept securely in a locked file cabinet in the Indians into Psychology Doctoral Education office at the University of North Dakota. Information will be kept for a period of five years, after which the information will be destroyed (documents shredded). The study experimenters and people who audit IRB procedures will have access to the data during this five-year period. You will not be personally identified in any reports or publications that may result from this study.

Right to Refuse or Withdraw

You may refuse to participate or withdraw from this study at any time without penalty. If you decide to withdraw from the study, please tell the experimenter.

Questions

If you have any questions about this research, please feel free to ask the experimenter. If you have additional questions later, contact Royleen Ross or Dr. J. Douglas McDonald at the UND Psychology Department. The phone number for Dr. McDonald is (701) 777-4495. The phone number for Royleen Ross is (701) 777-4497. If you have any other questions or concerns, please call the Office of Research Development and Compliance at (701) 777-4279.

You may report (anonymously, if you so choose) any complaints or comments regarding the manner in which this study is being conducted to the University of North Dakota Social Behavioral Institutional Review Board at (701) 777-4279 or by addressing a letter to the IRB at UND, P.O. Box 7134, Grand Forks, ND 58202-7134

MY SIGNATURE BELOW INDICATES I HAVE DECIDED TO VOLUNTEER AS A RESEARCH SUBJECT AND I HAVE READ, UNDERSTAND, AND RECEIVED A COPY OF THIS CONSENT FORM.

Date

Signature of Participant

MY SIGNATURE BELOW INDICATES I HAVE EXPLAINED THE PROCEDURES, RISKS, AND BENEFITS OF THIS STUDY TO THE PARTICIPANT.

Date

Signature of Investigator

APPENDIX B
DEMOGRAPHIC QUESTIONNAIRE

Demographic Questionnaire

Please complete the following information as accurately as possible. All information is strictly confidential and anonymous. This form will not include your name, only a subject number and at no time will your name be used in the data collection process. This will ensure that you will not be linked to the information given. Please complete all questions. Thank you.

1. Your age: _____
2. Your gender (check one): Male _____ Female _____
3. Your tribal affiliation: _____
4. Your Degree of Indian Blood: _____
5. Did you attend a boarding school?
6. Did your primary caregiver attend boarding school?
7. Did you participate in cultural events or activities?
8. Did your primary caregiver encourage cultural teachings?

9. Please indicate how interested you would be to see a culturally based therapy intervention for abused Native American children in your community:

Not interested		Neutral		Very interested
1	2	3	4	5

10. Would you or your children participate in a culturally based therapy intervention if you needed the services?

Yes _____ No _____

11. Do you think the community leaders should implement a culturally based therapy intervention for abused Native American children in your community?

Yes _____ No _____

**APPENDIX C
ACE SURVEY**

While you were growing up, during your first 18 years of life:

1. Did a parent or other adult in the household **often or very often...**
Swear at you, insult you, put you down, or humiliate you?
or
Act in a way that made you afraid that you might be physical hurt?
Yes No

2. Did a parent or other adult in the household **often or very often...**
Push, grab, slap, or throw something at you?
or
Ever hit you so hard that you had marks or were injured?
Yes No

3. Did an adult or person at least 5 years older than you **ever...**
Touch or fondle you or have you touch their body in a sexual way?
or
Attempt or actually have oral, anal, vaginal intercourse with you?
Yes No

4. Did you **often or very often** feel that...
No one in your family loved you or thought you were important or special?
or
Your family didn't look out for each other, feel close to each other, or support each other?
Yes No

5. Did you **often or very often** feel that...
You didn't have enough to eat, had to wear dirty clothes, and had no one to protect you?
or
Your parents were too drunk or high to take care of you or take you to the doctor if you needed it?
Yes No
6. Were your parents **ever** separated or divorced?
Yes No
7. Was your mother or stepmother:
Often or very often pushed, grabbed, slapped, or had something thrown at her?
or
Sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard?
or
Ever repeatedly hit at least a few minutes or threatened with a gun or knife?
Yes No
8. Did you live with anyone who was a problem drinker or alcoholic who used street drugs?
Yes No
9. Was a household member depressed or mentally ill, or did a household member attempt suicide?
Yes No
10. Did a household member go to prison?
Yes No

APPENDIX D
AMERICAN INDIAN BICULTURALISM INVENTORY – NORTHERN PLAINS

AIBI-NP (American Indian Biculturalism Inventory – Northern Plains)
(2014, McDonald, J.D, Ross, R. J., Rose, W. J.)

These questions ask you to describe your attitudes, feelings, and participation in Indian and White cultures. Items may apply completely, some, or not at all, so please read each question carefully and answer as accurately as you can. Then mark the number above the answer that best fits how you feel or what you do, as in the example below.

Example: What is your degree of comfort with paper and pencil questionnaires?

1. ____	2. ____	3. ____	4. <u>X</u>
No			Great
comfort			comfort

In this example, the person felt moderate but not complete comfort with paper and pencil questionnaires, so filled in 4.

In the case of attitudes and feelings, your first impression is usually correct. We are interested in how much your daily thoughts, feelings and actions are influenced by Indian and White cultures, keeping in mind that no two people have the same background.

1. In general, how comfortable are you around White people?

1. ____	2. ____	3. ____	4. ____
No			Complete
comfort			comfort

2. How comfortable are you in encouraging your children to learn and practice American Indian ways?

1. ____	2. ____	3. ____	4. ____
No			Complete
comfort			comfort

3. How strongly do you identify with American Indian culture?

1. ____	2. ____	3. ____	4. ____
No			Greatly
Identification			Identify

4. How strongly do you identify with White culture?
 1. ____ 2. ____ 3. ____ 4. ____
 No Identification Greatly Identify
5. How often do you think in an American Indian language?
 1. ____ 2. ____ 3. ____ 4. ____
 I rarely or never think in an Indian language Very often or always think in an Indian language
6. How confident are you in White/Western (doctors in hospitals) medicine?
 1. ____ 2. ____ 3. ____ 4. ____
 I do not use White medical doctors Have complete faith in White medical doctors
7. How confident are you in traditional Native/American Indian medicine and ceremonies?
 1. ____ 2. ____ 3. ____ 4. ____
 No confidence In Native medicine Have very strong faith in Native medicine
8. How much is your way of thinking of "Family" American Indian (cousins same as brothers and sisters, aunts/uncles as parents, everyone is related)?
 1. ____ 2. ____ 3. ____ 4. ____
 My idea of "Family" is mostly "White", relatives/friends are what they are My idea of "Family" is very strongly Indian we are all relatives
9. How often do you attend traditional American Indian ceremonies (i.e Sweat lodge, Pipe Ceremonies, Sundance, Shaky Tent, Vision Quest)?
 1. ____ 2. ____ 3. ____ 4. ____
 I never attend Indian ceremonies I attend Indian ceremonies frequently
10. How often do you attend more White, Christian religious ceremonies (Christenings, Baptisms, Church services)?
 1. ____ 2. ____ 3. ____ 4. ____
 I never attend Christian ceremonies I attend Christian ceremonies frequently

11. How often do you participate in Indian dancing (Grass, Fancy, Jingle-Dress, Round, etc.)?
 1. ____ 2. ____ 3. ____ 4. ____
 I never participate in Indian dances I participate in Indian dances frequently
12. To how many social organizations do you belong where most of the members are Indian?
 1. ____ 2. ____ 3. ____ 4. ____
 I belong to no Indian organizations Most of the organizations I belong to are Indian organizations
13. How often do you attend White celebrations (i.e. White ethnic festivals, parades, etc)?
 1. ____ 2. ____ 3. ____ 4. ____
 I never attend White celebrations I attend White celebrations frequently
14. How often do you attend Indian celebrations (i.e. Pow-Wows, Wacipis, Hand-games)?
 1. ____ 2. ____ 3. ____ 4. ____
 I never attend Indian celebrations I attend Indian celebrations frequently
15. How many of your family speak an American Indian language?
 1. ____ 2. ____ 3. ____ 4. ____
 None of my family speak Indian Most of my family speak Indian
16. How much do you speak an American Indian language?
 1. ____ 2. ____ 3. ____ 4. ____
 I rarely or never speak Indian I often or always speak Indian
17. To what extent do members of your family have Indian first or last names (like “Wambli” or “Kills-in-Water”)?
 1. ____ 2. ____ 3. ____ 4. ____
 None have Indian last names All have Indian last names

18. How often do you talk about White news and culture in your daily conversation?
- | | | | |
|---|---------|---------|--|
| 1. ____ | 2. ____ | 3. ____ | 4. ____ |
| I never engage in topics of conversation about Whites and their culture | | | I engage in topics of conversation about Whites and their culture frequently |
19. How often do you talk about Indian topics, news and culture in your daily conversations?
- | | | | |
|--|---------|---------|--|
| 1. ____ | 2. ____ | 3. ____ | 4. ____ |
| I never discuss Indian news or cultural issues | | | I discuss Indian news or cultural issues daily |
20. How much do you believe in any Indian Creation Stories (how Earth/People/Animals were made?)
- | | | | |
|---|---------|---------|--|
| 1. ____ | 2. ____ | 3. ____ | 4. ____ |
| I don't believe in any of those stories | | | I very strongly believe in those stories |
21. How much do you believe in any non-Indian Creation Stories (Adam/Eve, Garden of Eden, etc?)
- | | | | |
|---|---------|---------|--|
| 1. ____ | 2. ____ | 3. ____ | 4. ____ |
| I don't believe In any of those stories | | | I very strongly believe in those stories |
22. In general, how much do you believe “*Success*” best means when an **individual** wins or achieves something?
- | | | | |
|---|---------|---------|---|
| 1. ____ | 2. ____ | 3. ____ | 4. ____ |
| I totally believe success is best achieved by individuals | | | I totally believe success is best achieved by groups (i.e.families teams, tribes, etc.) |
23. In general, how much do you believe “*Success*” best means when a **Group** (i.e. families teams, tribes, etc.) wins or achieves something?
- | | | | |
|---|---------|---------|--|
| 1. ____ | 2. ____ | 3. ____ | 4. ____ |
| I totally believe success is best achieved by individuals | | | I totally believe success is best achieved by Groups |

24. How important is your European or White American heritage and history to you?
- | | | | |
|------------|---------|---------|-----------|
| 1. ____ | 2. ____ | 3. ____ | 4. ____ |
| Not at all | | | Very |
| Important | | | important |
25. My AGE is_____
26. My highest education level achieved is (# of years): _____
27. My PRIMARY Cultural/Ethnic Identification is (circle one only)
- White/Caucasian ethnicity (ethnic group [i.e. “Swedish”, “American”]_____)
 - American Indian/Alaska Native
(tribe:_____)
 - Asian (affiliation [i.e. “Chinese”]_____)
 - Latino/a (affiliation [i.e. “Mexican”]_____)
 - Other (please list_____)

APPENDIX E
PTSD 8: A SHORT PTSD INVENTORY

PTSD-8

The following are symptoms that people sometimes have after experiencing, witnessing or being confronted with a traumatic event. Please read each one carefully and mark your answer with an X according to how much the symptoms have bothered you since the trauma (One X per question).				
	Not at all	Rarely	Sometimes	Most of the time
1. Recurrent thoughts or memories of the event.				
2. Feelings as though the event is happening again.				
3. Recurrent nightmares about the event.				
4. Sudden emotional or physical reactions when reminded of the event.				
5. Avoiding activities that remind you of the event.				
6. Avoiding thoughts or feelings associated with the event.				
7. Feeling jumpy, easily startled.				
8. Feeling on guard.				

**APPENDIX F
RESEARCHER SCRIPT**

**PROTOCOL:
NATIVE AMERICAN CULTURAL PARTICIPATION AND POST-
TRAUMATIC STRESS SYMPTOM REDUCTION**

1. Offer the informed consent form and a copy of the mental health resource list. Allow the participant to read over the material, ask questions, and sign the consent form.
2. READ: *This study is trying to see how cultural participation affects post traumatic symptoms. You will first be asked to fill out a form asking some questions about your background and a survey about post traumatic symptoms. We will look over the forms and determine if you are eligible to participate in the study. If you are able to participate, you will fill out a survey about culture and another one about things that may have happened to you in your childhood. Please answer every question. Participation in this study is voluntary and you may end your participation at any time. Before we begin, do you have any questions?*
3. Administer the demographic questionnaire FIRST. After the participant is done with the questionnaire, ensure they are from one of the tribes from the following states: **Iowa, Minnesota, South Dakota, Wisconsin, Montana, Wyoming, or North Dakota**. If they are, give them the PTSD-8. If they do not mark any symptoms in the first box (mark all the NOT AT ALL BOXES), then advise the participant they are not eligible to participate in the study. If they mark any combination of any of the boxes, administer the AIBI-NP and the ACE questionnaire.
4. READ: *You are eligible to participate in this study. You will fill out a survey about culture and another one about things that may have happened to you in your childhood. Please answer every question.*

5. Give the participants the AIBI-NP and the ACE questionnaire (make sure the coded numbers are the same). After they finish, scan the questionnaires to ensure the participant has not forgotten/missed answering any questions. Point out the missed question to the participant and encourage them to answer the question. Ask them if they have any questions.
6. Separate the informed consent and place it in the manila folder marked **“INFORMED CONSENT.”** Place the surveys in the manila envelope which corresponds with their coded package.
7. Have the participant fill out the receipt and place it the manila folder marked **“RECEIPTS.”** Give the participant \$10.00 **(IN ORDER TO RECEIVE THEIR \$10, THEY MUST FILL OUT ALL FOUR SURVEYS)**

**APPENDIX G
LIST OF MENTAL HEALTH RESOURCES**

WE CARE ABOUT YOU AND YOUR FAMILY

It is common for people to have uncomfortable thoughts or feelings when talking about some of the issues in this survey. Your reactions may be mild or intense.

During or after the questions you or your loved ones may like to talk with someone. Area resources are listed below. We would be happy to help you contact any of these resources if you wish. We are firmly committed to our policy of confidentiality, so, if you decide to seek help for yourself or your family, your decision would be kept confidential.

RESOURCES

Type	Location	Program	Phone	Contact Persons
<i>North Dakota Facilities</i>				
MH	Belcourt	IHS- Turtle Mountain Service Unit	701-477-6111	
ALOD	Belcourt	Turtle Mountain Counseling/Rehab Center	701-477-3121	Peter Azure
ALOD	Bismarck	United Tribes Educational Technical Center	701-255-3285 Ext. 1200	
MH	Bismarck	West Central: Human Service Center	701-328-8888	
MH	Dickenson	Badlands Human Service Center	701-227-7500	
MH	Devil's Lake	Lake Region Human Service Center	701-665-2200 Crisis: 701-662-5050 Collect calls accepted	Kate Kenna
MH	Fargo	Southeast: Human Service Center	701-298-4500 Crisis: 888-342-4900	Jeff Stenseth
MH	Fort Berthold	IHS – Fort Berthold Service Unit	701-627-4701	
MH	Fort Totten	IHS - Spirit Lake Service Unit	701-766-1600	

ALOD	Fort Yates	Chemical Prevention Program	701-854-7210	
MH	Fort Yates	IHS – Standing Rock Service Unit	701-854-3831	
MH	Grand Forks	Northeast Human Service Center	701-795-3000	
MH	Grand Forks	UND Counseling Center	701-777-2127	
MH	Grand Forks	Psychological Services Center	701-777-3691	Joe Miller
MH	Jamestown	South Central Human Service Center	701-253-6300	
MH	Minot	North Central Human Service Center	701-857-8500 888-470-6968	
ALOD	New Town	Circle of Life	701-627-4700	
ALOD	Trenton	Native American Resource Center	701-774-9876	
NH	Williston	Northwest Human Service Center	701-774-4600 Crisis: 701-572-9111 800-231-7724	Alex Schweitzer
South Dakota Facilities				
MH	Aberdeen	Aberdeen Area IHS	605-226-7581	Rick Sorensen
MH	Fort Thompson	Crow Creek Service Unit	605-245-1500	
ALOD	Eagle Butte	Four Bands Healing Center	605-964-8182 605-964-8183	
ALOD	Flandreau	Flandreau Santee Sioux Tribal Counseling Center	(605)997-3844	
ALOD	Fort Thompson	Swift Horse Lodge	(605)245-2245	
MH	Kyle	IHS – Kyle Health Center	605-455-2451	
MH	Lower Brule	IHS- Lower Brule Service Unit	605-473-5544	
ALOD	Lower Brule	Lower Brule Counseling Service	(605)472-5584	
ALOD	Lake Andes	Canku Teca Treatment Center	(605)487-7841	
ALOD	Mission	Little Hoop Lodge— Residential	(605)856-2342	
Youth	Mobridge	Aberdeen Area IHS- Aberdeen Area Youth Regional Treatment Center	(605)845-7181	
MH	Pine Ridge	IHS – Pine Ridge Service Unit	605-867-5138	
ALOD	Rapid City	Substance Abuse Healing Program- Residential	(605)342-8925	
COMB	Rapid City	Black Hills Veteran's Center	605-718-1095	

MH	Rosebud	IHS – Rosebud Service Unit	605-747-2231	
MH	Sturgis	VA Hospital Psychology Department Ft. Meade VAMC	605-347-2511 Ext.394	
MH	Sisseton	IHS- Sisseton-Wahpeton Service Unit	605-698-7606	
MH	Yankton	IHS – Yankton Service Unit	605-384-3621	
MH	Wanblee	IHS- Wanblee Health Center	605-462-6155	
Minnesota Facilities				
MH	Bemidji	IHS- Bemidji Area	218-444-0471	Jenny Jenkins
MH	Cass Lake	IHS – Cass Lake Hospital	218-335-3200	
MH	Minneapolis	Native American Community Clinic	612-872-8086	
MH	Red lake	IHS- Red Lake Service Unit	218-679-0181	
MH	White Earth	IHS – White Earth Health Center	218-983-4300	
Nebraska				
MH	Winnebago	IHS- Winnebago Service Unit	402-878-2231	

TOLL FREE NUMBERS

- HELPLine.....2-1-1
- National Suicide Prevention Talkline800-273-TALK
800-273-8255
- National Suicide Hotline 800-SUICIDE
800-784-2433
- National Drug Information Treatment and Referral Hotline..... 800-662-HELP
800-662-4357
- Military Veterans Suicide Hotline..... 800-273-TALK
(Press 1)
- Alcohol Abuse and Crisis Intervention..... 800-234-0246
- Alcohol and Drug Abuse Helpline and Treatment..... 800-234-0420
- Alcohol Hotline Support & Information 800-331-2900

APPENDIX H
RECRUITMENT FLIER

ATTENTION!!!!

Confidential Research Opportunity

**Native American cultural participation and
post-traumatic stress symptom reduction
YOU COULD QUALIFY!**

**If you are interested in participating in a research study
requiring you to answer questions on some surveys, it will
take about 15-20 minutes of your time.**

REMEMBER---

ALL ANSWERS ARE KEPT CONFIDENTIAL

YOUR NAME/IDENTITY WILL NEVER BE REVEALED

IF YOU QUALIFY, YOU WILL BE COMPENSATED FOR YOUR TIME.

Approved by UND Institutional Review Board

FOR MORE INFORMATION CONTACT:

Royleen J. Ross, Researcher

(505) 206-3853

UND Clinical Psychology Program

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