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A COMPARISON STUDY OF AMERICAN INDIAN AND CAUCASIAN SEX OFFENDERS ON TRAUMA AND SELECTED TRAUMA EFFECTS

by

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Bachelor of Arts, Chadron State College, 2012
Master of Arts, University of North Dakota, 2014

A Dissertation

Submitted to the Graduate Faculty

of the

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In partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

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2017

This dissertation, submitted by Regina Sioux Ertz in partial fulfillment of the requirements for the Degree of Doctor of Philosophy 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.

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

Wayne Swisher
Dean of the School of Graduate Studies

April 19, 2017
Date

PERMISSION

Title A Comparison Study of American Indian and Caucasian Sex Offenders on Trauma and Selected Trauma Effects

Department Clinical Psychology

Degree Doctor of Philosophy

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Regina Sioux Ertz
06/13/17

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ABSTRACT

American Indian/Alaskan Natives (AI/AN) have a long history of documented trauma experiences. In addition, AI/AN individuals are likely to have fewer economic resources and are faced with increased traumatic experiences in comparison to the general population. Further, the American Indian population is also affected by overrepresentation with incarceration rates in federal and state government detention centers. These data support the need to address non-sexual recidivism issues in the American Indian population. Little research has examined trauma experiences, selected trauma effects, and unique differences for American Indian sex offenders. Treatment employed for American Indian sex offenders is conducted based on data supporting Caucasian sex offender treatment. However, there is a need to examine the unique differences among American Indian sex offenders, as they may require more trauma-informed care or other specific treatment needs. This study hypothesized American Indian male sex offenders would report more adverse childhood experiences, trauma experiences, higher current PTSD rates in relation to their most distressing traumatic event, more selected trauma effects, and higher non-sexual re-offense risks factors than Caucasian male sex offenders. Results indicated American Indian sex offenders reported significantly more adverse childhood experiences, higher rates of underreported trauma symptoms, impulsive/problematic sexual behaviors, higher rates of suicidal behavior in the past 6 months, and higher non-sexual re-offense risk factors than Caucasian sex offenders. Additional analyses were conducted on the data and are described in the results section.

CHAPTER I

INTRODUCTION

This study reviewed trauma experiences and selected trauma effects specific to American Indian or Alaskan Native (AI/AN) sex offenders. The terms AI/AN refers to individuals of AI/AN descent and American Indian is used to designate the research participants in this study. Many families and individual family members may identify as being AI/AN, but are not recognized by the federal government because they are not an enrolled member of their tribe. There are 566 federally-recognized tribes with a wide variation in membership (USCB, 2013). The federal government deferred tribal membership to the sovereign nations in 1934 when legislation passed the Indian Reorganization Act. Tribes were encouraged to develop a constitution providing recognized criteria for determining membership and enrollment under this act. Indian tribal councils now determine who is recognized as an AI/AN tribal member, and this criterion varies depending on a specific tribe. For this study, American Indian is defined as an individual who self-identifies as being AI/AN.

A recent preliminary study examined the number of trauma experiences, symptoms of Posttraumatic Stress Disorder (PTSD) endorsed related to those trauma experiences, traumatic cognitions, and dissociative experiences reported by American Indian and Caucasian male sex offenders (Ertz, 2014). Results indicated no significant differences between American Indian and Caucasian sex offenders on the reported number of trauma experiences, lifetime PTSD rates related to those trauma experiences, traumatic cognitions, or dissociative experiences. However, American Indian sex offenders were found to have significantly more adverse childhood

experiences (ACE) than Caucasian sex offenders. Additionally, contact sex offenders in the total sample displayed significantly more dissociative experiences than non-contact sex offenders regardless of ethnicity. The study found the prevalence rates for reported sexual abuse was 45.2% for American Indian sex offenders and 27.8% among Caucasian sex offenders. Finally, the lifetime PTSD rate for American Indian sex offenders in the study was 41.9%, which is significantly elevated in comparison to the prevalence rate of this disorder in the general population of 8% (APA, 2000). The lifetime PTSD rate for Caucasian sex offenders was also significantly elevated at 40.7% in this study (Ertz, 2014). This data suggests there may be a significant prevalence level of trauma experiences within the adult sex offender population in the United States (U.S.) regardless of ethnicity. However, this study did not evaluate if there were differences between American Indian and Caucasian sex offenders regarding specific trauma experiences or additional selected trauma effects.

The current study serves as an extension of the preliminary study completed to examine more specific trauma experiences and multiple selected trauma effects in efforts to determine if there are ethnic and or/cultural differences for American Indian sex offenders. Further, this study incorporated a measurement of non-sexual re-offense risks factors, as the available data suggests American Indian sex offenders are often overrepresented in correctional placements (Lewis, 2001). Results would provide further research for American Indian sex offenders, which contributes to the lack of knowledge of treatment needs for this population.

According to the data from the U.S. Census Bureau (USCB) (2013), American Indians are faced with unique demographic dimensions and socioeconomic status which is distinct from the general population. There are roughly 5.2 million AI/AN individual's residing in the U.S., representing approximately 2% of the total population. The AI/AN population is the fastest

growing population in the U.S., and this number is expected to increase to 11.2 million by 2060. In 2013, the states with the highest percentage of the AI/AN population were Alaska with 14.3%, New Mexico with 9.1%, South Dakota with 8.5%, Oklahoma with 7.5%, and Montana with 6.8%. Further, the percentage of AI/ANs who lacked health insurance was 26.9% in 2013. The top 10 leading causes of death for AI/ANs in 2013 according to the CDC were heart disease, cancer, unintentional injuries, diabetes, chronic liver disease and cirrhosis, chronic lower respiratory diseases, stroke, suicide, influenza and pneumonia, and kidney diseases. Additional health issues for AI/ANs include: teen pregnancy, infant mortality, HIV/AIDS, obesity, mental health, alcohol use, and smoking/tobacco use.

In 2010, the AI/AN birth rate among females 15-19 years of age was the third largest following Blacks and Hispanics. The birth rate among females 10-14 years of age was three times higher than their White counterparts. The preterm birthrate for AI/AN infants (13.6%) was higher than for White (10.8%) and Asian/Pacific Islanders infants (10.7%) in 2010. In 2008, the infant mortality rate was 53% higher for AI/AN women (8.42 infant deaths per 1,000 live births) compared with White women (5.52 infant deaths per 1,000 live births). AI/AN rates for those who did not complete high school was 25.1% in 2009 and 26.0% in 2011, and this was the second highest rates following Hispanics. This constitutes to 1 in 5 children will not complete high school, and this rate increases with individuals of lower social economic status. In 2011, the age-standardized percentage of AI/AN adults living below the poverty line (19.3%) was among the highest compared with Whites. The prevalence rate of unemployment for AI/ANs among adults aged 18-64 years was second highest (15.8%) following Blacks in 2010.

The AI/AN population had the highest rate of motor vehicle related deaths; however, this rate has decreased since 2005 from 30.6% to 25.2% in 2009. In 2009 AI/ANs still have the

highest rate of suicide (15.6%) and the highest death rate due to drug use (17.7%). In 2009, AI/AN youth and adults had the highest prevalence rates of current smoking compared to other racial or ethnic populations. However, smoking rates have declined from 17.2% to 13.6% in youth and from 42.2% to 34.4% in adults from 2006-2010. During 2011, AI/AN adults exhibited the highest prevalence rate of binge drinking (18.2%) and the highest number of drinks consumed during binge drinking (8.4%) when compared to all other race/ethnicity categories. Finally, in 2010, AI/ANs had the highest age adjusted mean number of physically unhealthy days in the past 30 days compared with other ethnic populations (CDC, 2013).

Due to a unique previous history with the federal government, tribes are entitled to health and educational services provided by the federal government even though many tribes exist as a sovereign nation. These services are provided through Indian Health Services (IHS); however, more than half of the AI/AN population does not reside on the reservation. This is due to limited job opportunities and adequate housing for families. As a result, many AI/ANs have limited or no access to IHS services and therefore it may be difficult for them to receive adequate health care (USCB, 2013).

American Indian sex offenders have also been affected by overrepresentation of incarceration rates in federal government prisons (Lewis, 2001). However, there are no other research studies from the U.S. to expand on this further. Regardless, this overrepresentation can be examined by reviewing the incarceration rates for the AI/AN individuals among the five states with the highest population of AI/AN individuals. According to Sakala (2014), American Indians represent the following rates of the state's prison population: Alaska with 38%, South Dakota with 29%, Montana with 22%, New Mexico with 11%, and Oklahoma with 10%. It should be noted all of these rates exceed the total population of AI/AN individuals in each state provided

above, which is overwhelming when considering the effects this has on the individual and their families. This overrepresentation of incarceration rates indicates a need to examine if American Indian sex offenders have higher non-sexual criminality needs/risks than Caucasian sex offenders, and thus was included as a measurement in this study.

Based on these statistics, it is apparent AI/AN individuals are likely to have fewer economic resources and are faced with increased traumatic experiences in comparison to the overall population. Many AI/AN individuals and families are affected by the effects of drugs, alcoholism, violence, incarceration, and unexpected deaths. The effects of all these variables in combination, impact an individual's ability to develop and maintain close relationships with family members and the community. Studying trauma experiences and selected trauma effects related to American Indian and Caucasian sex offenders is essential in developing and providing effective treatment for these individuals. To date, there has been little research available in addressing the treatment needs and risk factors for American Indian sex offenders. The current study is an attempt to expand the knowledge of specific difficulties American Indian sex offenders are faced with in order to provide trauma-informed approaches in treating these offenders. This study is not designed to identify a specific treatment model for AI/ANs, rather it is an effort to understand how the host, agent, and environment interact. Treating American Indian sex offenders effectively is a method of understanding their environment to prevent the agent from infecting the host. This is consistent with the public health model of disease prevention, in which the goal is to protect the public by decreasing the recidivism rates.

Review of Literature

The literature suggests AI/ANs are more likely to experience abandonment growing up, be raised by extended family members, have histories of maltreatment, have problems in

personal identity, and lack awareness and experience of traditional cultural values. Further, individuals often experience physiological changes and neurodevelopment changes in response to traumatic events. Experiencing childhood maltreatment has been linked to a variety of changes in health and social problems (Mitchell & Beech, 2011; Anda, Butchart, Felitti, & Brown, 2010; Anda et al., 2006; Felitti et al., 1998b). This includes changes in biological systems responsible for maintaining physiological stability when environmental changes occur (Danese & McEwen, 2012). The body and mind have been able to demonstrate resiliency towards experiencing environmental changes; however, once an individual experiences chronic trauma or childhood maltreatment, the body begins to adapt negatively for protection. Danese and McEwen (2012) refer to this as allostasis, which indicates children who have been exposed to maltreatment will experience biological changes, such as having smaller volume in the prefrontal cortex, greater activation of the hippocampus, and elevation in inflammation levels compared to non-maltreated children. Ehlert (2013) expands on this further by stating maltreated children produce lower levels of cortisol and found evidence supporting elevated markers of inflammation as well. As a result, childhood maltreatment can cause life-time changes in the nervous, endocrine, and immune system, which has severe consequences on an individual's overall health and well-being. Childhood adversity is a severe risk factor for the onset of psychobiology among children, and these biological changes may prevent a child from developing and maintaining securely attached relationships throughout their lifespan.

The human brain develops from the brain stem in an upward direction. Life functions develop first before birth, then the emotional areas develop after birth, which is then followed by the development of other higher functional areas until the individual reaches the age of 25. The emotional areas develop throughout the attachment with caregivers, while other areas of the

brain develop over time, based on the environmental exposure. Children exposed to maltreatment experience an increase in the alarm system of fight, flight, dissociate, or collapse mode. In other words, either they are hypervigilant, easily offended, overreact, violent, or they experience dissociative symptoms, are non-responsive, engage in self-mutilation, or numbing behaviors. These children response differently than non-maltreated children because they have learned their world is an unsafe place. Disrupted brain development increases the brain's alarm system so it is easily triggered and danger then becomes constant in the view of the environment. These effects remain with the individual throughout their life-time and carry over into adulthood. A meta-analysis study conducted by Schuitevoerder et al. (2013) found older adults with PTSD displayed deficits in the cognitive functioning areas of processing speed, learning, memory, and executive functioning. This suggests prolonged exposure to traumatic events can have severe consequences on the individual both physically and psychologically. Research indicates treatment of trauma requires organizational changes in which a supportive therapeutic environment is created to support trauma-informed care (Wilcox, 2012).

Many organizations have played a hand in developing the definition of trauma, including the American Psychological Association (APA). The diagnostic criterion for PTSD has been heavily debated throughout its development in the Diagnostic and Statistical Manual and Mental Disorders (DSM). PTSD has now been established in a new category of Trauma- and Stressor-Related Disorders in DSM-5 (APA, 2013). Previously, PTSD was classified under Anxiety and Related Disorders in the DSM-IV-R (APA, 2000); however, the research supports etiological differences between these two categories and has since been reclassified. The term "stressor" was narrowly defined in DSM-IV-R, which included directly experiencing or witnessing a life threatening event (APA, 2000). DSM-5 has expanded on this criteria to include directly

experiencing or witnessing an event, learning about a traumatic event occurring to a close family member or close friend, and experiencing first-hand repeated or extreme exposure to aversive details of a traumatic event through the media, pictures, TV, etc. Further, DSM-5 criteria for PTSD focuses more on the symptoms of PTSD rather than the immediate reactions an individual may experience with a given stressor. Four separate clusters have been created rather than three, which include: re-experiencing, which refers to experiencing thoughts, images, dreams, dissociative flashbacks, or psychological distress in response to triggers; avoidance, which refers to avoiding thoughts, feelings, or places which remind the individual of the event; negative cognitions and mood, which refers to experiencing a negative emotional state, unable to remember important details of the event, and an inability to experience positive emotions; and arousal, which refers to irritable behavior, angry outbursts, hypervigilance, and exaggerated startled responses. These symptoms must be present for a duration longer than 30 days and the disturbance causes distress or impaired functioning to the individual (APA, 2013).

The criterion for PTSD as defined in the DSM-5 is not sufficient in defining the concept of trauma. The definition of trauma has been reviewed in detail by the United States Substance Abuse & Mental Health Services Administration (SAMHSA) after making trauma and trauma-informed care a strategic approach for mental health providers. SAMHSA has recognized the harmful effects of trauma and the increasing cost to the public health care systems. There is a need to address trauma as a priority for effective behavioral health service delivery. Panels of experts were brought in for collaboration to address the various definitions of trauma to create a concept, which could be shared among practitioners, researchers, and trauma survivors. The following definition is provided below.

> Individual trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being (SAMHSA, 2014).

Three components of this definition are explained in greater detail. Events, or circumstances, involve actual or extreme threat of physical or psychological harm or severe life-threatening neglect for a child where healthy development is disrupted or impaired. This corresponds with the first criteria in DSM-5 in which the events, or circumstances, may occur as a single event or a chronic event repeated over time. The individual's experience of the event(s) must then be interpreted by the individual as being traumatic in nature. In other words, the individual is recognized as having the potential to react differently to the same event or circumstance. Finally, the aversive effects are long-lasting and may occur immediately after the event(s) or after a delay. An example of adverse effects includes an individual's ability to display appropriate coping strategies in response to a traumatic event. Strong social support serves as a good predictor if the individual will develop adverse effects in response to a traumatic event (SAMHSA, 2014). AI/AN populations often strive for family and community support; however, communities can also be effected by an event given the rural areas they reside in. Communities can provide strong support to trauma survivors or re-traumatize them, and entire communities can collectively react in the same ways as individuals reacts. Based on this unique cultural difference, it is hypothesized American Indian sex offenders would experience more adverse childhood experiences, trauma experiences, and selective trauma effects.

The original Adverse Childhood Experiences Study collected data from 17,337 participants to evaluate various pervasive and enduing early trauma events (Felitti et al., 1998b).

Results of this study produced frequencies and negative correlations of childhood maltreatment and household dysfunction, which included: 28% reported physical abuse, 21% reported sexual abuse, and 11% reported emotional abuse. Women reported more sexual abuse (25%) and emotional abuse (13%) than men (16% and 8%, respectively). Respondents reported 13% had witnessed domestic violence in the home, 27% experienced parental substance abuse, 19% had a parent who was depressed, mentally ill, or had attempted suicide, and 23% came from homes in which the parents were separated or divorced. Further, 5% indicated a family member had previously gone to prison (CDC, 2013). The results of this study lead to the development of the ACE questionnaire and research has become expansive with this instrument (Felitti et al., 1998a).

A study conducted by Levenson, Willis, and Prescott (2014) explored the prevalence of ACEs in the lives of male sex offenders compared to males in the general population. Sex offenders had more than 3 times the odds of child sexual abuse, twice the odds of physical abuse, 13 times the odds of verbal abuse, and more than 4 times the odds of emotional neglect. Further, half of the participants (N=679) endorsed four or more ACEs and multiple maltreatment often co-occurred with other types of household dysfunction. Higher ACE scores were significantly correlated with young victims, contact victims, more non-sexual arrests, and measures of violence and aggression. These results were similar to another study conducted by Reavis, Looman, Franco, and Rojas (2013), in which they found male sex offenders reported significantly higher rates of ACEs than males in the general population, and 48% of the participants (N=151) reported four or more adverse childhood experiences. This is also consistent with a study conducted by Weeks and Widom (1998), where they found higher rates of childhood maltreatment in incarcerated adult male sex offenders in which 26% reported

sexual abuse, 18% reported neglect, and 2/3 reported physical abuse. These results suggest sex offenders experience increased rates of sexual abuse, physical abuse, emotional abuse, and neglect compared to the general population. However, further research is needed to evaluate differences among American Indian and Caucasian sex offenders. The studies discussed did not discern ethnicity among the participants.

Lewis (2001) conducted a study examining the differences between AI/AN, Caucasian, and Black sex offenders. The results of the study yielded AI/AN sex offenders reported having more physical or sexual abuse than Black sex offenders, but their rates were similar to Caucasian sex offenders. Greater percentages of AI/AN sex offenders reported more child and familial victims, were under the influence of alcohol during the offense, and experienced increased incidences of depressive symptoms than their counterparts. This suggests many sex offenders have been raised within a dysfunctional household and have experienced lasting effects, such as affective dysregulation, deficits in social attachment, and cognitive problems (Anda et al., 2010; Anda et al., 2006). Studies conducted with the ACEs provides evidence that stress and traumatic childhood experiences, such as abuse, neglect, or other forms of household dysfunction, can lead to social, emotional, and cognitive impairments. These adverse effects lead to increased risk of unhealthy behaviors, violence or re-victimization, disease, or premature mortality (Anda et al., 2010). Having an understanding of the frequency and correlations of early adverse experiences can provide better trauma-informed interventions for clinicians providing sexual specific treatment. As the research suggests, these treatment needs and risk behaviors are most likely different for American Indian sex offenders versus Caucasian sex offenders. Reavis et al. (2013) suggested treatment programs should focus more on emphasizing the role of early trauma self-regulation and attachment.

Selective trauma effects include a variety of symptomology in response to a traumatic event, such as attachment style and dissociation. Infants have a neurobiological instinct to form and develop attachments with their caregivers as a survival mechanism. The original developer of the theory of attachment was John Bowlby who attempted to understand the intense distress experienced by infants who had been separated from their parents. According to Bowlby (1978, 1980), attachment is defined as the process by which an infant has an inborn need to seek and maintain close contact with their primary caregiver. When an infant becomes distressed, they will provide a signal (crying) in order to notify their caregiver they are in need of comfort. Infants do not have the ability to self-sooth; thus, it is up to the caregiver to provide care and comfort in response to distress signals such as holding, smiling, feeding, etc. As previously stated, the brain develops emotional responses after birth and when an infant is in distress the brain produces increased levels of cortisol. Michell and Beech (2011) found cortisol levels begin to rise when an infant is briefly separated from their caregiver, and the cortisol levels begin to lower once the caregiver returns and sooths the infant. Various physiological responses occur for the infant during this time; however, attachment patterns are shaped by a combination of genetic factors and social experiences (Fonagy, 2001).

Ainsworth, Blehar, Waters, and Walls (1978) conducted a study to examine Bowlby's theory of attachment in which they recorded children's reactions to separation and reunion from their caregivers. Four main child interaction styles were observed, which include: secure attachment, where children displayed appropriate behaviors of becoming upset at separation and pleased when they were reunited with their caregiver; avoidant attachment, where children were indifferent at separation and avoided the caregiver when reunited; resistant or ambivalent attachment, where children became distressed at separation and ambivalent at reunion;

disorganized/disoriented attachment, where both avoidant and ambivalent styles occurred at differing times for the child. These four childhood attachment styles correspond to how children will grow to interact with significant others and those around them (Mitchell and Beech, 2011). In addition, attachment impacts relationship outcomes and how individuals function in relationship dynamics.

These four attachment styles identified in children by Ainsworth et al. (1978) correspond to four different styles for adults, which include: secure attachment, anxious-preoccupied, dismissive-avoidant, and fearful-avoidant. Secure attachment in adults is demonstrated when there is a history of warm and responsive interactions, positive views of themselves, others, and their relationships, comfortable with both intimacy and independence, and can regulate between both positive and negative emotions. Anxious-preoccupied attachment in adults is evident when the individual can become overly dependent, have less positive views about themselves, seek high levels of intimacy, approval, and responsiveness, doubt their worth and self-blame, and display emotional expressiveness, worry, and impulsive choices. Dismissive-avoidant attachment in adults is demonstrated when an individual desires a high level of independence, can appear as avoiding attachment, view themselves as self-sufficient and invulnerable to feeling attached, deny needing close relationships, seek less intimacy and view themselves more positively than others, and suppress and hide their feelings. Fearful-avoidant attachment in adults is evident when the individual has experienced loss or sexual abuse in childhood and/or adolescence, have mixed feelings about close relationships, desire and feel uncomfortable with emotional closeness, have negative views about themselves and others, and seek intimacy less and suppress or deny their feelings (Alexander, 2015).

Attachment styles influence how an individual reacts to an environmental change or

stressor as well as how the person thinks and feels. According to Mitchell and Beech (2011), insecure attachment styles may influence an individual's personality trait and produce dysfunctional behavior. They go on further to suggest insecure attachment in childhood leads to difficulties in establishing intimate adult relationships. This difficulty in establishing healthy relationships with adults may lead individuals to the pursuit of intimacy through inappropriate sexual behaviors. McKillop, Smallbone, Wortley, and Andjic (2012) found sex offenders most frequently reported an insecure attachment style with their caregiver (e.g., low parental care and high overprotection and control). Further, offenders reported more insecure attachment with their fathers, and those insecure attachment behaviors were reflected in their adult attachment styles.

In an earlier study conducted by Smallbone and McCabe (2003) they found sex offenders who reported an insecure attachment style were more likely to report being sexually abused compared to those who reported secure attachment styles with their caregivers. Individuals who were sexually abused as children also reported an earlier onset of masturbation than those who were not sexually abused. This suggests an insecure attachment style is linked to childhood sexual abuse and has both direct and indirect effects on an individual's sexual abuse behavior. There is a need to develop further research for the prevention and early intervention of the treatment of sex offenders. Bowlby (1978) suggested in order to treat individuals who have developed insecure attachments, a positive warm environment must be provided by the clinician, and any other providers the individual is in contact with (such as parole officers, peers, family members, and the community). According to the research, including assessment measures which evaluate attachment styles is essential in providing effective treatment for sex offenders in conjunction with trauma-informed care.

Another selected trauma effect which can impact the treatment provided for American

Indian sex offenders includes dissociation. Dissociation is represented as a specifier for the criteria of PTSD and includes depersonalization (experiencing feelings of detachment from one's self) and derealization (experiencing feelings of unreality of surroundings) (APA, 2013). The literature demonstrates the AI/AN population often have excessively high rates of comorbidity impairments such as drug and alcohol use. This pattern of behavior may represent a desire to numb painful emotions related to experiencing trauma or abuse. Additional techniques individuals utilize to numb painful emotions include anger, bad relationships, sex, and the consumption of food. Dissociation can negatively impact cognitive performance, such as encoding of the trauma memories (Brewin, Ma, & Colson, 2013; Bedard-Gilligan & Zoellner, 2012). A study conducted by Brewin et al. (2013) found dissociative symptoms reduced the ability for participants to conduct accurate time estimations, digit span, and story retention on standardized intelligence tests. This suggests selected trauma effects can have severe implications on an individual's ability to process information, use their working memory, and display adequate coping skills. A combination of insecure attachment style and dissociative symptoms can prevent sex offenders from successfully completing treatment and can lead to other high risk behaviors related to non-sexual offenses.

According to the U.S. Probation and Pretrial Services, the recidivism rates for sex offenders is high; however, the majority of recidivism relates to non-sexual offenses vs. sexual offenses (U.S. Courts, 2013). Upon receiving sexual specific treatment, sex offenders complete assessment measures to determine their risk/needs for sexual recidivism, but most often they do not take into account their risk/needs for non-sexual recidivism. Seto (2013) expanded on a risk assessment outline originally developed by Andrews and Bonta, which suggests dynamic factors are of higher concern when conducting a risk assessment. He identifies three principles which

includes: the risk principle, which states the intensity of services should be matched to the recidivism risk posed by the offender; the need principle, which states interventions addressing criminogenic needs that are flexible and are more effective than interventions that do not address changes to these needs; and responsivity principle, which states interventions are more effective when they are tailored to the individual's learning style and capacity (pp. 234-335). The responsivity principle may also include factors related to culture and attachment issues. The research supports there is a need to include a non-sexual re-offence risk assessment to determine the risks/needs of sex offenders. Based upon the statistics which indicate American Indians sex offenders are overrepresented in correctional placements (Lewis, 2001), it is hypothesized American Indian sex offenders would have higher rates of non-sexual criminal risks/needs compared to Caucasian sex offenders.

Additional information gained through the U.S. Pretrial and Probation Office in South Dakota highlights a further area of concern regarding American Indian sex offenders placed on federal probation. This data covers a timeframe from Fiscal Year 2012 to March of 2014. During this time there were 139 sex offenders under supervision through the U.S. Probation Office in South Dakota, and 91% were American Indians. A higher percent of sex offender cases were closed (48%) due to revocation than non-sexual offenders (30%). An additional 2% of sex offender cases were closed due to being charged with another sexual offense. This data indicates 50% of sex offenders' cases were closed due to supervision failure. In other words, up to 50% of American Indian sex offenders presented with probation violations, which resulted in premature treatment terminations. Closed cases of this nature suggests it is necessary to develop interventions required to increase public protection resulted from treatment failures (J. Bentley, personal communication, July 7, 2014).

The literature presents strong evidence that American Indian sex offenders are likely to have significant trauma histories and selected trauma effects compared to their Caucasian counterparts. Further research is needed to develop trauma-informed treatment for survivors, offenders, families, and communities. Specifically, this study compared of the number of adverse childhood experiences and traumas experiences by American Indian and Caucasian sex offenders currently receiving sexual specific treatment. Further, the level of current self-reported PTSD rates in relation to their most distressing traumatic event, selective trauma effects, and non-sexual re-offense risks factors were compared for each group to determine if there are any significant differences.

Study Hypotheses

Hypothesis 1: American Indian sex offender participants would report more adverse childhood experiences than the Caucasian sex offender participants.

Hypothesis 2: American Indian sex offender participants would report more trauma experiences than the Caucasian sex offender participants.

Hypothesis 3: American Indian sex offender participants would endorse higher current self-report PTSD rates than the Caucasian sex offender participants.

Hypothesis 4: American Indian sex offender participants would display more selective trauma effects than the Caucasian sex offender participants.

Hypothesis 5: American Indian sex offender participants would endorse higher non-sexual re-offense risk factors than the Caucasian sex offender participants.

CHAPTER II

METHODS

Participants

The participants consisted of (N=63) volunteer American Indian (n=31) and Caucasian (n=32) adult male sex offenders. Age range: 18-71, education range: 7-18, American Indian income range: 0-3,000, and Caucasian income range: 0-12,000. Participants were receiving individual/group sexual specific treatment through Chrysalis Association in Rapid City, South Dakota. This population was a convenience sample, and represents the local community.

Materials and Procedure

The instruments used consisted of a demographic form, the Adverse Childhood Experiences (ACE), the Life Events Checklist for DSM-5 (LEC-5), the Posttraumatic Checklist for DSM-5 (PCL-5), the Trauma Symptom Inventory-2 (TSI-2), and the Level of Service Inventory-Revised: Screening Version (LSI-R:SV). Participants were given a code number to prevent potential identification. Data collection took place by the provider of the participant's sexual specific treatment at Chrysalis Association.

The participant's provider met with each individual to review the consent form (see Appendix A) and explained any questions presented. Participants were not asked to sign the consent form in order to avoid transmitting protected health information. A waiver of consent due to HIPAA privacy issues was approved for this study. Once the consent form had been reviewed, and each participant acknowledged their understanding of the consent form, participants were then asked to complete the demographic from (Appendix B).

The demographic form recorded such variables as age, current living arrangements and where they grew up (either on or off the reservation), legal status, total number of convictions, number of sexual convictions, number of contact and non-contact convictions, months served in tribal and county jail and prison, past and current treatment (specifically the type and duration of treatment in months), education level, abuse survivor status (including: sexual, physical, neglect, and emotional), employment status, and monthly income. Participants were then asked to complete the five instruments noted above.

The ACE was completed first and scores were assessed using the 17-item questionnaire created by Felitti and colleges (1998a). Participants answered questions related to 9 categories including: psychological abuse, physical abuse, sexual abuse, neglect, family substance abuse, parental separation/divorce, violent treatment of mother, family mental illness/suicide, and family member in prison. This instrument was scored dichotomously from a range of 0 (*no exposure*) to 10 (*exposure in all categories*). Participants answered "Yes" or "No" if they were exposed to specific adverse experiences before the age of 18.

The LEC-5 was developed by Weathers et al. (2013a) and assessed for potential traumatic events individuals may have experienced in their lifetime. This instrument was selected because it is suitable both for clinical and research purposes, and it can be administered to a wide population. The instrument utilizes low reading level, common language, and simple responses. The events listed on the LEC-5 were used to define specific traumatic experiences. This instrument is a brief self-report measure examining 16 events and one general event known to potentially lead to distress or a diagnosis of PTSD. This includes: natural disasters, serious accidents, physical abuse, sexual assault, military trauma, and other traumas associated with AI/AN populations. The LEC-5 addresses the criteria A for PTSD as defined in the DSM-5

(APA, 2013), which includes: directly experiencing the event, witnessing the event, learning about the event, and the event being part of their job. Participants were asked to identify how the event applies to them or if the event does not apply to them. Additional dimensions are available on this instrument, which includes: how long ago it happened, whether there was actual or a threat of death or injury, the event involving sexual violence, and how many times they have experienced the event. However, these dimensions were not assessed for in this study. Psychometrics for this instrument have not been established yet due to the recent changes made for DSM-5; however, the original LEC demonstrated good convergent validity and psychopathology known to relate to traumatic exposure (Gray, Litz, Hsu, & Lombardo, 2004). Weathers and colleges (2013a) expect few psychometric differences given the minimal revisions from the original version of the LEC. Participants were then asked to complete the PCL-5 for the most distressing traumatic event they experienced as identified on the LEC-5.

The PCL-5 was developed by Weathers et al. (2013b) and measures the criteria B, C, D, and E for PTSD as defined in the DSM-5 (APA, 2013). This instrument was selected because it can be administered in conjunction with the LEC-5 to determine if an individual meets full criteria for PTSD. The instrument is a 20-item self-report measure, which is easily read and takes 5-10 minutes to complete. Participants were asked to fill out this instrument in relation to their most distressing traumatic event. Items were rated on a five-point scale ranging from 0 (*Not At All*) to 4 (*Extremely*). According to Weathers and colleges (2013b), the disturbance must cause significant distress or impairment, which was associated with a cutoff value of 2 on the PCL-5. To determine if individuals meet full criteria for PTSD, the following DSM-5 diagnostic rule requires at least: 1 item in B (questions 1-5), 1 item in C (questions 6-7), 2 items in D (questions 8-14), and 2 items in E (questions 15-20). The cutoff value of 2 was used to determine if the

participant met full criteria for PTSD in relationship to an identified stressful experience on the LEC-5. The scores on the LEC-5 and PCL-5 were then compared between American Indian and Caucasian sex offenders to determine if there were differences between the two groups.

The TSI-2 was developed by Briere (2011) and is a revised version of the TSI (Briere, 1995). This instrument measures trauma related acute and chronic symptomology, which includes: the effects of sexual and physical assault, intimate partner violence, combat, torture, medical trauma, witnessing violence, or other trauma, etc. The TSI-2 is a 136-item self-report measure evaluating selected trauma effects, such as dissociation, somatization, insecure attachment, impaired self-capacities, and dysfunctional behavior. This instrument has good internal consistency reliability, test-retest stability, and convergent validity. Participants were asked to complete the full measure, which produced scores on two validity scales, 4 broad categories of distress, and 12 different types of trauma-related symptoms of which 6 of these clinical scales produce additional supplementary scales. The majority of participants produced valid scores on the TSI-2, which refers to the Response Level (RL) and Atypical Response (ATR) scales being within normal limits. There were 10 identified participants who scored above the cutoff value for the RL and ATR, which indicates they invalidated the instrument. However, these participants were included in the final data analysis due to the significant results produced between groups and implications it has for American Indian sex offenders.

The RL validity scale measures bias toward underreporting or denying symptomatology related to trauma, and the ATR validity scale measures bias toward over-reporting trauma-related symptoms. The four broad categories of distress scales include the following: Self-Disturbance (SELF), which measures difficulties associated with inadequate self-awareness and negative models of self and others; Posttraumatic Stress (TRAUMA), which measures posttraumatic

stress and related anxiety and dissociation; Externalization (EXT), which measures the tendency to engage in dysfunctional or self-destructive behaviors when distressed; and Somatization (SOMA), which measures somatic preoccupation and distress. The 12 clinical scales include the following: Anxious Arousal (AA), which measures anxiety and hyperarousal symptoms, symptoms of anxiety, and symptoms associated with posttraumatic hyperarousal; Depression (D), which measures cognitive, affective, or somatic symptoms of depression; Anger (ANG), which measures angry thoughts, feelings, or memories; Intrusive Experiences (IE), which measures reliving/intrusion symptoms of posttraumatic stress; Defensive Avoidance (DA), which measures avoidance of upsetting thoughts, feelings, or memories; Dissociation (DIS), which measures depersonalization, derealization, detachment, amnesia, and identity splits; Somatic Preoccupations (SOM), which measures somatic preoccupation and distress, aches and pains, and generalized somatic complaints; Sexual Disturbance (SXD), which measures sexual problems and behaviors and negative thoughts and feelings associated with sexuality; Suicidality (SUI), which measures suicidal ideation, thoughts, and behaviors; Insecure Attachment (IA), which measures difficulties or insecurities regarding close relationships with others and preoccupation with abandonment or rejection in relationships; Impaired Self-Reference (ISR), which measures difficulties in accessing identity, self, or self-determination, lack of awareness of internal mental processes associated with a personal sense of self, and overvaluing others' views and demands in the absence of sufficient self-references; and Tension Reduction Behavior (TRB), which measures use of external activities (e.g. self-injury, bingeing) as a way to avoid or distract from upsetting internal states. The scores on the four broad categories of distress scales and 12 clinical scales on the TSI-2 were compared between American Indian and Caucasian sex offenders to determine if there were differences between the two groups.

The final instrument administered was the LSI-R:SV (Andrews and Bonta, 1998). The LSI-R:SV is derived from the full LSI-R and consists of 8-items measuring risk/needs of non-sexual re-offense risk factors. This instrument is time-efficient, has good internal consistency, reliability, and construct validity. The first 6 questions measure criminal history, education/employment history, companionship, alcohol/drug problem, and emotional/personal issues. Participants were asked to identify either *yes* or *no* if the event applies to them. The final two questions measure family/marital satisfaction and attitudes/orientation towards their criminal offense. These items were rated on a four-point scale ranging from 0 (*A satisfactory situation with no (or limited) need for improvement*) to 4 (*A very unsatisfactory situation with a very clear and strong need for improvement*). The total score placed the participant in a cumulative frequency for criminality risk/needs, which includes: Minimum (0-2), Medium (total score 3-5), and Maximum (total score 6-8). Additional follow up questions were asked, which include: *How is the relationship with your parents? How do you feel about the crimes you've committed?* Participants' answers were coded as a 0 for negative/no relationship and a 1 for a positive/supportive relationship with their caregiver from childhood (e.g., mother, father, grandparents, aunts, uncles, etc.). Participants were given a 0 if they denied remorse or were neutral towards their criminal offense or a 1 if they identified remorse for their criminal offense. Scores were then compared between the two groups to determine any differences.

CHAPTER III

RESULTS

Data analysis examined whether there were any significant group differences between American Indian and Caucasian sex offenders in relation to the number of adverse childhood experiences, trauma experiences, current PTSD rates in relation to their most distressing traumatic event, selected trauma effects, and non-sexual re-offense risk factors. Information from the demographic form is summarized by frequency distributions in Table 1. Descriptive statistics for treatment time in months, tribal jail, county jail, and prison time in months, total convictions, and sexual convictions are represented in Table 2.

Table 1. Frequency Distribution for Demographic Information

Variables	American Indian (n = 31)	Caucasian (n = 32)
Living Arrangements		
Currently live on the reservation	19.4	6.3
Currently live off the reservation	80.6	93.8
Grew up on the reservation	58.1	6.3
Grew up off the reservation	32.3	93.8
Grew up on and off the reservation	9.7	0.0
Legal Status		
On Parole	58.1	50.0
On Probation	41.9	50.0

Table 1. cont.

Variables	American Indian (n = 31)	Caucasian (n = 32)
Offense Type		
Contact offenders	74.2	46.9
Non-contact offenders	16.1	50.0
Contact and non-contact offenders	3.2	3.1
Employment		
Worked full-time	45.2	71.9
Worked part-time	6.5	9.4
On disability	6.5	9.4
Receiving assistance	0.0	0.0
Receiving unemployment	0.0	0.0
Retired	0.0	6.3
Unemployed	41.9	3.1
Abuse Survivor	74.2	48.1
Sexual abuse	64.5	59.4
Physical abuse	80.6	68.8
Neglect	16.1	12.5
Emotional abuse	22.6	40.6

Table 2. Means and Standard Deviations of Variables from the Demographic Form

	American Indian (n = 31)		Caucasian (n = 32)	
Variables	M	SD	M	SD
Treatment Time (in months)	19.00	33.53	29.28	29.61
Tribal Jail (in months)	1.08	2.30	0.06	0.35

Table 2. cont.

	American Indian (n = 31)		Caucasian (n = 32)	
Variables	M	SD	M	SD
County Jail (in months)	7.79	8.28	7.80	13.63
Prison (in months)	42.24	93.37	38.94	88.24
Total Convictions	1.81	2.70	1.81	1.26
Sexual Convictions	1.16	0.37	1.22	0.66

Correlations were evaluated to examine any significant relationships between the variables on the demographic form and the trauma instruments separately for American Indian and Caucasian sex offenders. For American Indian sex offenders, results indicated a moderate positive relationship ($p < 0.05$) between age and months spent in prison ($r = .533$), age and total number of convictions ($r = .385$), age and total income ($r = .400$), months spent in tribal jail and months spent in prison ($r = .472$), and months spent in county jail and total number of sexual convictions ($r = .464$). There was a strong positive relationship ($p < 0.05$) between months spent in prison and total number of convictions ($r = .859$). A summary of the correlation matrix for the variables in the demographic form are represented in Table 3. In regards to the trauma instruments, there were moderate positive relationships ($p < 0.05$) between the ACE and LEC-5 ($r = .583$), the ACE and PCL-5 ($r = .471$), and the PCL-5 and LSI-R:SV ($r = .412$). Table 4 represents a summary of the correlation matrix.

Table 3. Correlation Matrix for Demographic Form from 31 American Indian Sex Offenders

Variables	1	2	3	4	5	6	7	8	9
1. Age	–								
2. Treatment Time	-.153	–							

Table 3. cont.

3. Tribal Jail	.126	.093	–						
4. County Jail	-.029	.064	.013	–					
5. Prison	.533**	-.057	.472**	.145	–				
6. Total Convictions	.385*	-.018	.279	.126	.859**	–			
7. Sexual Convictions	.128	.032	-.132	.464**	-.048	.065	–		
8. Education	-.193	-.220	-.116	.051	.019	.026	.087	–	
9. Income	.400*	-.269	-.071	-.251	-.002	-.001	.145	.023	–

Note. *$p < 0.05$ (2-tailed), **$p < 0.01$ (2-tailed)

Table 4. Correlation Matrix for Trauma Instruments from 31 American Indian Sex Offenders

Trauma Instruments	1	2	3	4
1. ACE	–			
2. LEC-5	.583**	–		
3. PCL-5	.471**	.259	–	
4. LSI-R:SV	.311	.048	.412*	–

Note. *$p < 0.05$ (2-tailed), **$p < 0.01$ (2-tailed)

Caucasian sex offenders results indicated a moderate positive relationship ($p < 0.05$) between months spent in tribal jail and total number of sexual convictions ($r = .493$), and total number of convictions and total number of sexual convictions ($r = .519$). There was a strong positive relationship ($p < 0.05$) between months spent in prison and total number of convictions ($r = .741$). In addition, there was a strong negative relationship ($p < 0.05$) between months spent in county jail and education ($r = .714$). A summary of the correlation matrix for the variables in the demographic form are represented in Table 5. For the trauma instruments, there were moderate positive relationships ($p < 0.05$) between the ACE and LEC-5 ($r = .469$) and the PCL-5 and LSI-R:SV ($r = .437$). Table 6 represents a summary of the correlation matrix.

Table 5. Correlation Matrix for Demographic Form from 32 Caucasian Sex Offenders

Variables	1	2	3	4	5	6	7	8	9
1. Age	–								
2. Treatment Time	.071	–							
3. Tribal Jail	.157	-.063	–						
4. County Jail	-.150	.059	.056	–					
5. Prison	.291	.136	.230	.076	–				
6. Total Convictions	.193	.149	.173	-.097	.741**	–			
7. Sexual Convictions	.071	-.084	.493**	-.067	.173	.519**	–		
8. Education	-.002	-.025	.027	-.714**	-.119	-.111	-.066	–	
9. Income	.188	-.166	-.064	-.176	-.187	-.184	-.099	.230	–

Note. *p < 0.05 (2-tailed), **p < 0.01 (2-tailed)

Table 6. Correlation Matrix for Trauma Instruments from 32 Caucasian Sex Offenders

Trauma Instruments	1	2	3	4
1. ACE	–			
2. LEC-5	.469**	–		
3. PCL-5	.269	.208	–	
4. LSI-R:SV	.026	.128	.437*	–

Note. *p < 0.05 (2-tailed), **p < 0.01 (2-tailed)

An analysis of variance (ANOVA) was conducted to evaluate the hypotheses that American Indian sex offenders would report more adverse childhood experiences, trauma experiences, higher current PTSD rates in relation to their most distressing traumatic event, more selected trauma effects, and higher non-sexual re-offense risk factors than Caucasian sex offenders. Ethnicity was identified as the independent variable (American Indian and Caucasian). Preliminary screening of the data identified outliers that could potentially interfere with statistical findings. As a result, all outliers were transformed for each individual trauma

instrument, as well as each individual subtest and supplementary subtests on the TSI-2 in order to establish a normal distribution. Results indicate the ACE scores varied significantly with ethnicity, $F = 3.90$, $p < 0.05$, $\eta^2 = .060$. A summary of the ANOVA results and descriptive statistics for the ACE is represented in Table 7. As hypothesized, comparison of group means reveal American Indian sex offenders have significantly more adverse childhood experiences than Caucasian sex offenders. There were no statistical significances found for the LEC-5 and PCL-5 by ethnicity. A summary of the means and standard deviations for the LEC-5 and PCL-5 can be found in Table 8.

Table 7. ANOVA Results and Descriptive Statistics for the ACE by Ethnicity

	Adverse Childhood Experiences					
Ethnicity Type	Mean	SD	n			
American Indian	4.74	2.56	31			
Caucasian	3.50	2.44	32			
Source	SS	df	MS	F	η^2	Observed Power[b]
Ethnicity	24.29	1	24.29	3.90*	.060	.493
Error	379.94	61	6.228			

Note. $R^2 = .060$, Adj. $R^2 = .045$. *p < .05

Table 8. Means and Standard Deviations of the LEC-5 and PCL-5 by Ethnicity

	Ethnicity			
	American Indian (n = 31)		Caucasian (n = 32)	
Trauma Instruments	M	SD	M	SD
LEC-5	8.16	4.55	8.75	4.10
PCL-5	.258	.445	.375	.492

The LEC-5 was analyzed by giving a count to the total number of traumatic events endorsed, and the PCL-5 was analyzed by giving a count to participants who meet full criteria of PTSD as defined in the DSM-5 (APA, 2013). The data for the LEC-5 was organized to identify the most frequently endorsed types of traumatic events and is summarized in Table 9. The most frequently endorsed traumatic event for American Indian sex offenders included being physically assaulted (83.9%), while Caucasian sex offenders most frequently reported being in a transportation accident (90.6). In addition, American Indian sex offenders most frequently experienced a total number of traumatic experiences including the following: 7 or 11. Caucasian sex offenders reported most frequently experiencing a total number of traumatic experiences including the following: 7, 9. or 11. Finally, American Indian sex offenders reported a current PTSD rate of 25.9% and Caucasian sex offenders reported a current PTSD rate of 37.5%. Additional analysis was conducted to determine significant differences for each individual traumatic event between American Indian and Caucasian sex offenders; however, there was no significant difference between groups.

Table 9. Most Frequently Endorsed Types of Trauma Exposure on the LEC-5

Type of Exposure	% of American Indian (n = 31)	% of Caucasian (n = 32)
Natural disaster (for example, flood, hurricane, tornado, earthquake)	54.8	71.9
Fire or explosion	58.1	65.6
Transportation accident (for example, car accident, boat accident, train wreck, plane crash)	74.2	90.6
Serious accident at work, home, or during recreational activity	45.2	62.5
Exposure to toxic substance (for example, dangerous chemicals, radiation)	25.8	46.9

Table 9. cont.

Physical assault (for example, being attacked, hit, slapped, kicked, beaten up)	83.9	71.9
Assault with a weapon (for example, being shot, stabbed, threatened with a knife, gun, bomb)	64.5	50.0
Sexual assault (rape, attempted rape, made to perform any type of sexual act through force or threat of harm)	58.1	53.1
Other unwanted or uncomfortable sexual experience	48.4	53.1
Combat or exposure to war-zone (in the military or as a civilian)	19.4	31.3
Captivity (for example, being kidnapped, abducted, held hostage, prisoner of war)	19.4	21.9
Life-threatening illness or injury	45.2	59.4
Severe human suffering	29.0	28.1
Sudden violent death (for example, homicide, suicide)	54.8	53.1
Sudden accidental death	48.4	59.4
Serious injury, harm, or death you caused to someone else	25.8	18.8
Any other very stressful event or experience	58.1	53.1

An ANOVA was conducted to evaluate the hypothesis that American Indian sex offenders would report more selected trauma effects as defined by the individual and supplementary subtests on the TSI-2 than Caucasian sex offenders. However, an independent *t*-test was utilized to evaluate group differences for the individual and supplementary subtests on the TSI-2 as a result of Leven's test of equal variances being significant ($p < 0.05$). This suggests unequal variances between the two groups and violates the assumption for ANOVA. T-scores were chosen to be evaluated as they represented standard scores across all subtests. Statistical results for the Response Level (RL) T-scores varied significantly by ethnicity for equal variances

assumed, $t(61) = 2.718$, $p < 0.05$, d = .18, and unequal variances assumed, $t(53.61) = 2.703$, $p < 0.05$, d = .20. The Sexual Disturbance-Dysfunctional Sexual Behavior (SXD-DSB) T-scores also varied significantly by ethnicity for equal variances assumed, $t(61) = 3.768$, $p < 0.05$, d = .25, and unequal variances assumed, $t(35.35) = 3.718$, $p < 0.05$, d = .42. Finally, the Suicidality-Behavior (SUI-B) T-scores varied significantly by ethnicity for equal variances assumed, $t(61) = 3.809$, $p < 0.05$, d = .22, and unequal variances assumed, $t(30.12) = 3.748$, $p < 0.05$, d = .50. A summary of the independent *t*-test results and descriptive statistics for the TSI-2 is represented in Table 10. As hypothesized, statistical analyses reveal American Indian sex offenders displayed significantly more underreporting/denying trauma symptomatology, dysfunctional, impulsive, or problematic sexual behavior, and suicidal behaviors/attempts in the past 6 months than Caucasian sex offenders. Results for the remaining subtests on the TSI-2 were not significant and a summary of the means and standard deviations are represented in Table 11.

T-Score elevations, as defined as a cutoff value at or exceeding 65T, is represented in Table 11 for each individual subtest and supplementary subtests on the TSI-2. American Indian sex offenders most frequently recorded elevations on the Depression (D) (22.6%) and Suicidality-Behavior (SUI-B) (25.8%) subtests. These subtests evaluate depressed mood and cognitions, as well as engaging in suicidal behavior in the past 6 months. Caucasian sex offenders most frequently recorded elevations on Depression (D) (21.9%), Defensive Avoidance (DA) (21.9%), and Somatic Preoccupations-Pain (SOM-P) (21.9%) subtests. These subtests evaluate depressed mood and cognitions, exerting significant effort to avoid events that bring up painful thoughts or memories, and experiencing significant pain in the body or muscle spasms. The remaining percent of elevated T-scores for each subtest and supplementary subtests on the TSI-2 are summarized in Table 11.

Table 10. Independent t-test Results and Descriptive Statistics for the TSI-2 subtests by Ethnicity

	Ethnicity							
	American Indian (n = 31)		Caucasian (n = 32)		95% CI for Mean Difference			
Subtest	M	SD	M	SD		t	df	d
RL[a]	60.84	14.72	52.16	10.32	2.29, 15.07	2.718*	61	.18
RL[b]	60.84	14.72	52.16	10.32	2.24, 15.12	2.703*	53.61	.20
SXD-DSB[a]	49.80	8.55	43.84	2.60	2.80, 9.13	3.768*	61	.25
SXD-DSB[b]	49.80	8.55	43.84	2.60	2.71, 9.22	3.718*	35.35	.42
SUI-B[a]	54.68	10.84	47.38	.491	3.47, 11.14	3.809*	61	.22
SUI-B[b]	54.68	10.84	47.38	.491	3.32, 11.28	3.748*	30.12	.50

Note. a = *t*-test with equal variances; b = *t*-test with unequal variances
*p < .05 for two-tailed test

Table 11. Means, Standard Deviations, and Percent of Elevated T-scores for the TSI-2 subtests by Ethnicity

	Ethnicity					
	American Indian (n = 31)		% of Elevated T-Scores	Caucasian (n = 32)		% of Elevated T-Scores
TSI-2 Subtests	M	SD		M	SD	
Response Level	60.84	14.72	35.5	52.56	11.34	12.5
Atypical Response	55.87	17.11	25.8	52.56	11.92	21.9
Self-Disturbance	49.77	13.07	16.1	51.63	9.86	9.4
Posttraumatic Stress	50.55	13.32	12.9	50.97	10.59	15.6
Externalization	51.39	15.46	16.1	48.53	9.37	3.1
Somatization	47.90	10.51	6.5	48.94	9.66	3.1
Anxious Arousal	47.68	11.52	12.9	50.63	9.64	9.4
Anxiety	49.06	11.86	12.9	50.69	9.93	9.4

Table 11. cont.

Hyperarousal	46.58	10.53	6.5	49.22	9.37	6.2
Depression	51.19	12.66	22.6	54.44	10.92	21.9
Anger	47.48	9.69	12.9	48.53	10.40	9.4
Intrusive Experiences	51.97	14.30	16.1	50.88	12.36	18.7
Defensive Avoidance	51.65	12.35	19.4	51.72	11.51	21.9
Dissociation	50.97	14.04	12.9	50.09	10.68	12.5
Somatic Preoccupations	47.19	9.79	3.2	49.88	9.57	12.5
Pain	48.81	11.45	12.9	53.09	10.86	21.9
General	46.45	8.37	3.2	45.53	9.33	3.1
Sexual Disturbance	48.81	9.31	12.9	46.53	9.04	6.2
Sexual Concerns	47.94	8.38	3.2	48.63	10.30	6.2
Dysfunctional Sexual Bx.	50.00	8.99	12.9	46.13	8.48	3.1
Suicidality	57.35	19.59	19.4	51.19	9.27	12.5
Ideation	56.16	20.65	19.4	51.22	10.68	9.4
Behavior	58.32	18.50	25.8	49.47	5.98	6.2
Insecure Attachment	49.10	11.98	16.1	50.44	9.29	6.2
Relational Avoidance	50.39	11.28	16.1	50.38	10.65	12.5
Rejection Sensitivity	48.06	11.08	3.2	50.66	7.82	0.0
Impaired Self-Reference	49.10	13.64	12.9	49.00	9.01	3.1
Reduced Self-Awareness	50.71	12.79	19.4	51.75	10.57	15.6
Other-Directedness	46.77	13.28	9.7	46.16	7.58	0.0
Tension Reduction Bx.	53.90	16.68	19.4	51.31	10.43	15.6

An ANOVA was conducted to evaluate the final hypothesis that American Indian sex offenders would report higher non-sexual re-offense risk factors than Caucasian sex offenders. However, an independent *t*-test was utilized to evaluate group differences for the LSI-R:SV as a

result of Leven's test of equal variances being significant ($p < 0.05$) and equal variances cannot be assumed. The LSI-R:SV was analyzed utilizing the total score produced, which places the participant in a cumulative frequency for criminality risk/needs. Results for the LSI-R:SV scores varied significantly by ethnicity for equal variances assumed, $t(61) = 3.351$, $p < 0.05$, d = .23, and unequal variances assumed, $t(51.13) = 3.329$, $p < 0.05$, d = .26. As hypothesized, statistical analyses reveal American Indian sex offenders display significantly higher non-sexual re-offense risk factors than Caucasian sex offenders. Given the total score cutoff range (Minimum 0-2, Medium 3-5, and Maximum 6-8), American Indian sex offenders were at Medium risk whereas Caucasian sex offenders were at Minimum risk of non-sexual re-offense risk. A summary of the *t*-test results and descriptive statistics for the LSI-R:SV is represented in Table 12.

Additional analyses were conducted to determine significant differences for relationship with caregivers and endorsing remorse for their criminal offense between American Indian and Caucasian sex offenders. These three variables were analyzed by giving a count to endorsing a positive relationship with both the participants' female and male caregivers and remorse for their criminal offense; however, there were no significant difference between groups. A summary of the means and standard deviations for the remaining variables on the LSI-R:SV are represented in Table 13.

Table 12. Independent t-test Results and Descriptive Statistics for the LSI-R:SV by Ethnicity

	Ethnicity							
	American Indian (n = 31)		Caucasian (n = 32)		95% CI for Mean Difference			
	M	SD	M	SD		t	df	d
LSI-R:SV[a]	2.55	1.57	1.44	1.01	.448, 1.774	3.351*	61	.23
LSI-R:SV[b]	2.55	1.57	1.44	1.01	.441, 1.781	3.329*	51.13	.26

Note. a = *t*-test with equal variances; b = *t*-test with unequal variances. *p < .05 for two-tailed test

Table 13. Means and Standard Deviations of the LSI-R:SV by Ethnicity

	Ethnicity			
	American Indian (n = 31)		Caucasian (n = 32)	
Trauma Instruments	M	SD	M	SD
LSI-R:SV	2.55	1.57	1.44	1.01
Relationship w/Female Caregiver	.677	.475	.813	.397
Relationship w/Male Caregiver	.613	.495	.531	.507
Remorse for Crime	.871	.341	.938	.246

An additional evaluation of the number of adverse childhood experiences, trauma experiences, current PTSD rates in relation to their most distressing traumatic event, selected trauma effects, and non-sexual re-offense risk factors was conducted between participants identified as contact sex offenders and non-contact sex offenders during the final phases of analysis. It should be noted that two subjects (1 American Indian, 1 Caucasian) identified themselves as both contact and non-contact sex offenders and were eliminated from the data analysis. An ANOVA was utilized to analyze differences between offense types. Results indicate the ACE scores varied significantly with offense type, $F = 6.83$, $p < 0.05$, $\eta^2 = .104$. A summary of the ANOVA results and descriptive statistics for the ACE is represented in Table 14. Comparison of group means reveal contact sex offenders have significantly more adverse childhood experiences than non-contact sex offenders. There were no statistical significances found for the LEC-5 and PCL-5 by offense type. A summary of the means and standard deviations for the LEC-5 and PCL-5 can be found in Table 15.

Table 14. ANOVA Results and Descriptive Statistics for the ACE by Offense Type

	Adverse Childhood Experiences					
Offense Type	Mean	SD	n			
Contact	4.61	2.32	41			
Non-contact	2.90	2.55	20			
Source	SS	df	MS	F	η^2	Observed Power[b]
Offense Type	39.30	1	39.30	6.83*	.104	.729
Error	339.56	59	5.755			

Note. $R^2 = .060$, Adj. $R^2 = .045$. *p < .05

Table 15. Means and Standard Deviations of the LEC-5 and PCL-5 by Offense Type

	Offense Type			
	Contact (n = 41)		Non-contact (n = 20)	
Trauma Instruments	M	SD	M	SD
LEC-5	9.05	4.59	7.10	3.55
PCL-5	.317	.471	.300	.470

An ANOVA was conducted to evaluate the group differences by offense type in regards to selected trauma effects as defined as individual and supplementary subtests on the TSI-2. However, an independent *t*-test was utilized to evaluate group differences for the individual and supplementary subtests on the TSI-2 as a result of Leven's test of equal variances being significant ($p < 0.05$) and equal variances cannot be assumed. T-scores were chosen to be evaluated as they represented standard scores across all subtests. Statistical results for the Atypical Response (ATR) T-scores varied significantly by offense type for equal variances assumed, $t(59) = -3.812$, $p < 0.05$, d = .26, and unequal variances assumed, $t(40.13) = -5.479$, $p < 0.05$, d = .55. The Dissociation (DIS) T-scores also varied significantly by offense type for equal

variances assumed, $t(59) = -2.218$, $p < 0.05$, d = .15, and unequal variances assumed, $t(58.54) = -2.707$, $p < 0.05$, d = .18. The Somatic Preoccupations-General (SOM-G) T-scores varied significantly by offense type for equal variances assumed, $t(59) = -2.112$, $p < 0.05$, d = .15, and unequal variances assumed, $t(54.74) = -2.453$, $p < 0.05$, d = .18. The Sexual Disturbance (SXD) T-scores varied significantly by offense type for equal variances assumed, $t(59) = -2.325$, $p < 0.05$, d = .18, and unequal variances assumed, $t(58.66) = -2.847$, $p < 0.05$, d = .19. Finally, the Sexual Disturbance-Dysfunctional Sexual Behavior (SXD-DSB) T-scores varied significantly by offense type for equal variances assumed, $t(59) = -2.375$, $p < 0.05$, d = .16, and unequal variances assumed, $t(58.77) = -2.918$, $p < 0.05$, d = .20. A summary of the independent *t*-test results and descriptive statistics for the TSI-2 is represented in Table 16. Statistical analyses reveal contact sex offenders display significantly more over-reporting of trauma symptoms, depersonalization and derealization, general body complaints and muscle spasms, and dysfunctional, impulsive, or problematic sexual behavior than non-contact sex offenders. The remaining individual and supplementary subtests on the TSI-2 were not significant.

Table 16. Independent t-test Results and Descriptive Statistics for the TSI-2 subtests by Offense Type

	Offense Type							
	Contact (n = 41)		Non-Contact (n = 20)		95% CI for Mean Difference			
Subtest	M	SD	M	SD		T	df	d
ATR[a]	57.90	15.94	44.25	.444	-20.82, -6.49	-3.812*	59	.26
ATR[b]	57.90	15.94	44.25	.444	-18.69, -8.62	-5.479*	40.13	.55
DIS[a]	52.51	12.76	45.75	6.73	-12.86, -.661	-2.218*	59	.15
DIS[b]	52.51	12.76	45.75	6.73	-11.76, -1.76	-2.707*	58.54	.18
SOM-G[a]	47.66	9.67	42.65	6.14	-9.75, -.264	-2.112*	59	.15

Table 16. cont.

SOM-G[b]	47.66	9.67	42.65	6.14	-9.10, -.917	-2.453*	54.74	.18
SXD[a]	49.32	9.58	44.00	4.50	-9.89, -.742	-2.325*	59	.18
SXD[b]	49.32	9.58	44.00	4.50	-9.05, -1.58	-2.847*	58.66	.19
SXD-DSB[a]	48.32	7.72	43.95	4.00	-8.05, -.688	-2.375*	59	.16
SXD-DSB[b]	48.32	7.72	43.95	4.00	-7.36, -1.37	-2.918*	58.77	.20

Note. a = *t*-test with equal variances; b = *t*-test with unequal variances
*p < .05 for two-tailed test

Finally, an ANOVA was conducted to evaluate the group differences by offense type in regards to non-sexual re-offense risk factors, relationship with female and male caregivers, and endorsing remorse for their criminal offense on the LSI-R:SV. Results indicate the LSI-R:SV scores varied significantly by offense type, $F = 4.78$, $p < 0.05$, $\eta^2 = .075$. A summary of the ANOVA results and descriptive statistics for the LSI-R:SV is represented in Table 17. Comparison of group means reveal contact offenders display significantly higher non-sexual re-offense risk factors than non-contact sex offenders. Additional analyses were conducted to determine significant differences for relationships with female and male caregivers, and endorsing remorse for their criminal offense between contact and non-contact sex offenders. Results indicate there were no significant differences between groups. A summary of the means and standard deviations for the remaining variables on the LSI-R:SV are represented in Table 18.

Table 17. ANOVA Results and Descriptive Statistics for the LSI-R:SV by Offense Type

	LSI-R:SV					
Offense Type	Mean	SD	n			
Contact	2.27	1.48	41			
Non-contact	1.45	1.10	20			
Source	SS	df	MS	F	η^2	Observed Power[b]
Offense Type	9.00	1	9.00	4.78*	.075	.576
Error	110.10	59	1.881			

Note. $R^2 = .060$, Adj. $R^2 = .045$. *p < .05

Table 18. Means and Standard Deviations of the LSI-R:SV by Offense Type

	Offense Type			
	Contact (n = 41)		Non-contact (n = 20)	
Trauma Instruments	M	SD	M	SD
LSI-R:SV	2.27	1.48	1.45	1.10
Relationship w/Female Caregiver	.732	.449	.750	.444
Relationship w/Male Caregiver	.561	.502	.600	.502
Remorse for Crime	.854	.358	1.00	.000

CHAPTER IV

DISCUSSION

This study sought to identify potential differences between American Indian and Caucasian sex offenders in regards to trauma exposure and non-sexual re-offense risk factors. It was reasoned American Indian sex offenders may require different treatment needs in comparison to Caucasian sex offenders given the literature documenting AI/AN's unique demographics, increased exposure to trauma and PTSD rates, and overrepresentation of incarceration rates in federal prisons (USCB, 2013; Beals et al., 2013; Lewis, 2001). Five alternative hypotheses were evaluated: American Indian sex offenders would report more adverse childhood experiences, trauma experiences, higher current PTSD rates in relation to their most distressing traumatic event, more selected trauma effects, and higher non-sexual re-offense risk factors than Caucasian sex offenders. Selected trauma effects were defined by the individual supplementary subtests on the TSI-2. Additional post hoc analyses were conducted evaluating differences between contact and non-contact sex offenders; however, these analyses were not part of the original hypotheses. The results supported the hypotheses in which American Indian sex offenders reported more adverse childhood experiences, selected trauma effects, and higher non-sexual re-offense risk factors than Caucasian sex offenders. However, there were no significant results supporting the remaining alternative hypotheses. Further, contact sex offenders reported more adverse childhood experiences, selected trauma effects, and higher non-sexual re-offense risk factors than non-contact sex offenders.

Further analyses indicated the majority of the sample had been exposed to more adverse childhood experiences, multiple trauma exposures, higher rates of current PTSD, and more selected trauma effects (e.g., underreporting trauma somatology, dysfunctional sexual behavior, and suicidal behavior). Specifically, analysis completed on the ACE indicated American Indian sex offenders reported significantly more adverse childhood experiences compared to Caucasian sex offenders (see Table 7). These results were consistent with a previous study (Ertz, 2014), in which American Indian sex offenders also reported significantly higher ACE scores. Further analysis of the ACE scores indicated that contact sex offenders reported significantly more adverse childhood experiences than non-contact sex offenders independent of ethnicity (see Table 14). Previous research has found childhood sexual abuse, emotional neglect, and unmarried parents are significant predictors of sexual deviance in adulthood for sex offenders in general (Levenson & Grady, 2016). These results suggests American Indian and contact sex offenders are being raised within more dysfunctional households, which reinforces the need to consider how early trauma experiences can contribute to abusive and criminal behavior.

Results evaluating differences of trauma experiences and current prevalence rates of PTSD between American Indian and Caucasian sex offenders revealed no significant differences (see Table 8). However, both groups reported higher rates of trauma exposure and current PTSD rates compared to the general population, which is consistent with the literature (Ertz 2014). Similarly, additional analyses of trauma experiences and current PTSD rates indicated no significant differences between contact and non-contact sex offenders independent of ethnicity (see Table 15). American Indian sex offenders reported higher prevalence rates of: physical assault, such as being attacked, hit, slapped, kicked, or beaten up; transportation (car, boat, train, or plan) accident; and being assaulted with a weapon, such as being shot, stabbed, or threatened.

In comparison, Caucasian sex offenders reported higher prevalence rates of: transportation accident; physical assault; being in a natural disaster, such as a flood, hurricane, tornado, or earthquake; being in a fire or explosion; and having a serious accident at work, home, or in recreational activities. The prevalence rates of sexual assault or other unwanted/uncomfortable sexual experiences were also high (>48%) for both ethnicities (see Table 9).

Furthermore, overall prevalence rates of current PTSD for both ethnicities were highly elevated. With Caucasian sex offenders reporting higher current PTSD rates than American Indians. The overall sample having higher rates of PTSD, regardless of ethnicity, was consistent with a previous study; however, American Indian sex offenders reported higher lifetime PTSD rates compared to Caucasian sex offenders in previous studies (Ertz, 2014). The prevalence rates of lifetime PTSD among AI/ANs varies across studies; however, a comprehensive meta-analysis indicates AI/ANs experience a significantly greater lifetime prevalence of PTSD than Caucasians (Bassett, Buchwald, & Manson, 2014). Despite finding no significant differences between groups in regards to overall trauma experiences and current PTSD rates, the results support the need for further research for both American Indian and Caucasian sex offenders. The higher rates of trauma experiences and current PTSD rates among the sample suggests trauma may represent a risk for sexual offending in general. This suggests a need to consider utilizing formal trauma assessment measures as part of psycho-sexual evaluations and addressing trauma exposure as part of treatment for both American Indian and Caucasian sex offenders.

There is strong evidence in the literature suggesting American Indian sex offenders are more likely to endorse selected trauma effects in comparison to Caucasian sex offenders. Results of the individual and supplementary subtests on the TSI-2 indicated American Indian sex offenders reported the following: underreported their trauma symptomology; more dysfunctional,

impulsive, or problematic sexual behavior; and engaged in more suicidal behavior/attempts in the past 6 months than Caucasian sex offenders (see Table 10). Underreporting or denying trauma symptomology may not be a conscious process or related to an individual's sexual offense(s). In addition, recent literature suggests AI/ANs who engage more frequently in historical loss thinking may be more susceptible to suicide ideation, which can increase ruminative tendencies such as brooding (Tucker, Wingate, O'Keefe, Hollingsworth, & Cole, 2016). AI/ANs have historically been adversely effected by intergenerational trauma, suggesting this is an important variable to investigate as a clinician working with American Indian sex offenders (Heart, Chase, Elkins, & Altschul, 2011). These significant variables have several implications relating to different assessment needs, treatment planning, and treatment implementation between American Indian and Caucasian sex offenders. These factors could potentially impact progress of American Indian sex offenders in treatment and further research in this area is warranted.

Frequency distributions of all the individual and supplementary subtests on the TSI-2 indicate there were many clinically significant (>65T) subtests for both ethnicities. American Indian sex offenders most frequently elevated the Depression (D) and Suicidality-Behavior (SUI-B) subtests, while Caucasian sex offenders most frequently elevated Depression (D), Defensive Avoidance (DA), and Somatic Preoccupations-Pain (SOM-P) subtests (see Table 11). This suggests clinicians should monitor depressive symptoms for both American Indian and Caucasian sex offenders. In addition, suicidal behavior for American Indians and avoidance of distressing memories and somatic complaints for Caucasian sex offenders should be monitored throughout the course of treatment, as these variables may slow progression through treatment.

The remaining individual and supplementary subtests on the TSI-2 were not significant

between American Indian and Caucasian sex offenders. It is important to address the specific individual and supplementary subtests on the TSI-2 that were not significant, which relates to attachment style. The Insecure Attachment (IA) subtest and supplementary subtests Insecure Attachment-Relational Avoidance (IA-RA) and Insecure Attachment-Rejection Sensitivity (IA-RS) address this area. These subtests measure the following: parental maltreatment, unavailability, inadequate empathic attunement, and frightening behavior; avoidance of intimacy; and the preoccupation with fear of rejection and abandonment. The combination of increased adverse childhood experiences and trauma exposure can impact an individual's ability to develop and maintain close relationships with family members and the others in the community. This can potentially lead to difficulties in establishing healthy relationships with adults, which can negatively impact intimacy and learning appropriate sexual behaviors.

The lack of significant differences between ethnicities, as well as lower frequency of these subtests being clinically significant (>65T), suggests sex offenders in general have developed more secure attachments with their parents/caregivers in early childhood. This is consistent with the analyses done on the LSI-R:SV in which participants were asked to identify if they have a close relationship with their caregiver. The vast majority of participants, regardless of ethnicity, reported having a close relationship with both their female and male caregivers. However, this is inconsistent with recent literature that suggests sex offenders report more insecure attachment styles with their caregiver (McKillop et al., 2012). This suggests the convenience sample in the current study may lack external validity. There is still strong support within the literature that treatment planning should incorporate emphasis on the role of early trauma self-regulation and attachment (Reavis et al, 2013). However, no existing research directly examines attachment styles for American Indian sex offenders, thus further research is

needed in this area.

Additional analyses were completed regarding comparisons of contact and non-contact sex offenders regardless of ethnicity for selected trauma effects. Results indicated contact sex offenders significantly reported: over-reporting trauma symptomology; higher levels of depersonalization and derealization; experiencing general body complaints and muscle spasms at a greater level; and experiencing more dysfunctional, impulsive, or problematic sexual behavior than non-contact sex offenders (see Table 16). This is consistent with previous research in which contact sex offenders reported significantly more dissociative symptoms than non-contact offenders (Ertz, 2014). Similar to the comparison of ethnicity, this suggests these significant variables may be important in relation to treatment planning between contact and non-contact sex offenders. Increased dissociation can significantly impact an individual's ability to process information, use their working memory, and display adequate coping skills (Brewin et al., 2013). As a result, dissociative symptoms could negatively impact contact sex offenders from successfully completing treatment, and can lead to other high risk behaviors related to non-sexual offenses. However, additional research is needed in this area to evaluate the impact dissociation can have on treatment outcomes.

The final analyses comparing non-sexual re-offense risk factors between American Indian and Caucasian sex offenders indicate American Indian sex offenders were at Medium risk to criminally re-offend compared to Caucasian sex offenders who were at Minimum risk (see Table 12). The additional analysis evaluating non-sexual re-offense risk factors by offense type indicated contact sex offenders reported significantly higher non-sexual re-offense risk factors compared to non-contact sex offenders; however, both groups were at Minimum risk (see Table 17). The literature demonstrates the recidivism rates for sex offenders is high; however, the

majority of recidivism rates is related to non-sexual criminal offenses vs. sexual offenses (U.S. Courts, 2013). In addition, American Indian sex offenders have higher incarceration rates in federal government prisons compared to other ethnicities (Lewis, 2001). The significant difference in non-sexual re-offense risk factors suggests assessment and treatment differences exist between these groups based on ethnic, culture, and additional variables. Non-sexual recidivism is an important consideration in assessment and treatment planning. Assessment data is related to identifying risks to re-offend both sexually and non-sexually since treatment is an effort to initiate primary prevention and protect the public from further violent behaviors of any nature. This goal is not met when a sex offender does not complete treatment. Treatment termination before completion fails to protect the public and is costly in terms of fiscal expenditures and effort. Such outcomes increase sex offender's risks and needs, and negative impacts likely occur in the area of offender responsivity.

In addition, the role of trauma in the areas of risk, need, and responsivity may require consideration when developing and implementing treatment plans for both American Indian and Caucasian sex offenders. Andrews and Bonta (2010) develop the Risk-Need-Responsivity model, which is correctional treatment focusing on three primary principles. The risk principle states the level intervention needs to be matched to the assessed level of risk of each offender, such as low risk offenders require minimal services. The need principle focuses on treating criminogenic areas associated with reduction in criminal actions to reduce recidivism risk. Finally, responsivity refers to program delivery that is relevant for the individual offender based on their learning styles, motivations, and abilities. Felthous (2013) outlines that risk assessments should be focused on prediction of future aggressive behaviors rather than focusing the causes/ treatment of other mental health concerns (e.g., depression) (pp. 4). Focusing on aggressive

behaviors rather than mental health concerns has shown to improve accuracy in making risk management decisions since criminal risk is not limited to a mental health focus.

The areas of significance reported above provides increased information regarding best practices for individuals who are involved with supervision, psycho-sexual evaluations, and treatment for both American Indian and Caucasian sex offenders. This involves identifying and incorporating the impact of adverse childhood experiences related to the treatment needs of American Indian sex offenders. This consideration is supported by the significant differences identified from the ACEs between American Indian and Caucasian sex offenders in the current study, as well as the previous study (Ertz, 2014). Further research is necessary to identify how the differences in ACE scores impact American Indian sex offender's behavior in adulthood and treatment progress/completion. It is suggested that earlier adverse childhood experiences may increase criminal re-offense risks for both sexual and non-sexual offending. These areas would likely relate to both risk and needs as identified in the Risk-Need-Responsivity model noted above.

Differences in non-sexual re-offense risk factors indicate significant assessment and treatment differences exist between the groups in this study based on ethnic, culture, and additional variables. American Indian sex offenders would be expected to present different assessment needs, additional areas of treatment planning, and require further topics be addressed during treatment implementation compared to Caucasian sex offenders. In addition, treatment failure may be predetermined for American Indian sex offenders based on their non-sexual re-offense risk behavior. The current practices of utilizing treatment methodologies, validated for treating primarily Caucasian sex offenders, presents a concern due to significant differences identified for selected trauma effects. These areas may have detrimental effects on all three areas

of the Risk-Need-Responsivity variables. However, adding additional treatment areas due to increased, or new, risk factors is consistent with the need principle. Future research should focus on best assessment and treatment practices for American Indian sex offenders to reduce their Medium non-sexual re-offense risk.

An important consideration relates to incorporating Native world views and perspectives as well as cultural traditions and values. There is limited research addressing if these variables would help increase treatment compliance and completion for American Indian sex offenders. A majority of American Indian sex offenders identified prior childhood abuse in addition to being an offender. Future research could explore potential treatment methods that would address trauma victimization, sexual offending, high risk non-sexual criminality, and Native traditions for American Indian sex offenders. A combination of these variables could achieve the goal of developing an evidenced-based treatment specific for this population. Successful treatment completion for American Indian sex offenders could improve the quality of living for the individual, and public safety for their families and the community as a whole.

APPENDICES

Appendix A

THE UNIVERSITY OF NORTH DAKOTA
CONSENT FORM TO PARTICIPATE IN RESEARCH

PRINCIPLE INVESTIGATOR: Regina S. Ertz, M.A.

STUDY TITLE: A Comparison Study of American Indian and Caucasian Sex Offenders on Trauma and Selected Trauma Effects

DEPARTMENT: Psychology

Statement of Research and Study Procedures: You are invited to participate in a research study. This study is focused on understanding the number of trauma experiences and the different types of trauma experiences American Indian and Caucasian sex offenders have experienced during their life. I am a graduate student in the clinical psychology program at the University of North Dakota. This study will be part of my training to become a clinical psychologist. No agency or individual is sponsoring this study.

All American Indian and Caucasian sex offenders being treated at Chrysalis Association or by other programs in South Dakota who are 18 years of age and older are invited to participate. It is important you understand the following information before saying you will give your permission to be part of this research study.

1. Taking part in this study is entirely voluntary and you can quit being a part of the research at any time today.
2. Your only involvement in the study will be today and you will not lose any services you would normally receive if you decide not to take part.
3. By taking part in the study you may or may not benefit personally, but the knowledge will be gained from your participation will benefit other sex offenders in treatment.
4. You will be asked to provide information about your history of experiencing trauma, how these experiences have affected you, and to complete various short tests about your feelings and thoughts.
5. You will not be asked to sign any documents in order to protect your right to confidentiality and in order to prevent you from releasing any private health information. You will not be identified personally and no information will be shared in which someone can use to identify you.
6. Saying you do not wish to participate will not limit your treatment or any other activities.
7. The benefits, risks, any discomfort identify, and other information about this research study are presented below. Please feel free to ask me or anyone else you wish to talk to any questions you have.
8. I will publish the results of this research but no information will be included in this publication which can personally identify you.

Trauma can be defined in many ways. I am studying emotional reactions to trauma which usually involves events that produce painful emotional reactions and attempts to cope that do not help the person or may even cause more trouble for them. My purpose in conducting this study is to identify if American Indian and Caucasian sex offenders present the same type treatment needs. If you agree to participate in the study you will be asked to give me some information about your history and to complete four different questionnaires. There will be no testing of your DNA, other types of physical test, or examinations completed.

Possible Risks: The information you will be asked to share may cause you to feel bad but this is the same information you will be asked to share during an evaluation of your sexual history and during sex offender treatment. You will not be asked to disclose information which may cause you to get into trouble and you have the right to refuse to answer any verbal or written questions presented to you as part of this research study. No information will be asked about your sexual attitudes, preferences, or practices; information relating to the use of alcohol, drugs, or other addictive products; information pertaining to illegal conduct; information, if released, might damage your financial standing, employability, or reputation within the community or might lead to social stigmatization or discrimination; information pertaining to your psychological well-being or mental health; and genetic information or tissue samples. You should avoid giving information about these areas on you own while completing the information requested during your participation in this study.

Benefits: There are potential benefits to you in participating in this research. You may gain a better understanding of how past events have impacted you and you can sign a release form so this information is provided to people who are trying to help you such as your sex offender counselor, or a probation or parole officer. Another benefit is the information you provide to me may reflect treatment needs which can be discussed with your sex offender counselor or if you request me to share this information.

Confidentiality: All identifying information regarding your identity will not be gathered. Chrysalis Association is covered under HIPAA and no protected health information (PHI) will be released to the principal investigator. Information gathered form the questionnaires will be coded and at no time will your name, or other identifying information, be used in the data collection, entry, or analysis procedures. Analysis of data will be conducted using coded data numbers. 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 3 years, after which the information will be destroyed (shredding paper). The principal investigator and the supervisor of this study will be the only people to have access to the data. In addition, people that audit IRB procedures will have access to the data.

Research related injuries: There are no funds available to pay for mental-health care if you have a bad emotional reaction resulting directly from this research study. However, you are currently involved with receiving psychological and/or mental-health services so it is likely any bad emotional reaction you have from this study can be addressed through the services.

Payment: The services you receive through this research study will not be paid by anyone. No payment will be offered to you as a subject because this might influence people to become subjects without considering potential risk they may encounter.

Stopping your involvement: You may withdraw from participating in this study at any time. There will be no loss of benefits or other activities if you make this choice. Your cooperation in completing the information is appreciated and allows me to gain important information about sex offender treatment needs for American Indian and Caucasian sex offenders.

Follow-up: The only follow-up activities taking place will involve me contacting individuals which you have requested to contact as noted in the benefits section above. If you have other questions after today you can also contact your sex offender counselor as he or she will have information about how to contact me.

Consent document: This consent document is yours to keep after you have read and reviewed it. It is suggested you keep this consent form for your reference and personal records.

Problems for questions: Should any questions or problems arise regarding this study or any research-related reactions take place you can contact me through Chrysalis Association in Rapid City, South Dakota, by calling (605) 341-8647. You can also contact me as the principle investigator, at (605)393-7646 or my advisor at the University of North Dakota, Dr. J. Douglas McDonald, at (701)777-4495.

Research participants' rights: If you have questions regarding your rights as a research subject, you may contact The University of North Dakota Institutional Review Board at **(701) 777-4279**.

- You may also call this number about any problems, complaints, or concerns you have about this research study.
- You may also call this umber if you cannot reach research staff, or you wish to talk with someone who is independent of the research team.
- General information about being a research subject can be found by clicking "Information for Research Participants" on the web site: http://und.edu/research/resources/human-subjects/research-participants.cfm

Statement of consent: I have read this form and I agree to take part in this research project titled A Comparison Study of American Indian and Caucasian Sex Offenders on Trauma and Selected Trauma Effects.

Appendix B
Demographic Form

Subject Number _____ Age _____

Living Arrangements: ___ On Reservation
___ Off Reservation

Where grew up: ___ On Reservation
___ Off Reservation

Legal status: ___ On parole
___ On probation

Total number of convictions _____
Number of sexual convictions _____

Months served in tribal jail _____
Months served in county jail _____
Months served in prison _____

Number of contact convictions _____
Number of non-contact convictions _____
Convictions for Child Pornography _____
Computer _____ Cell phone _____ Other _____

Treatment programs, past and current:

	Type of treatment	Started	Ended	Outcome
1.	_____	__/___	__/___	_____
2.	_____	__/___	__/___	_____
3.	_____	__/___	__/___	_____
4.	_____	__/___	__/___	_____
5.	_____	__/___	__/___	_____

Highest educational level in years: _____

Abuse survivor ___ No ___ Yes

Type of abuse

	Age(s)
1___ Sexual	_____
2___ Physical	_____
3___ Neglect	_____
4___ Emotional	_____

Employment Status:

	Monthly income
1___ Working full-time	_____
2___ Working part-time	_____
3___ On disability	_____
4___ Receiving assistance	_____
5___ Receiving unemployment	_____
6___ Retired	_____
7___ Unemployed	_____
Total monthly income	_____

Notes:
_____
_____
_____

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