

THE RELATIONSHIP OF EDUCATIONAL LEVEL,  
RESERVATION STATUS AND BLOOD  
QUANTUM WITH ANGER AND  
POST-COLONIAL STRESS  
AMONG AMERICAN  
INDIANS

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## CHAPTER I

### INTRODUCTION

In this study, I attempted to determine in archival data from a sample of American Indian people (Winterowd, Miville, Willmon, Casillas, Shunkamola, Dudley, Schultz, Sheader-Wood, and Warner, 2001) the relationship of reservation status, blood quantum (perceived as relevant for determining *Indianness*), and educational level to post-colonial stress and the experience and expression of anger. Although the data set from the 2001 study was utilized, the previous study differed in that acculturation level and hope were utilized as the independent variables.

#### Intergenerational Oppression of American Indian People

American Indian people have experienced a traumatic end to their traditional cultures. Given the historically horrendous experiences of oppression and loss of their cultures at the hands of European Americans, it is without surprise that many American Indians are distrustful of White European Americans. Traditional means of living and surviving were decimated and American Indian people were forced to learn the ways of Europeans, their traditional religions were deemed illegal; children were taken from their parents and removed to institutions for learning many miles from their homes. Whitbeck, Adams, Hoyt, and Chen (2004) argued that these historical losses are not confined to any one single catastrophic period, but are ongoing and ever present in the lives of American Indian people as daily reminders of the trauma and loss. Brave Heart and De Bruyn

(1998) argued that the first generations of American Indians who suffered these traumatic experiences actually suffered from Post-Traumatic Stress Disorder (PTSD) and their descendants continue to suffer from historical trauma and historical unresolved grief. Duran and Duran (1995) referred to this as intergenerational post-traumatic stress. Winterowd et al. (2001) referred to this as intergenerational post-colonial stress. Whitbeck et al. (2004) referred to these events as historical loss.

### Theoretical Approach

My study was anchored in Duran's theory of the soul wound and intergenerational post-traumatic stress, which is based on the results of his 1990 research conducted with a large and diverse population of American Indian people in the San Francisco Bay area. He found that the basic issue for a large percentage (70%) of this group was that something occurred at a very deep psychological level and had completely overwhelmed and destroyed this American Indian community's world. The community's "unconscious" perception of the unfriendly and hostile world was that harmony had been destroyed by the colonizing European society. Duran and Duran (1995) concluded that the subsequent problems that have manifested for this population since colonization are merely symptoms of a deeper wound----the soul wound.

Duran and Duran stated that the core of American Indian awareness was the place where the soul wound occurred. The manifestations of such a wound are then embodied by the tremendous suffering that the people have undergone since the collective soul wound was inflicted half a millennium ago. Duran's theory is further clarified via his personal story of hurt, anger, and phenomenal experiences regarding the Manhattan Project

and his family's ancestral land in his book titled *Buddha in Redface* (Duran, 2000; E. Duran, personal communication, May 3, 2004).

### Post-Colonial Stress

Historically, observations of emotions and emotional expressions of American Indians have been identified as negative. Since the first contact with Europeans, stereotypes of American Indians, as being either hostile or stoic, continue to reinforce the misunderstandings of this culturally diverse population (Josephy, 1968; Leighton & Kluchohn, 1947; Utter, 1993). It is imperative that researchers provide the cultural perspective of emotional behavior found in American Indian tribal cultures to help distinguish between culturally sanctioned behavior and the behavioral symptoms of psychological disorders (Berryhill, 1998; Choney, Berryhill-Paapke, & Robbins, 1995).

Post-colonial stress refers to the psychological distress manifested by images of collective traumas experienced by American Indian people. Research is needed to help determine how stress may manifest itself in American Indians and when it may become problematic.

To accurately understand psychological functioning in American Indians, it is necessary to employ valid and reliable assessment methodologies and assessment devices (Sue & Sue, 1999; Tanaka-Matsumi, Seiden, & Lam, 1996). One way to address this issue is to evaluate the relative utility of an assessment methodology specifically developed for use with given cultural groups. Another approach is to evaluate the relative utility of an 'established' measure with another cultural group (Zvolensky, McNeil, Porter, & Stewart, 2001). The Winterowd et al. (2001) study, from which I obtained the data for this dissertation, utilized the latter approach by using an existing assessment

instrument to measure anger, STAXI-2 (Spielberger, Sydeman, Owen, & Marsh, 1999), and the Post-Colonial Stress Scale (PCSS developed by Winterowd & Miville, 2000), an assessment instrument specifically developed to measure post colonial stress.

### Purpose of the Study

My purpose in this study was to examine archival data from the Winterowd et al. (2001) protocol to elucidate the relationship of reservation status, blood quantum (perceived as relevant for determining Indianness among various American Indian peoples), and educational level with post-colonial stress and the experience (state anger/trait anger) and expression (anger expression-out, anger expression-in, anger control-out, anger control-in) anger. The salience of these variables coupled with the results of the Winterowd et al. (2001) study were the primary reasons for pursuing this research.

Duran and Duran (1995) argued that many American Indians may appear stoic or impassive due to deep-seated anger or grief over historic injustices and the use of alcohol has been documented as one way that many have chosen to conceal their feelings of anger. Burris (2001) studied anger among members of one American Indian tribe in Oklahoma and found that the manifestation of anger for this particular tribe diverged from the traditional display of emotional restraint when angry to more frequent and hostile expressions of anger as younger generations have adopted the dominant society's cultural ways than older generations.

Winterowd et al. (2001) found that anger was associated with post-colonial stress, acculturation, and hope. Winterowd and her team, of which I was a member, also found that American Indian people have similar as well as unique experiences of anger (e.g.,

state and trait) and anger expression compared to the predominantly White normative sample on the STAXI-2 (Spielberger et al., 1999). Acculturation was found to be related to anger, with more traditional American Indian people experiencing less anger (state, anger-out) and more anger control than non-traditional American Indian people.

### Significance of the Study

Considering the historical trauma of American Indians dating back to the 1400's; i.e., battles, wars, European diseases, colonization/annihilation policy, loss of historical homelands, loss of cultural references, boarding schools, forced relocation, etc. and the fact that descendants of the first generation members who experienced these traumas continue to be negatively affected by the thoughts of these atrocities, it is vital that research conducted with this population present new knowledge that is important and beneficial to American Indian people. I believed that the characteristic context of the variables studied made this a unique undertaking. Although I extended the Winterowd et al. (2001) study in utilizing the data set, the independent variables that I studied were chosen based on past research and my relevant personal observations and experiences.

My choice for studying these particular variables---reservation status, blood quantum, level of education--- was, also, based on my belief that these factors might influence American Indian people's anger and post-colonial stress. As anger is viewed as a protective emotion given the intergenerational oppression of American Indian people, I found it surprising that very little research has been conducted on the experience and expression of anger among the American Indian population despite the fact that anger is also viewed as a normal emotion signaling that one is in pain. Previous researchers have found that the more one follows one's particular tribal traditional mores, the more apt one

is to restrain one's emotions inclusive of anger (Briggs, 1970; Burris, 2001; Spindler & Spindler, 1971; Young, 1991).

While I was on the Winterowd et al. (2001) research team, an interesting finding became evident. On the Post-Colonial Stress Scale, a high percentage (67%) of the study participants responded "not at all" to the question, "I grieve the loss of my culture." Because I am an American Indian who was raised in a quasi-traditional manner, I can relate this to my personal experience and my upbringing. Generally, Indians whose blood quantum is three-fourths to full and who have been able to keep their native language, traditions, and beliefs intact are not going to feel that anything of importance has been taken from them. Regardless of the hardships they may have endured through forced assimilation they have not lost their culture; therefore, why respond affirmatively to this question.

Thus, I became interested in blood quantum in relation to post-colonial stress for this dissertation. Generally, traditional American Indians consider full-blood status as being honorable as it shows that the tribal member comes from a family that, most likely, respects and honors the tribal ways (H. Jones [Creek], personal communication, October 1988). Traditionally, one of the common norms is to marry and live among your own tribe. One is taught to be careful of not marrying a member of one's own clan and, generally, not mixing the blood. One is also taught that if the blood is mixed it would be better to mix with a different tribe rather than a different race (V. Yazzie [Navajo], personal communication, August 1972).

I also chose blood quantum as a variable of study based on common occurrences experienced by various mixed blood relatives, friends, and acquaintances of mine. For

example, many of the mixed bloods, regardless how closely connected to the traditional ways, are teased and called names such as “half-breed”, “breed”, “white boy” or “white girl” and usually in a derogatory manner. This seems to create cognitive dissonance for them; i.e., they love their family dearly, but are hurt deeply by the insinuation that maybe they are a lowly human because they are not full-blood (a matter of which they had no choice). This cognitive dissonance may result in anger that may not be expressed. I found no studies were found that measured the concept, blood quantum.

Additionally, Burris (2001) indicated that the issue of blood quantum emerged during her interviews with the elders of her tribe. She reported that the relationship between the degree of tribal blood and allegiance to traditional ways is a variable that may address the acculturation issue (Burris, 2001). Therefore, I believed that blood quantum (i.e., an indirect measure of Indianness) would be related to the experience and expression of anger as well as to post-colonial distress among American Indian people. Therefore, I hypothesized that the PCSS, as a measure of post-colonial stress, related to anger would be associated with blood quantum. I found nothing in the literature to indicate that blood quantum had been studied as to prevalence or as a connection to historical trauma and loss.

I chose reservation status as a variable of study based on past research (Barron, Oge, & Markovick, 1999; Chester, Mahalish, & Davis, 1999; Evaneshko, 1999; Henderson, Stephen, Kunitz, & Gabriel, 1998; Herman-Stahl, Spencer, & Duncn, 2003; King, 1999; La Fromboise, Trimble, & Mohatt, 1990; Pinchette, Berven, Menz, & La Fromboise, 1997; Snipp, 1996; Trimble, 1981; Trimble, Fleming, Beauvais, & Jumper, 1996) and my own experiences. My experience has been that many American Indian



people prefer living near their ancestral homes regardless of their attained level of education and despite high unemployment rates and dire economic conditions. My experience has further supported my belief that American Indian people who have managed to keep their traditional ways intact choose to live on a reservation or tribal lands in order to maintain the social/cultural support that they seem not able to obtain in living among the dominant American society. I also chose this variable based on the Brave Heart and De Bruyn (1998) study and my belief that living on a reservation or on Indian tribal lands may protect Indian people from anger and post-colonial stress because of their immersion in their culture and less exposure to non-Indians. Because a pattern was perceived to have developed in this regard, I postulated that there would be a relationship between reservation status, anger, and post-colonial stress among American Indian people.

I chose the variable of education level because a pattern emerged from the data indicating that a large number of participants of the Winterowd, et al. (2001) study were highly educated. To date, no investigators have published data exploring how educational level might impact the experience and expression of anger and post-colonial stress among American Indians. I believed that the more educated Indian people are (both by European American standards and traditional Indian standards), the more informed they are of the prevalence and severity of indignities experienced by American Indians via European colonialization than those who are similarly less educated. I also believed that the more educated Indian people are, the more aware they are of the stresses of interfacing with the non-Indian culture than those who are less educated. In addition, I

believed that educational level would have a significant relationship to anger and post-colonial stress.

Additionally, I hoped that any significant findings would provide empirical support to the argument that American Indian people do experience stress and anger regarding the historical oppression they've experienced since the 1400's. Moreover, I anticipated that the results of this investigation would provide clinicians with useful information for the facilitation of these issues in a culturally responsive manner so that American Indian people may begin to heal from the hurt of historical oppression and its negative effects.

### Definition of Terms

Anger. The concept of anger usually refers to an emotional state that consists of feelings that vary in intensity, from mild irritation to intense rage (Spielberger, Jacobs, Russell, & Crane, 1983). Anger is also considered a normal emotion signaling that one is in pain (McKay & Rogers, 2000).

STAXI-2. State-Trait Anxiety Inventory-2 (Spielberger, et al., 1999) consists of six major scales and five subscales for assessing the experience, expression, and control of anger. Only two major scales (state and trait) were utilized for this study in addition to the five subscales. State Anger: Measures the intensity of angry feelings and the extent to which a person feels like expressing anger at a particular time. Trait Anger: Measures how often angry feelings are experienced over time.

STAXI-2 subscales. Anger Expression-Out (AXO): Measures how often angry feelings are expressed in verbally or physically aggressive behavior (aggress). Anger Expression-In (AXI): Measures how often angry feelings are experienced but not expressed (suppress). Anger Control-Out (ACO): Measures how often a person controls

the outward expression of angry feelings. Anger Control-In (ACI): Measures how often a person attempts to control angry feelings by calming down or cooling off. Anger Expression Index (AXIND): Provides a general index of anger expression based on responses to the AXO, AXI, ACO, and ACI items.

Post-colonial stress. Post-colonial stress refers to the psychological distress manifested by images of collective traumas experienced by American Indian people.

Post-Colonial Stress Scale (PCSS; Winterowd & Miville, 2000). A scale used to measure the level of acculturation stress experienced based upon two factors: Distress and Distrust of Whites. The distress items measure the distress associated with the way American Indian people have been historically treated as well as how Indian people have been treated today. The distrust items measure the feelings of distrust American Indian people have toward White people given the intergenerational oppression experienced by Indian people.

American Indian. There is no single definition of the term American Indian. The term American Indian is used throughout this paper because this is the term commonly used to reference Indian people of the U.S. Other terms sometimes used to reference this population of people is First Americans, First Nations, and Native Peoples.

Traditional Indian. Researchers have found that traditional American Indian refers to an individual who speaks little or no English, knows and understands tribal customs (cognitive) with little or no knowledge and understanding of White customs. Also, he or she actively participates in traditional social activities, knows and acts appropriately in these activities (e.g., respect for elders, generosity/sharing, cooperation, collective or group orientation, extended family involvement, spirituality, etc.), embraces traditional

religious rituals including those Christian practices modified to include traditional aspects of worship. The individual chooses to live in environments removed from White cultural influences (Berryhill, 1998; Choney et al., 1995).

*Educational level.* For the purposes of this study, educational level was assessed on the demographic sheet as one of the following: elementary school (1-6 yrs.), junior high and/or high school (6-12 yrs.), associate/technical school or college (12-16 yrs.) or graduate school (17 + yrs.). Participants were asked to indicate how far they had gone in their schooling. Because of the overall educational level in the data, educational level was classified into two categories for the analyses: high school and college.

*Blood quantum.* With the beginning of the tribal enrollment process in the late 1800's, the designation of degree of blood was developed. The federal government used the guide from English Horse Breeding of Quarter, Half, Three Quarters, etc. in an arbitrary standard that was not measurable. When a census was taken by an Indian agent or census taker, a determination of Indian Blood was made arbitrarily as Indian, half-Indian, or quarter-Indian based on the immediate family lines. In some tribes, all the Indian people were declared full-blooded. Many tribes require individuals to provide proof they descended from someone listed on these historic census rolls to be eligible for tribal enrollment (Pevar, 2002; Willis & Big Foot, 2003).

The participants of the current study self-reported their degree of Indian blood as one of the following: less than 1/16, 1/16, 1/8, 1/4, 1/2, 3/4, or 4/4. These fractions represent the degree of Indian blood the participants self-proclaimed they inherited from their parents. The participants were not required to present Certificates of Indian Blood, tribal citizenship cards, or official letters from tribal leaders as proof of Indian blood. For

the analyses in this study, blood quantum was divided into two categories:  $\frac{3}{4}$  to full-blood versus less than  $\frac{3}{4}$  blood quantum.

Reservation status. The terms Indian reservation and Indian country may be used interchangeably, but are not the same. Indian country is a larger concept because it includes all Indian reservations and independent American Indian communities, trust, and restricted allotments located outside a reservation (Pevar, 2002 p. 24). Participants of the current study indicated if they lived in urban, rural, or on a reservation (tribal land). Whether or not participants indicated that they lived on a reservation or not determined their reservation status.

### Research Hypotheses

(1) I hypothesized that reservation status, educational level, and blood quantum would have an effect on anger and anger expression scores.

1(a) I hypothesized that American Indians who lived on tribal lands would have less state and trait anger compared to American Indians who had not lived on tribal lands.

1 (ai) I hypothesized that American Indians with higher blood quantum levels would experience and express less state and trait anger than Indian people with lower blood quantum levels.

1 (aii) I hypothesized that American Indians with more formal education would report more state and trait anger than American Indians with less education.

1(b) I hypothesized that American Indian people who had higher blood quantum levels would be less likely to express their anger out and more likely to suppress their anger in than Indian people with lower blood quantum levels.

1 (bi) I hypothesized that American Indian people who lived on tribal lands would be less likely to express their anger outward and more likely to suppress their anger in than Indian people who had not lived on tribal lands.

1 (bii) I hypothesized that American Indians with less education would be more likely to express their anger out and less likely to suppress their anger in than American Indians with more education.

1(c) I hypothesized that American Indian people who lived on tribal lands who had higher blood quantum levels would control their anger outwardly and inwardly more than Indian people with lower blood quantum levels.

1 (ci) I hypothesized that American Indians who lived on tribal lands were more likely to control their anger outwardly and inwardly than American Indians who had not lived on tribal lands.

1 (cii) I hypothesized that American Indians with higher levels of education were more likely to control their anger outwardly and inwardly than American Indians with lower levels of education.

1(d) I hypothesized that American Indian people who never lived on tribal lands, had lower levels of education, and lower blood quantum levels would have higher scores on overall anger expression compared to American Indian people who lived on tribal lands, had higher levels of education, and higher blood quantum levels.

(2) I hypothesized that American Indian people who did not live on tribal lands, had lower levels of education, and lower levels of blood quantum would report more post-colonial stress compared to American Indian people who did not live on reservations, had higher levels of education, and higher blood quantum levels.

### Limitations Prior to the Study

The theory upon which the study was based had not been empirically tested at the onset of this project; therefore, limiting the research literature on the topic. The post-colonial stress measurement had limited empirical validation. The qualitative aspect that I believe would be important to a study of this nature was not possible due to the fact that this study was an archival study. I thus would be unable to demonstrate any causal relationships with this study.

### Assumptions

I assumed that (1) the STAXI-2 (Spielberger et al., 1999) is a valid measure of anger among American Indian people. I assumed that (2) the Post-Colonial Stress Scale is a valid measure of assessing level of stress related to the colonization of North America and the intergenerational oppression American Indian people have faced. I assumed that (3) all participants of the Winterowd et al. (2001) study were certified members of a federally recognized tribe or nation. I also assumed that (4) participants of the Winterowd et al. (2001) study responded to the assessment instruments openly, honestly, and with equal motivation.

## CHAPTER II

### REVIEW OF LITERATURE

In this chapter I review the literature relevant to anger and stress of American Indian people. First, an overview of previous work conceptualizing historical psychological distress, historical trauma and loss among American Indian is presented. Second, I review related and informative pieces of research are reviewed for the purpose of defining and/or elaborating upon similar concepts such as Post-Traumatic Stress Disorder (PTSD), Intergenerational Trauma. Third, after considering psychological approaches to the study of emotions and culture, I look at American Indian specific research on anger and stress. Finally, I review research relevant to Spielberger's STAXI-2.

#### Intergenerational Oppression of American Indian People: Distress, Trauma and the Soul Wound

Given the historical oppression that American Indians have experienced since there has been contact between native and colonial cultures, an environmental shock has occurred. Their life world that had been known for centuries became threatened, and, in most cases, that life world was systematically destroyed (Duran & Duran, 1995). This systematic destruction included racial genocide, forced removal from their ancestral homelands, boarding schools, the illegal taking of their transplanted homelands, relocation, forced adoptions of Indian children into White families, and so forth. No other



group in the United States has endured such staggering institutionally forced assimilation (Choney et al., 1995; Debo, 1941/1989; Duran & Duran, 1995).

*Intergenerational distress and trauma.* Brave Heart and De Bruyn (1998) argued that the first generations of American Indians who suffered these traumatic experiences actually suffered from Post-Traumatic Stress Disorder (PTSD). In addition, they argue that similar to children of Jewish Holocaust survivors subsequent generations of American Indians suffer from what they refer to as historical unresolved grief. They found that subsequent generations of American Indians experience a pervasive sense of pain from what happened to their ancestors and losses that they have not had an opportunity to mourn. Additionally, Brave Heart and DeBruyn contended that recent past and current generations of American Indians have faced and continue to confront repeated traumatic losses. They reasoned that these layers of traumas add to the anguish and psychological numbing related to historical trauma and unresolved grief.

Brave Heart and De Bruyn (1998) established in their study with American Indian mental health group facilitators that American Indian people can be successfully assisted in processing their deeply imbedded and unresolved historical grief, a grief which has accumulated over several generations. They cite several examples of expressed anger and grief that is passed on from one generation to the next. They also provide evidence of self-inflicted guilt among many American Indian people for the loss of traditional ways and the difficulty of separating themselves from past historical traumas. Brave Heart and DeBruyn (1998) included the following from a transcript of one of these process groups, which provide a portrayal of the emotion generated.

We are just continuing to be victimized. It's fine for us to process all of this here. But, when we leave here we have to deal with this again. It's just so overwhelming. I feel like I've been carrying a weight around that I've inherited. If I knew how to let it go, I would. That's what I want to do here, because it gets in the way. I have this theory that grief is passed on genetically because it's there and I never knew where it came from. I think we're all inhibited by the sense of responsibility and the sense of guilt....we blame ourselves for our loss of tradition. I feel a sense of responsibility to undo the pain of the past. I can't separate myself from the past, the history and the trauma. It [history] has been paralyzing to us as a group [American Indian people] (p. 67).

Whitbeck et al. (2004) maintained that getting to the roots of understanding how these historical traumas are transmitted across generations is of utmost importance to obtain a better understanding of the concept of historical trauma. They argued that the analogy of the American Indian historical trauma to the Jewish Holocaust is superficially accurate, but there are major differences. They determined that the American Indian losses are not confined to any one catastrophic event or period and they are ongoing and present.

Whitbeck et al. (2004) further claimed that "ethnic cleansing" did not end with the horrendous events against American Indians in the 1800's or 1900's, but continues into this millennium. They reason that American Indian people are faced with daily reminders of their losses of land, language, traditional religious practices, traditional family systems

and traditional healing practices. In addition, they contend that American Indian people are faced with persistent discrimination.

*Understanding and measuring historical loss.* In their groundbreaking study of historical trauma, Whitbeck et al. (2004) developed two potentially viable measures, The Historical Loss Scale and The Historical Loss Associated Symptoms Scale. They used these scales in a study with a group of American Indian parents located on a Midwestern reservation. They administered The Historical Loss Scale to a sample of 143 American Indian parents. They found that 18.2% of this sample had thoughts about loss of land several times a day on a daily basis and 10.1% had similar thoughts on a weekly basis; 36.3% had thoughts several times a day on a daily basis about loss of traditional language; 33.7% thought daily about the loss of culture; 48.1% thought about loss of culture on a weekly basis; 35.2% had daily thoughts about children's loss of respect for traditional ways; and 52.8% had weekly thoughts about children's loss of respect for traditional ways. These percentages indicated that the current generation of American Indian parents is very much in touch with the historical losses of their people. In summary, they found that perceptions of historical loss are prominent in the minds of many of these adults. They, also, found that these perceptions of historical losses lead to emotional responses associated with anger/avoidance and anxiety/depression. They are conducting further research with these measures.

Another way to show how the stories of these tragic events of the past are passed down from one generation to the next is through the tradition of storytelling. This story was passed down from a Creek elder who experienced the actual event. She passed the story on to her granddaughter and the granddaughter passed the story on to the author of

the book in which the story was written. The story is about the forced removal of the Creek people from their ancestral homelands, Alabama and Georgia:

Many different rumors of a removal to the far west was often heard...there was the time we noticed that several overloaded wagons were passing by our home, yet, we did not grasp the meaning... wagons soon stopped at our homes and we were commanded to gather a few of our belongings and we were loaded onto the wagons...we were taken to a crudely built stockade and joined others of our tribe... there was this awful silence that showed the heartaches and sorrow at being taken from our homes and separation from our loved ones...times became horrible... many of our people fell by the wayside...too weak to keep up...crude beds were quickly prepared for the sick and weary...only a bowl of water was left within their reach as they were left to suffer and die alone...little children cried piteously day after day from weariness, hunger, and illness...they were once happy children...now left without father and mother...death stalked at all hours...there was no time for proper burying or ceremonies...the dead were placed between logs and covered with shrubs, some were shoved under thickets, some were not even buried, but left by the wayside” (Debo, 1941/1989, pp. 104-105).

I am a member of the Creek tribe and can attest to the stories, mostly oral, that are passed from generation to generation. For example, the historical background for a particular burial tradition practiced by the tribe was told to me in story-like fashion several years ago by an elder of the tribe (W. Haney, personal communication, July,

1982). He explained that Creek people pay tribute to our many ancestors who were forcibly removed from their original homelands. Our deceased loved one's coffin is partially covered with a handmade quilt during the funeral service. The quilt is, then, used to cover the entire coffin before being placed into the ground. This tradition serves as a remembrance to our ancestors who died along the journey. According to the story, if there was no time for proper burial, the deceased would first be covered with brush or rocks and then, be covered with a quilt if one was available.

Many of our traditional hymns came about at the time of these most tragic events in Creek tribal history and many are still sung today. Debo (1941/1989) provided a brief interpretation of one song: "I have no more land, I am driven away from home, driven up the red waters; let us all go, let us all die together, and somewhere upon the banks of the river, we will all be together" (pp. 105-106).

*The soul wound.* Duran and Duran (1995) have argued that the psychological images of collective traumas experienced by American Indian people have been passed from generation to generation. They referred to this as intergenerational transmission of post-traumatic stress disorder. I used Duran's theory of the soul wound and intergenerational post-traumatic stress, which is based on his past research with a large and diverse American Indian population, as the conceptual basis for this dissertation. Duran found that something had occurred at a very deep psychological level and had completely overwhelmed and destroyed the world for this community of people. The community's unconscious perception of the unfriendly and hostile world was that harmony had been destroyed by the colonizing European society and subsequent

problems that have manifested for them since colonization are merely symptoms of a deeper wound---the soul wound (Duran & Duran, 1995).

Duran and Duran (1995) argued that the core of American Indian awareness was the place where the soul wound occurred. The manifestations of such a wound are, then, embodied by the tremendous suffering that the people have undergone since the collective soul wound was inflicted half a millennium ago. Duran (2000) further postulates his theory via his personal story of hurt, anger, and phenomenal experiences regarding the Manhattan Project and his family's ancestral land in his book titled *Buddha in Redface*.

Duran and Duran (1995, p.30) also contended that the psychological images of collective traumas experienced by American Indian people have been passed from generation to generation. This has been referred to as intergenerational transmission of post-traumatic stress. They compared the dynamics of the experienced traumas of the American Indian people to the dynamics of the Jewish people's experience of the Holocaust and emphasized that American Indians' traumatic experience, at the hands of a government that preaches freedom and democracy, was more intense.

Duran and Duran (1995) further maintained that much of the trauma is ongoing via acculturative stress or the extreme pressure for American Indian people to assimilate into the non-Indian community:

If these traumas are not resolved in the lifetime of the person suffering such upheaval, it is unthinkable that the person will not fall into some type of dysfunctional behavior that will then become the learning environment for their children. Once these children grow up with fear, rage, anger, and

grief as the norm, it is little wonder that family problems of all types begin to emerge with the family system (p. 31).

### Differentiating Post-Colonial Stress, Intergenerational Trauma, and PTSD

Historically, emotions and emotional expressions of American Indians have been stereotyped as negative. This idea that American Indians were/are either hostile or stoic reinforces a misconception of this culturally diverse population (Josephy, 1968; Leighton & Kluchohn, 1947; Utter, 1993). It is crucial, according to a number of authors, that this change; researchers need to increase their attention to and application of the cultural perspective of emotional behavior found in American Indian tribal cultures to distinguish culturally sanctioned behavior and the behavioral symptoms of psychological disorders (Choney et al., 1995).

Post-colonial stress. A number of researchers who are concerned with psychological issues of American Indian people (Brave Heart & De Bruyn, 1998; Duran & Duran, 1995; Whitbeck et al., 2004; Winterowd et al., 2001) have become interested in the construct of post-colonial stress. Post-colonial stress is the psychological distress manifested by images of collective traumas experienced by American Indian people via European colonization. Opportunities abound to study the prevalence of intergenerational post-traumatic stress (i.e., post-colonial stress), how it manifests in American Indian people, and when it may become problematic.

Psycho-spiritual domain of American Indian people. In addition to presenting evidence of the existence of historical unresolved grief among American Indian people, Brave Heart and De Bruyn (1998) also suggested healing strategies via spiritual empowerment through the use of modern and traditional American Indian approaches.

This is consistent with Duran and Duran's (1995) contention that the differences between American Indian and Anglo worldviews and how these need to begin to be integrated. In my literature review, I found evidence of the emergence of the need for this integration in the acknowledgment of the spiritual and psychological dichotomy of the American Indian worldview.

Duran and Duran (1995) noted the differences between the Western or non-Native and the American Indian psychological worldview, noting that the separation of religion or spirituality and the psychological reality does not exist for American Indians as it does for Westerners. In his book *Buddha in Redface*, Duran (2000) takes the reader on a spiritual journey that offers insight into some ancient American Indian processes, which are easily grasped for one versed in the traditional beliefs of one's tribe; i.e., the mind, body, and spirit are one; the individual is a part of all creation; and/or we are all related or interconnected through Nature.

These beliefs are prevalent among many American Indian tribes. The tribal group of which I am affiliated with bases all of being human on a spiritual aspect. Our system of clans has been in existence for many generations and the clans are named for animals and forces of nature in accordance with our belief that we are related to the animals, the wind, the earth, the trees, the rocks, all humans, and so forth. A deeply imbedded belief is held that everything in the world is a part of a whole and everything is connected in some way to everything else.

Traditional teachings tell us of the seen and the unseen; the physical and spiritual world are both real. We are also taught that if a spiritual law is broken, it can negatively affect the physical world. A balanced life is what we strive for and we do this by



honoring the laws of both dimensions of reality. Each summer a spiritual renewal is celebrated at each of the various tribal ceremonial grounds. Various rituals are performed inclusive of the building of the sacred fire. We are taught that just as the sacred fire of our ceremonial grounds is built in a ritualistic manner to pay homage to the sacredness of the four directions, so, too, must we build and direct our lives by paying homage to the four dimensions of true learning which are mental, spiritual, emotional, and physical.

Brave Heart and De Bruyn (1998), in summarizing their concepts of historical unresolved grief and historical trauma among American Indians wrote about a relocation project administered by the Bureau of Indian Affairs (BIA) in the middle of the twentieth century. This program was responsible for moving more than 100,000 American Indians to major urban areas throughout the U.S. Many American Indians responded and many returned to their respective reservations within a short period of time. Those who chose to remain in the cities developed a lifestyle of going back and forth to the home reservation or tribal lands. Other researchers have suggested that many American Indians prefer living near their ancestral homes despite high unemployment rates, dire economic conditions, and regardless of their attained level of education (Barron et al., 1999; Chester et al., 1999; Evaneshko, 1999; Herman-Stahl et al., 2003; King, 1999; La Fromboise et al., 1990; Pinchette et al., 1997; Snipp, 1996; Trimble, 1981; Trimble et al., 1996). This has been found to be a pervasive pattern within American Indian communities. From all indications the purpose for this behavior is for spiritual renewal.

A 1999 study of the mental health needs of a large metropolitan area conducted by King found that 56% of those who completed the survey sought out help for psychological problems and 44% did not. The church and traditional methods were the

help most often sought demonstrating the importance that many American Indians place upon spirituality as part of their healing process.

In a study of mental health needs of off-reservation American Indians in Northern Arizona 97% of the respondents believed that it's important to maintain their traditional language. Ninety-five percent (95%) reported that knowledge of their tribal cultural histories is important to them. More than half (55%) reported that they have been discriminated against because of their ethnicity. Demographics for the total American Indian population (7,200) for this area indicate that 75% of the adults have not completed high school or achieved a general education diploma (GED). Seventy-three percent (73%) of the respondents felt that it is best for American Indian people to accommodate to modern life. Paradoxically, it is the attempt to accommodate to modern ways of life that seems to create additional stress for American Indian people as a group. The authors acknowledge a major error in their assessment instrument in regard to their reference of traditional healers as professionals. Only 1% of the respondents reported affirmatively to this question which may be due to the fact that the respondents view traditional healing from a cultural or spiritual context as opposed to a professional one (Chester et al., 1999).

In a study conducted with Tucson, Arizona area American Indians to determine their mental health needs, investigators found that 73%, the majority of the population, had lived in Tucson for more than 10 years; 36.8% were life-long residents of Tucson; 52.3% of the respondents had never lived on a reservation; 10.3% had lived off the reservation for less than ten years; and 73% of the respondents held to both traditional and modern ways. Out of the 129 respondents who identified a tribal home area, 40.8% reported that they had returned to their tribal home more than three times in the past year

and 13.8% reported that they had made no visits (Evaneshko, 1999). A majority of the respondents (76.4%) indicated they used other community mental health resources other than the Indian Health Service (IHS); 20.1% responded that they utilized native medicine; and, 16.7% reported they depended on the Native American church.

Evaneshko (1999) indicated that the most intriguing results of her study were the extent of the continuous contact with the people's home reservations or tribal areas and, that despite being long-time urban residents, a very large number (83%) retained some component of their traditional ways. Her interpretation of these results is in sync with previous research findings for the tendency of native peoples to turn to their roots and seek sanctuary in their traditional value systems.

Barron et al. (1999) surveyed 30 non-American Indian health service providers in the Butte, Montana area about possible barriers to the provision of services to American Indian people. Seventy-two percent (72%) of the provider respondents felt that the mental health needs of American Indians are different than those of the general population. Some of the reasons given for this were that (1) American Indians have cultural, religious, social values and beliefs that are much different from and poorly understood by the general population. These differences create problems in meeting personal and social needs because they require an approach that requires genuine sensitivity and that considers a more traditional holistic approach; and, (2) The stressors of leaving an area that they were raised in and supported and, then, trying to fit into the general population would adversely impact most individuals, but is magnified for the American Indian for reasons such as cultural, religious, or social differences. In addition, the result of human responses to changes in socialization, poor assimilation into

unfamiliar and different settings often leads to loss of identity and resultant loss of self-esteem.

Herman-Stahl et al. (2003) investigated the link between cultural orientation and substance use among American Indians. They found that low orientation (little connection with traditions, language, spirituality, etc.) to the American Indian culture and biculturalism were associated with higher levels of multiple types of substance misuse including heavy and extended drinking, illicit drug use, poly drug use, and alcohol abuse/dependence. In addition, bicultural individuals were three times as likely to drink heavily and 2.3 times more likely to have an alcohol use disorder as compared with individuals with a high traditional American Indian orientation. The authors acknowledge that their findings conflict with previous research that suggested biculturalism as being the most adaptive form of acculturation because individuals are able to draw upon multiple sources of strengths and knowledge to succeed in various contexts.

#### Cultural Specific Research of Anger and Stress

*Psychological approach to the study of emotions and culture.* Marsella and Yamada (2000) posit that cultural context can be a major stressor if individuals and/or groups are faced with demands that exceed their abilities and resources to cope. Some culture-related stressors that may cause mental disorders include racism, acculturation, social change, cultural abuse, and cultural disintegration (Marsella & Yamada, 2000). Cultures with histories that include racism, discrimination, and oppression may have deep-seated anger shaping the values and perceptions of its individual members and, thus, influencing these cultures (Duran & Duran, 1995).

Lazarus (2000) stated that the conceptual bottom line of his approach to studying the emotions is the relational meaning that an individual constructs from the person-environment relationship. Specifically, he believes that emotions are always a response to relational meaning. The relational meaning of an encounter is a person's sense of the harms and benefits in a particular person-environment relationship (Lazarus, 1993). That relationship is the result of appraisals of the combination of social and physical environment and personal goals, beliefs about self and the world (Lazarus, 2000).

Appraisal is central to all cognitive approaches in presuming that all complex creatures capable of learning are characterized by the fundamental biological property of constantly evaluating what is happening with respect to one's well being (Lazarus, 1994). Relational meaning has to do with the adaptational match or mismatch between an individual and the environmental conditions being faced such as harm or threat (Lazarus, 1994). Anger implies a particular kind of harm or threat. Anger consists of separate and distinct emotion families, though each occurrence of a given emotion may be somewhat different from the prototypical ideal (Lazarus, 1991b).

If a person appraises his/her relationship to the environment in a particular way, then a specific emotion—which is tied to the appraisal pattern—always follows (Lazarus, 1994). Lazarus (1994) posited that all persons will react with the emotion that is defined by its core relational theme and the appraisal pattern (Lazarus, 1994). Within a group of people and sometimes across groups of people, a reactive emotion should appear similar because each produces a similar pattern of perceptions, appraisals, and coping processes that, in turn, produce common motor requirements, homeostatic processes, and physiological changes (Lazarus, 1994).

Culture can have a strong influence on the emotions because individual appraisals are made at the throng of an environmental display and the goals and beliefs of that individual. Relative to anger, culture provides the basis for knowing when we have been demeaned. He believes that for people to react with an emotion, the relevance of what is happening to their well-being must be sensed as well (Lazarus, 1994).

Averill, Catlin, and Chon (1990) found that subjects rated anger, love, and hope as having the same five features: (1) all are difficult to control, (2) all affect the way one thinks or perceives events, (3) all affect the way one behaves, (4) all motivate behavior, increase persistence, enable one to go on (even in the face of adversity), and (5) all are common universal experiences. Averill (1982) stated that with respect to anger, emotional feelings are stories we tell ourselves in order to guide and account for our own behavior. With respect to culture and emotions, Averill (1982) believes that every culture has a large number of linguistic resources for representing somatic and affective experiences in non-emotionalized terms. The interpersonal and moral causes of somatic and affective experiences are mediated by mental entities that come in the form of abstract interpretive or symbolic schemes with names such as “anger,” “sadness,” “envy,” etc. (Averill, 1982).

*Anger and American Indians.* I found a lack of research the emotions of anger and stress among American Indians. In a bibliographic search by Trimble and Bagwell (1995), I found a few anthropological or ethnographical studies somewhat related to the theme of the current study, American Indians’ experience and expression of anger. These studies are reviewed in the following paragraphs. These anthropological studies provided

some evidence of the cultural variation in the expression and social regulations of anger in non-Western cultures.

Young conducted an anthropological study on locus of control, depression, and anger among American Indian college students. The results of the study indicated that depression and belief in control by powerful others were positively correlated for the students who had low scores on the assaultive, verbal and indirect subscales of the hostility measure. The low scores on the subscales indicated an inability to express anger physically, verbally, or indirectly (Young, 1991).

Spindler and Spindler (1971) conducted a study in which they described the psychological features of different acculturated groups of Menominee Indians. The psychological features given in this study were from both men and women but the differences in the men's adaptation produced more diversity among groups. The characteristic that would be of interest to the current study was the control of overt emotionality and aggression.

Briggs (1970) conducted a study of the emotional patterns of the Utku Eskimos. She found that the Utku highly valued emotional control and the maintenance of equanimity or calmness under difficult circumstances. Adult Utku did not display overt expressions of anger, but demonstrated covert behaviors of anger like sulking, silence, and withdrawal. Narrative accounts were provided of Utku family that provided a cultural perspective of the expression and social regulation of emotions. Any emotional behavior that deviated from even-tempered was reprimanded. Avoidance and/or isolation were the punishments utilized to reinforce to the people of the tribe that displays of anger threatened social cohesion (Briggs, 1970).

Benedict (1934) wrote a book titled *Patterns of Culture*. In her writings about the Zuni Indians, she indicated that the expression of emotion, whether it was anger, jealousy, love, or grief, was displayed in moderation. For Zuni priests, there was a taboo against feeling any anger. In contrast, she described the Kwakiutl tribe as having an integrated culture that valued rights or privileges such as nobility titles and material possessions, which were used in contests known as “potlatches” to shame their competitors.

Burris (2001) conducted the research of anger for her doctoral dissertation titled *The Sociohistorical Meaning of Anger for Elders of an American Indian Tribe*. The social historical meaning of anger was constructed from narrative accounts of seven elders of an individual American Indian tribe obtained in interviews. The meaning of anger was found to be related to child rearing practices and maintaining the traditional tribal values and customs. Anger was essentially regulated in the past for this tribal community with beliefs of emotional restraint and respect for others taught through child rearing. Anger was expressed in social situations when a wrongdoing occurred, or exhibiting disrespect for another or deviating from the social norm. Anger was expressed according to the circumstance and the people involved. It was found that the social regulation of the expression of anger has diminished and it has become more common for the younger generation to express anger. Due to acculturation and other lifestyle changes, tribal members have come to value their need to express their anger.

Winterowd study, data source for this dissertation. The Winterowd et al. (2001) study utilized the STAXI-2 (Spielberger et al., 1999) to explore the experience and expression of anger among American Indian people. In addition, they looked at anger in



relation to acculturation level, post-colonial stress, and hope. Participants were American Indian people who were fellows of an American Indian scholarship program in a southwestern university, other university students of American Indian descent, and a convenience sample of American Indian people who were members of various tribes or nations across the U. S. Results were based on a sample of 168 ( $n = 168$ ), of whom 115 (68.5%) were female and 53 (31.5%) male participants between the ages 18 and 88 years. Ninety-three (55.5%) of the participants were three-fourths to full- blood American Indian, and 123 (73.2%) participants had higher education (college/graduate school) experience. Thirty-six (21.4%) of the participants indicated their residency status to be urban; 55 (33%) indicated their residency status to be rural; and, 75 (44.6%) indicated their residency status to be reservation.

In addition to the STAXI-2 (Spielberger et al, 1999), the following scales of measurement were administered to the participants of the study: (1) Life Perspective Scale (LPS; Choney et al., 1995) which measures American Indian acculturation levels; (2) the Hope Scale developed by Snyder, Sympson, Ybasco, Borders, Babyak and Higgins (1996); (3) the Post-Colonial Stress Scale (PCSS; Winterowd & Miville, 2000; Cronbach alpha = .84); and (4) the Acculturation Behavior Scale (ABS; Winterowd & Miville, 2000; Cronbach alpha = .91).

Investigators found that, on average, the experience of anger and anger expression did not differ between the American Indian sample and the STAXI-2 (Spielberger et al., 1999) normative group which was predominantly white (Winterowd et al, 2001). The most significant finding was that the people in the study sample suppress (AX-I) their

anger more and control (AX-O) the outward expression of their anger more than people in the original normative sample (Winterowd et al., 2001).

A series of forward multiple regression analyses were conducted with hope, post-colonial stress, and acculturation as the independent variables and the anger subscales as the dependent variables. Researchers found that post-colonial stress and acculturation were significant predictors of state anger, trait anger, anger expression-out (aggression). Acculturation was found to be the significant predictor of anger expression-in (suppression). Hope was found to be the significant predictor of anger control (in and out), and overall anger frequency (Winterowd et al., 2001).

*PTSD and American Indians.* A total of 1,403 abstracts were reviewed via PsychINFO and two articles were found that related to the theme PTSD and American Indians. One of the two articles found via PsychINFO addressed a study conducted with American Indian male Vietnam veterans. The second PTSD study was conducted with American Indian adolescents. These articles are also reviewed.

Beals, Manson, Shore, Firedman, Ashcraft, Fairbank and Schlenger (2002) conducted a mandated study to examine differential prevalence of PTSD among five ethnically defined samples of male Vietnam veterans inclusive of American Indian Vietnam veterans. Interviews were conducted to assess individual experiences before, during, and after the war. The prevalence of both 1-month and lifetime PTSD was higher for American Indians than for Whites. When differential exposure to war-zone stress was controlled with logistic regressions, ethnicity no longer was a significant predictor of PTSD.

Jones, Dauphinais, Sack, and Somervell (1997) administered the Diagnostic Interview Schedule for Children (DISC-2.1C), including the PTSD module to 109 American Indian adolescents from a reservation of the Northern Plains tribes. They found that 61% of the respondents reported at least one traumatic event and the prevalence rate of diagnosable PTSD was found to be only 3%. They determined that the reporting of a traumatic event was associated with increased prevalence of behavioral disorders and substance abuse or dependence diagnoses. They found no significant differences were found in academic performance between those who reported traumatic events or PTSD symptoms and those who did not. They did not collect specific information on the temporal relationship between the occurrence of reported traumatic events and the onset of PTSD symptoms; therefore, negating any conclusions of causality. There also did not measure the intensity of the traumas or the frequency of the reported PTSD symptoms. The findings are not generalizable since conditions vary from one reservation to another.

### STAXI-2 Anger Measurement Studies

Spielberger (1980) developed the State-Trait Anger Scale (STAS) to assess anger. It was similar in conception and format to the State-Trait Anxiety Scale he developed in 1966. He constructed the STAS to measure anger as an emotional state that varies in intensity and individual differences in anger proneness as a personality trait. Before constructing the STAS, definitions were formulated for state anger and trait anger. State anger (S-anger) was defined as a psychobiological state or condition consisting of subjective feelings that vary in intensity, from mild irritation or annoyance to intense fury and rage, and arouse the autonomic nervous system. State anger was assumed to

fluctuate over time as a function of frustration, perceived affronts, injustice, or being verbally or physically attacked. Trait anger (T-anger) was defined in terms of how often angry feelings were experienced over time. It was assumed that persons high in T-anger perceive a wider range of situations as anger provoking than persons low in T-anger, and persons high in T-anger would be more likely to experience more frequent and intense elevations in S-anger whenever annoying or frustrating circumstances were encountered (Spielberger & Gorsuch, 1966). Additionally, it posited that trait anger reflects individual differences in the frequency and intensity with which state anger is experienced over time. Trait anger refers to a stable personality dimension of anger proneness or the tendency to experience state anger (Spielberger, Jacobs, Russell, & Crane, 1983).

Considering the previously established conceptualization of anger-expression as a unidimensional, bipolar variable, Spielberger, Johnson, Russell, Crane, Jacobs, and Worten (1985) attempted to construct a scale to measure this dimension. The research team developed definitions of anger-in and anger-out to guide the production of the Anger-Expression (AX) scale. Anger-in was defined as how often angry feelings were experienced but suppressed and anger-out was defined as the frequency that angry feelings were expressed in aggressive behavior, verbal or physical. The rating scale format for the AX scale was the same as the one used with the STAS T-anger scale. The instructions were changed by asking the subjects to report how often they generally reacted or behaved in the manner described when they felt angry or furious (Spielberger et al., 1980, 1983, 1985).

The AX/Con subscale assesses individual differences in how often individuals attempt to control the expression of angry feelings. Persons with high AX/Con scores are

thought to invest a great deal of energy in monitoring and preventing the expression of anger. Moderately high negative correlations of AX/Con with AX/Out suggest that these efforts are usually successful. Persons with high AX/Con scores and who are also high in T-Anger/Temperament may be strongly authoritarian and use anger to intimidate others. Excessive over-control of anger may result in passivity and withdrawal, and persons with high AX/Con and high trait anxiety scores are likely to experience depression (Spielberger, 1988; Spielberger, Reheiser, & Sydeman, 1995).

Spielberger constructed the State-Trait Anger Expression Inventory (STAXI) by combining the STAS and AX scale to form the 44 item assessment instrument. The inventory consisted of five primary scales: State Anger, Trait Anger, Anger-In, Anger-Out, and Anger-Control. The STAXI T-Anger Scale has two four-item subscales: T/Anger/Temperament and T-Anger/Reaction. This instrument was normed with a predominantly White population. (see manual for the state-trait anger expression inventory, Spielberger, 1988).

The STAXI-2 scales and subscales are as follows (Spielberger et al., 1999): (1) State Anger (Feeling Angry, Feel Like Expressing Anger Verbally, Feel Like Expressing Anger Physically); (2) Trait Anger (Angry Temperament, Angry Reaction); (3) Anger Expression-Out; (4) Anger Expression-In; (5) Anger Control-Out; (6) Anger Control-In; and (7) Anger Expression Index. The STAXI-2 State Anger scale assesses the intensity of anger as an emotional state at a particular time. The Trait Anger scale measures how often angry feelings are experienced over time. The Anger Expression and Anger Control scales assess four relatively independent anger-related traits:

(a) expression of anger toward other persons or objects in the environment (Anger Expression-Out); (b) holding-in or suppressing angry feelings (Anger Expression-In); (c) controlling angry feelings by preventing the expression of anger toward other persons or objects in the environment (Anger Control-Out); and (d) controlling suppressed angry feelings by calming down or cooling off (Anger Control-In).

Deffenbacher (1992) used the STAS T-Anger Scale in a series of studies to assess the correlates and consequences of trait anger. He found that individuals with high T-Anger scores reported experiencing more intense and more frequent day-to-day anger across a wide range of anger producing situations. They also experienced anger-related physiological symptoms two to four times more often than low T-Anger respondents. When provoked, the high T-Anger individuals revealed stronger general tendencies to both express and suppress anger, and more abnormal physical and verbal hostility. He determined that emotional states of anger can be conceptualized as a complex cognitive-psycho-physiological phenomenon found within the context of a specific situation. He recommended using several different measurement strategies in assessing anger, such as interviewing, role play, and self-monitoring so that the range of real and potential sources of anger may be determined.

Considering their idea that trait anger is often not the only important variable in determining anger-related outcomes, Deffenbacher, Oetting, Lynch, and Morris (1996), conducted a study using the 24 items on the Anger Expression Inventory (AEI). They added items to the measure, which were designed to assess different forms of anger expression, and then examined responses to determine whether other forms of anger expressions exist and can be readily measured. In their review of literature, they found

no studies utilizing the AEI scale to determine whether specific forms of anger expression lead to certain types of consequences. The researchers addressed this issue by assessing the frequency that an individual's anger led them to do, feel, or experience commonly occurring anger consequences such as getting into a verbal or physical fight, damaging property, or feeling guilty and then relating these consequences to the person's trait anger level and typical forms of anger expression (Deffenbacher et al., 1996).

Some of the findings that seemed pertinent to my dissertation study are as follows:

(1) Experiencing negative emotions as a result of one's anger was most associated with suppressing anger and being less able to control anger expression; and, (2) Anger-In was most highly correlated with the consequence of experiencing negative emotional states such as depression and embarrassment as consequences that are most logically related to that style. The investigators suggested that future studies should be undertaken to assess anger expression at one point in time and correlated with consequences assessed by multiple methods at another point in the future as this would help to increase our understanding of anger, its expression, and consequences, and inform treatment of anger in clinical settings (Deffenbacher et al., 1996).

Deffenbacher and Swaim (1999) explored aggressive forms of anger expression in adolescents. They found that aggressive anger expression in adolescents consists of at least three correlated, but distinct forms of expression. One form of expression involves abusive verbal expression and the other two are more physical in form, one where anger is directed toward people and the other toward things and the physical environment. Both middle and high school students reported greater verbally assaulting expression than physical assault on things, which was significantly higher than physical assault on others.

White non-Hispanic students expressed their anger more frequently via negative verbal means than did Mexican-American students. The researchers were unable to find literature on ethnic differences in anger expression styles in the younger population and the limited data on ethnicity effects were mixed, but the study did suggest that in public school samples of adolescents, Mexican-American youth are less likely to use a verbally aggressive style of expressing their anger (Deffenbacher & Swaim 1999).

Aggressive forms of anger expression correlated positively with anxiety and depression as was found for adults in past studies. There was a new finding in the tendency for forms of aggressive anger expression to be more highly correlated with depression than anxiety. The researchers felt that this finding would be important in counseling depressed youths who may be inclined to express their anger in impulsive aggressive ways perhaps contributing to suicide potential and other forms of acting out (Deffenbacher & Swaim, 1999).

### Summary

In this chapter I've presented a mixture of scholarly knowledge available on historical intergenerational oppression of American Indian people and understanding and measuring historical trauma and loss. I have woven in specific and personal stories pointedly related to intergenerational distress and trauma. I have provided a synopsis of the soul wound theory differentiating post-colonial stress, intergenerational trauma, and post-traumatic stress disorder. I have provided empirical evidence of the emergence of the need to integrate the American Indian and Anglo worldviews for psychological healing of the unresolved grief and historical trauma among American Indian people. In addition, I've addressed scholarly research regarding the psychological approach to



studying emotions and culture, cultural specific research of anger and stress, and general anger measurement studies. Hopefully, I've provided a foundation from which future researchers might further expand the scholarly literature base on observations and interactions with American Indian people in a social environmental context while integrating techniques taken from general psychological principles and adapting them to a more specific cultural context.

## CHAPTER III

### METHOD

My purpose in this study was to examine the relationship of blood quantum, education level, and reservation status with the experience and expression of anger and post-colonial stress among American Indian people. In this chapter, I describe the participants, measures, and procedures.

#### Participants

As this was an archival study, I utilized the data obtained in the Winterowd et al. (2001) study. I examined the relationship of three specific variables (blood quantum, education level, and reservation status) to anger and post-colonial stress.

The participants included American Indian university students in a southwestern university; and American Indian people (n=168) affiliated with 36 tribes or nations across the U.S. The sample consisted of 168 adults ranging in age from 18 to 88 years with the average age being 40.8 years (sd = 14.02). See Table 1 (p. 41) for lists of tribal names and numbers of subjects per tribe represented in the study sample. Fifty-three (31.5%) of the participants were male and 115 (68.5%) were female. Ninety-three (55.5%) of the participants self-reported their blood quantum to be  $\frac{3}{4}$  to full blood. The majority (n =123; 73.2%) of the participants reported college/graduate education and 20.2% reported having at least a high school education. Forty-five (45%) reported living on a

Table 1

Tribal Names and Numbers of Subjects Per Tribe Represented in Study Sample

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Tribal Name	No. of Subjects (n=76)	Tribal Name	No. of Subjects (n=92)
Arapaho	2	Iowa	4
Alabama-Quasarte	2	Kaw	2
Apache	4	Kiowa	8
Arapaho	2	Mississippi	3
Blackfoot	1	Navajo	27
Caddo	2	Northern Cheyenne	3
Cherokee/Eastern Band	10	Osage	1
Cherokee/Western Band	15	Otoe-Missouri	3
Cheyenne	2	Pawnee	4
Chickasaw	4	Ponca	4
Chippewa	1	Potawatomi	2
Choctaw	8	Sac-N-Fox	2
Comanche	1	Seminole	11
Creek	16	Seneca	2
Crow	1	Shawnee	4
Delaware	1	Sioux	8
Flathead	1	Western Delaware	2
Hopi	3	Wichita	2

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reservation and 47% reported not living on a reservation. As a majority of the participants were solicited via established American Indian entities; i.e., IHS, BIA, institutes of higher learning, Indian nation events and personally referred acquaintances, it is assumed that tribal membership had been established.

### Measures

The participants completed a packet of questionnaires that included: (1) an informed consent form, (2) the Life Perspectives Scale (LPS; Choney et al., 1995; Berryhill, 1998) that measures American Indian acculturation levels, (3) the STAXI-2 (Spielberger, 1999) that measures the experience (state and trait anger) and expression (anger-in, anger-out, anger control efforts, and overall expression) of anger, (4) the Hope Scale (Snyder et al., 1991, 1966) a dispositional self-report measure of hope, (5) the Post-Colonial Stress Scale (PCSS; Winterowd & Miville, 2000), and (6) a demographic information sheet. The demographic sheet, STAXI-2, and the Post-Colonial Stress Scale responses were used for this dissertation study.

### Instrumentation

*Demographic sheet.* The demographic sheet provided the following information for each of the participants: self-reports of age, sex, tribal affiliation, blood quantum, level of education, whether or not one lives or lived on a reservation, and whether or not one lives or lived in an urban or rural area, among other information. (See copy of demographic sheet in Appendix A).

*The Post-Colonial Stress Scale (PCSS; Winterowd & Miville, 2000).* The PCSS measures the level of acculturative stress experienced by a respondent. Participants

responded to 12 items using a 7-point Likert scale (1 = Not At All to 7 = A Great Deal). A principle components analysis with oblimin rotation was conducted on the PCSS items and a two factor solution emerged: Distress and Distrust of Whites (Winterowd & Miville, 2000). The Distress scale items measured the distress associated with the way Indian people have been historically treated as well as how Indian people have been treated today. An example of an item from this subscale is 'I feel angry when I think of how Indian people are treated today.' The Distrust of Whites scale measured the feelings of distrust Indian people have toward White people given the intergenerational oppression Indian people have experienced by non-Indians. An example of an item from this factor is 'When I think about what my family has taught me (e.g., parents, grandparents, significant people in my life), I learned not to trust whites.' (See copy of the PCSS in Appendix A).

*State-Trait Anger Expression Inventory-2 (STAXI-2; Spielberger, 1999).* The STAXI-2 has 57 items consisting of six major scales and five subscales for assessing the experience, expression, and control of anger. The measure also includes an anger expression index that provides an overall measure of total anger expression. Researchers have found these scales to be internally consistent, factorially orthogonal, and empirically independent (Spielberger et al., 1999). The state anger scale assesses the intensity of anger as an emotional state at a particular time (Spielberger et al., 1999). The trait anger scale measures how often angry feelings are experienced over time. For this sample of American Indian people, the alpha reliabilities were .92 for State anger and .84 for Trait anger.

The Anger Expression and Anger Control scales assess four relatively independent anger-related traits: (a) expression of anger toward other persons or objects in the environment (Anger Expression-Out/AXO); (b) holding in or suppressing angry feelings (Anger Expression-In/AXI); (c) controlling angry feelings by preventing the expression of anger toward other persons or objects in the environment (Anger Control-Out/ACO); and (d) controlling suppressed angry feelings by calming down or cooling off. Subjects rated the 32 Anger Expression and Anger Control items according to how often they generally react or behave when they are feeling angry or furious on a 4-point frequency scale. For this sample, the alpha reliabilities were .55 for AXO, .78 for AXI, .84 for ACO, and .86 for ACI.

The STAS and the AX scales have been used extensively in research on the relation between anger and health. With the development of the improved STAXI measures for assessing the experience and expression of anger, suppressed anger has been consistently identified as an important factor in elevated blood pressure and hypertension. The STAXI scales have also been used in studying the effects of situational factors on the experience and expression of anger (Aragona, 1983; Pape, 1986; Spielberger et al., 1983, 1988, 1999; Stoner, 1988).

The normative sample for the STAXI-2 included more than 1,900 individual adults. Normative tables provide raw score to percentile and raw score to T-score conversions from STAXI-2 scale and subscale scores for the total normative sample, as well as by gender for three age groups: 16-19 years, 20-29 years, and 30 years and older.. This instrument's normative sample was conducted with a predominantly White population as

have the majority of the studies conducted with Spielberger's earlier anger measuring instruments (Spielberger et al., 1999).

The distribution of scores on the S-Anger and T-Anger/T scales are positively skewed which prevents these scales from effectively discriminating among respondents with low scores. Low scores on the other STAXI scales may provide useful information that contributes to understanding the personality dynamics of an individual with low scores; i.e., individuals who score below the 25<sup>th</sup> percentile on T-anger, AXI, and AXO scales generally experience, express, or suppress relatively little anger (Spielberger et al., 1999).

General characteristics of persons with high scores on each of the STAXI scales are as follows: (1) S-Anger – Individuals with high scores are experiencing relatively intense angry feelings at the time the test was administered. If S-Anger is elevated relative to T-Anger, the individual's angry feelings are likely to be determined by situation. Elevations in S-Anger are more likely to reflect chronic anger if T-Anger and AXI scores are also high; (2) T-Anger – High T-Anger individuals frequently experience angry feelings, especially when they feel they are treated unfairly by others. Whether persons high in T-Anger suppress, express, or control their anger can be inferred from their scores on the AXI, AXO, and ACO scales; (3) T-Anger/T – Persons with high T-Anger/T scores are quick-tempered and readily express their anger with little provocation. Such individuals are often impulsive and lacking in anger control. High T-Anger/T individuals who have high ACO scores may be strongly authoritarian and use anger to intimidate others; (4) T-Anger/R – Persons with high T-Anger/R scores are highly sensitive to criticism, perceived affronts, and negative evaluation by others. They

frequently experience intense feelings of anger under such circumstances; (5) AXI-- Persons with high AXI scores frequently experience intense angry feelings, but tend to suppress these feelings rather than to express them either physically or in verbal behavior. Persons with high AXI scores who also have high AXO scores may express their anger in some situations while suppressing it in others; (6) AXO--Persons with high AXO scores frequently experience anger which they express in aggressive behavior. Anger-Out may be expressed in physical acts such as assaulting other persons or slamming doors, or verbally in the form of criticism, sarcasm, insults, threats, and the extreme use of profanity; (7) ACO – Persons with high scores on the ACO scale tend to invest a great deal of energy in monitoring and preventing the expression of anger. Although controlling anger is certainly desirable, the over-control of anger may result in passivity and withdrawal. Persons with high ACO and high T-Anger scores may also experience anxiety and depression (Spielberger et al., 1999).

### Procedures

Participants were solicited via personal contact with tribal/nation representatives, university students, and HIS or BIA behavioral health agencies' personnel. A uniform script (a copy of the script is in Appendix A) was followed when participants were asked if they would be interested in participating in a study exploring cultural and emotional issues in American Indian people. If interested, they completed a packet of questionnaires that included an informed consent form (a copy of the consent form is in Appendix A), the demographic information sheet, the LPS, the STAXI-2, the Hope Scale, and the PCSS. When the participants completed the questionnaires and demographic sheet, they placed the entire packet in an envelope provided and sealed it shut.



To ensure the confidentiality of the participants' responses, they did not write their names on any of the forms except for the informed consent form (this was stated clearly on the consent form). The informed consent form was collected separately from the remainder of the packet and was placed in a sealed envelope to ensure that there was no way to connect a participants' identity with their questionnaire responses.

The data packets were not viewed by anyone except the research team. Either a research associate of the study or a designated professional at each tribe/nation site, university site, or behavioral health agency site collected the data packets as well as the informed consent forms. The data packets and informed consent forms were placed in a locked file drawer and collected by the designated research team member to be further secured. The data (including the questionnaire packets and the informed consent forms) were collected from the research team participants, filed and locked in a secure location at the Oklahoma State University. Permission was obtained from the investigators of the Winterowd et al. (2001) study to utilize the database from their study and, more specifically, the demographic sheet, STAXI-2, and PCSS data.

### Data Analysis Design

The Statistical Package for the Social Sciences (SPSS) for Windows 98 was used to conduct a non-experimental factorial design for this study. Reservation status (reservation status: yes vs. no), educational level (high school or lower vs. college or higher), and blood quantum (less than  $\frac{3}{4}$  vs.  $\frac{3}{4}$  to full-blood) were utilized as the independent variables. The subscales of the STAXI-2 (Spielberger et al., 1999), the total score obtained for the Post-Colonial Stress Scale (PCSSTOT; coefficient reliability of

.84; Winterowd et al., 2001), and the overall anger expression index (AXIND) were utilized as the dependent variables.

I utilized the General Linear Model (GLM) procedure to examine the influence of the independent variables on the dependent variables. I identified the independent variables as follows: reservation status (RESERV) with two levels (.00 = no; 1.00 = yes) “no” indicating ‘never lived on reservation or Indian tribal lands’ and “yes” indicating ‘lived on reservation or Indian tribal lands’; educational level (SCHOOL) with two levels (1.00 = high school or lower; 2.00 = college or higher); and blood quantum (QUANTGRP) with two levels (1.00 = less than  $\frac{3}{4}$  blood quantum; 2.00 =  $\frac{3}{4}$  to  $\frac{4}{4}$  or full-blood). I identified the dependent variables as follows: state anger (SANG), trait anger (TANG), anger expression-out (AXO), anger expression-in (AXI), anger control-out (ACO), anger control-in (ACI). I used the Univariate Analysis of Variance model to determine the effects of the variables. I utilized Type III sums of squares in the analysis. Contrasts were not utilized as there were only two levels for each independent variable. Plots were not used as I constructed my own.

In using the GLM, predictions are based on the relationship between independent variables and the dependent variable; the stronger the relationship, the better the prediction. I assessed these relationships (or effects) using the analysis of variance procedure. For the Univariate Analysis of Variance, I set the significance level at .05. I selected compare main effects, descriptive statistics, estimates of effect size, observed power, and parameter estimates as additional options.

I originally proposed to do a series of 2 (reservation status) X 2 (blood quantum) X 2 (educational level) ANOVAs. However, there were not enough participants in some of

the cells to conduct these analyses. To counter the unbalance (different number of subjects in each cell), a series of 2 X 2 multivariate analyses of variance (MANOVAs) were conducted with the anger experience (state anger and trait anger) and the anger expression (anger-in and anger-out; anger control in- and anger control-out) subscales. A series of 2 x 2 analyses of variances (ANOVAs) was conducted with AXIND and PCSSTOT.

I conducted an evaluation of the analyses by examining the means, and standard deviations obtained by the output. Next I examined the *F* tests of between-subjects effects.

## CHAPTER IV

### RESULTS

My focus in this study was to determine the relationship (effect) of reservation status (RESERV), educational level (SCHOOL), and blood quantum (QUANTGRP) on anger and anger expression. I report the results sequentially, beginning with the anger subscale scores, then, the anger index scores and ending with the post-colonial stress total scores.

#### Anger Subscales Analyses

In Hypothesis 1, I stated that reservation status, educational level, and blood quantum would have an effect on anger and anger expression scores. My review of the analyses indicated that blood quantum and reservation status interact with each other to affect the state and trait anger scores for American Indian people; blood quantum had a significant effect on the anger expression-out and anger expression-in scores of this population; and, reservation status had a significant main effect on anger expression-out and anger expression-in scores. There were no effects for the anger index scores. I found that there was a main effect was found for blood quantum and reservation on the post-colonial scores. Hypothesis 1 was supported by the results of the study.

In Hypothesis 1(a), I stated that American Indians who lived on tribal lands would have less state and trait anger compared to American Indians who had not lived on tribal lands. In the analysis of the 2 (QUANTGRP) x 2 (RESERV) MANOVA with SANG and

TANG scores, I found a significant interaction effect, QUANTGRP x RESERV, for the SANG and TANG scores,  $F(2, 147) = 3.14, p = .046$ . When SANG and TANG scores were considered separately in the follow-up univariate analyses, the interaction effect was found only for SANG scores,  $F(1, 148) = 6.31, p = .013$ , and not for TANG scores,  $F(1, 148) = .91, p = .34$ . I found no significant main effects for SANG and TANG scores by QUANTGRP,  $F(2, 147) = 1.67, p = .19$ , nor for SANG and TANG scores by RESERV,  $F(2, 147) = .34, p = .71$ . The statistically significant interaction effect suggested that Indian people with less than  $\frac{3}{4}$  blood quantum who had not lived on reservation or tribal lands tend to have higher levels of state anger compared to Indian people with  $\frac{3}{4}$  to full-blood ( $\frac{4}{4}$ ) who lived on reservations or tribal land ( $19.80 > 16.58$ ), Indian people with  $\frac{3}{4}$  to full-blood ( $\frac{4}{4}$ ) who never lived on reservations or tribal land tend to have higher state anger than Indian people with less than  $\frac{3}{4}$  blood quantum who never lived on reservations or tribal land ( $18.09 > 17.02$ ). Hypothesis 1 (a) was supported. The means and standard deviations for state and trait anger subscale scores by blood quantum and reservation status groups are reported in Table 2 below. Figure 1 displays the state anger score by blood quantum x reservation status interaction effect.

In Hypothesis 1 (ai), I stated that American Indians with higher blood quantum would experience and express less state and trait anger than Indian people with lower levels of blood quantum levels. Examination of the state anger scores by QUANTGRP and RESERV revealed that Indian people with  $\frac{3}{4}$  to full-blood ( $\frac{4}{4}$ ) blood quantum who lived on tribal lands had the lowest average state anger scores. Further examination of the individual group means and standard deviations revealed that Indian people with less than

Table 2

Means and Standard Deviations for State and Trait Anger Subscale Scores by Blood

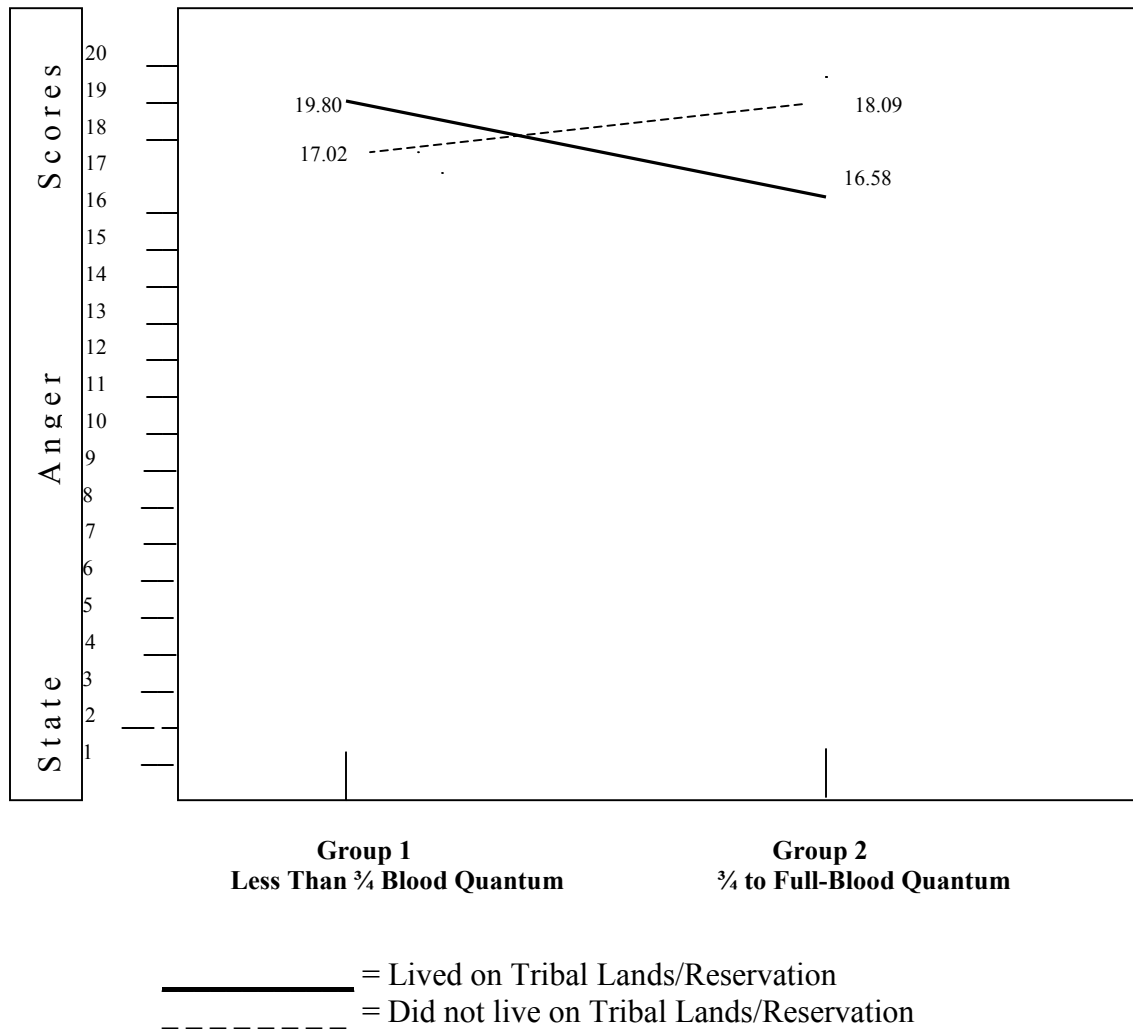
Quantum Groups and Reservation Status Groups

Reservation Status		Blood Quantum	
		Less than $\frac{3}{4}$	$\frac{3}{4}$ to Full (4/4)
Never lived on Indian Tribal Lands			
	State Anger	m = 17.02 *	m = 18.09 *
		sd = 3.68	sd = 6.87
	Trait Anger	m = 17.23	m = 16.64
		sd = 5.09	sd = 4.70
		n = 44	n = 33
Lived on Indian Tribal Lands			
	State Anger	m = 19.80 *	m = 16.58 *
		sd = 6.96	sd = 3.38
	Trait Anger	m = 17.92	m = 15.82
		sd = 4.71	sd = 4.40
		n = 25	n = 50

\* p < .05

Figure 1

Graph of Interaction Effect for State Anger Subscale by Reservation Status Groups and Blood Quantum Groups



$\frac{3}{4}$  blood quantum and who had lived on tribal lands had the highest state and trait anger scores; however, these results did not reach statistical significance. Hypothesis 1 (ai) was not supported.

In Hypothesis 1 (aai), I stated that American Indian people with higher levels of education would report more state and trait anger than American Indian people with lower levels of education. I examined the state and trait scores for blood quantum group x educational level. I found no interaction effect for QUANTGRP x SCHOOL for SANG and TANG scores,  $F(2, 162) = .07, p = .93$ , nor did I find any main effects for SANG and TANG scores by QUANTGRP,  $F(2, 162) = 1.67, p = .19$ , or SCHOOL,  $F(2, 162) = 1.93, p = .15$ . My review of the means and standard deviations for the four individual groups indicated that Indian people with higher levels of blood quantum and low levels of education tended to have higher state and trait anger compared to Indian people with higher levels of blood quantum with higher levels of education ( $19.19 > 17.61$ ;  $18.14 > 16.93$ , respectively). In addition, Indian people with lower levels of blood quantum and lower levels of education tended to have higher state and trait anger compared to Indian people with lower levels of blood quantum and higher levels of education ( $17.88 > 16.68$ ;  $16.69 > 15.11$ , respectively). Hypothesis 1 (aai) was not supported in this analysis. The means and standard deviations for state and trait anger subscale scores by blood quantum groups and educational level groups are reported in Table 3 below.

I also examined state and trait anger scores for educational level x reservation status. I found no interaction effect for SCHOOL x RESERV,  $F(2, 146) = .08, p = .92$ , nor did I find any main effects for SANG and TANG by SCHOOL,  $F(2, 146) = 2.76$ ,



Table 3

Means and Standard Deviations for State and Trait Anger Subscale Scores by Blood

Quantum Groups and Educational Level Groups

---

Educational Level	Blood Quantum	
	Less than $\frac{3}{4}$	$\frac{3}{4}$ to Full (4/4)
<hr/>		
High School or Lower		
State Anger	m = 17.88 sd = 4.67	m = 19.19 sd = 6.37
Trait Anger	m = 16.69 sd = 5.29 n = 16	m = 18.14 sd = 4.93 n = 59
<hr/>		
College or Higher		
State Anger	m = 16.68 sd = 4.05	m = 17.61 sd = 5.49
Trait Anger	m = 15.11 sd = 4.77 n = 28	m = 16.93 sd = 4.29 n = 64
<hr/>		

$p = .067$ , or RESERV,  $F(2, 146) = .34$ ,  $p = .71$ . In taking a close look at the four individual group means and standard deviations, I found that Indian people with higher levels of education who lived on tribal lands tend to have higher state and trait anger than Indian people with lower levels of education who had lived on tribal lands (17.97 > 16.40; 16.92 > 14.93, respectively). In addition, Indian people with higher levels of education who had never lived on tribal lands tend to have higher state and trait anger than Indian people with lower levels of education who never lived on tribal lands (17.83 > 16.96; 17.69 > 15.61, respectively). These findings are not easy to explain without more information. Other factors might be influencing the results for educational level. This analysis did not support hypothesis 1 (a<sub>ii</sub>). The means and standard deviations for state and trait anger subscale scores by educational level and reservations status are in Table 4 below.

In Hypothesis 1(b), I stated that American Indian people who had higher blood quantum levels would be less likely to express their anger out and more likely to suppress their anger in than Indian people with lower blood quantum levels. In analyzing the 2 (QUANTGRP) x 2 (SCHOOL) MANOVA with AXO and AXI, I found no interaction effect (QUANTGRP x SCHOOL) for AXO and AXI scores,  $F(2, 162) = .01$ ,  $p = .99$ . A significant main effect was found for AXO and AXI by QUANTGRP,  $F(2, 162) = 3.00$ ,  $p = .053$ . The main effect suggests that Indian people with lower levels of blood quantum were more likely to express their anger out than Indian people with higher levels of blood quantum. The follow-up univariate analyses revealed a main effect for AXI by QUANTGRP,  $F(1, 163) = 5.94$ ,  $p = .016$ , but not for AXO by QUANTGRP,  $F(1, 163) =$

Table 4

Means and Standard Deviations for State and Trait Anger Subscale Scores by

Educational Level Status Groups and Reservation Status Groups

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Educational Level	Reservation Status	
	Never Lived on Indian Tribal Lands	Lived on Indian Tribal Lands
<hr/>		
High School or Lower		
State Anger	m = 16.96	m = 16.40
	sd = 4.20	sd = 2.35
Trait Anger	m = 15.61	m = 14.93
	sd = 4.97	sd = 3.85
	n = 28	n = 15
<hr/>		
College or Higher		
State Anger	m = 17.83	m = 17.97
	sd = 5.87	sd = 5.51
Trait Anger	m = 17.69	m = 16.92
	sd = 4.76	sd = 4.69
	n = 48	n = 60

---

.77,  $p = .38$ . This main effect suggests that Indian people with lower levels of blood quantum were more likely to suppress their anger compared to Indian people with higher levels of blood quantum. No main effect was found for AXO and AXI scores by SCHOOL,  $F(2, 162) = .22, p = .81$ . Hypothesis 1 (b) was supported by this analysis. The means and standard deviations for anger expression-out and anger expression-in subscale scores by blood quantum and educational level groups are shown in Table 5 below.

In Hypothesis 1 (bi), I stated that American Indian people who lived on tribal land would be less likely to express their anger out and suppress their anger in than Indian people who never lived on tribal lands. In analyzing the 2 (QUANTGRP) x 2 (RESERV) MANOVA with AXO and AXI, I found no interaction effect,  $F(2, 147) = 2.64, p = .075$ . In addition, no significant main effect was found for AXO and AXI by RESERV,  $F(2, 147) = 1.43, p = .24$ , or QUANTGRP,  $F(2, 147) = 2.23, p = .11$ . However, in reviewing the four individual group means and standard deviations, I found that Indian people who lived on tribal lands tended to suppress their anger more than Indian who never lived on tribal lands ( $18.64 > 17.77$ ). I also found that, on average, Indian people who had never lived on tribal lands tended to express their anger out more than Indian people who lived on tribal lands. Hypothesis 1 (bi) was not supported. The means and standard deviations for anger expression-out and anger expression-in subscale scores by blood quantum and reservation status groups are shown in Table 6 below.

In Hypothesis 1 (bii), I stated that American Indian people with less education would be more likely to express their anger out and less likely to suppress their anger in than American Indians with more education. In analyzing the 2 (SCHOOL) x 2

Table 5

Means and Standard Deviations for Anger Expression-Out and Anger Expression-In

Subscale Scores by Blood Quantum Groups and Educational Level Groups

---

Educational Level	Blood Quantum	
	Less than $\frac{3}{4}$	$\frac{3}{4}$ to Full (4/4)
<hr/>		
High School or Lower		
Anger Expression-Out	m = 15.31 *	m = 15.39
	sd = 3.30	sd = 3.12
Anger Expression-In	m = 19.00 *	m = 18.49
	sd = 3.90	sd = 5.27
	n = 16	n = 59
<hr/>		
College or Higher		
Anger Expression-Out	m = 14.89 *	m = 14.81
	sd = 3.26	sd = 3.04
Anger Expression-In	m = 16.96 *	m = 16.38
	sd = 4.60	sd = 4.38
	n = 28	n = 64

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\* p < .05

Table 6

Means and Standard Deviations for Anger Expression-Out and Anger Expression-In

Subscale Scores by Blood Quantum Groups and Reservation Status Groups

---

Reservation Status	Blood Quantum	
	Less than $\frac{3}{4}$	$\frac{3}{4}$ to Full (4/4)
<hr/>		
Never Lived on Indian Tribal Lands		
Anger Expression-Out	m = 15.57	m = 15.30
	sd = 3.25	sd = 3.44
Anger Expression-In	m = 17.77	m = 17.94
	sd = 4.66	sd = 4.55
	n = 44	n = 33
<hr/>		
Lived on Indian Tribal Lands		
Anger Expression-Out	m = 15.00	m = 14.30
	sd = 3.14	sd = 2.75
Anger Expression-In	m = 18.64	m = 15.36
	sd = 4.61	sd = 4.14
	n = 25	n = 50
<hr/>		

(RESERV) MANOVA with AXO and AXI, I found no interaction effect for SCHOOL x RESERV,  $F(2, 146) = .98, p = .38$ , with AXO and AXI. However, I did find a significant main effect for RESERV when AXO and AXI were considered together,  $F(2, 146) = 3.11, p = .05$ . The main effects suggested that American Indian people who lived on tribal lands would be less likely to express their anger out compared to Indian people who never lived on tribal lands. The follow-up univariate analyses revealed a significant main effect for RESERV with AXI scores,  $F(1, 147) = 4.90, p = .03$ , but not for AXO. The main effect indicated that Indian people who never lived on a reservation or tribal land were more likely to suppress their anger in compared to Indian people who lived on a reservation or tribal land. No main effect was found for AXO and AXI by SCHOOL,  $F(2, 146) = .15, p = .87$ . This analysis resulted in significant findings that support hypothesis 1; however, hypothesis 1 (bii) was not supported. The means and standard deviations for anger expression-out and anger expression-in subscale scores by educational level groups and reservation status groups are reported in Table 7 below.

In Hypothesis 1 (c), I stated that American Indian people who lived on tribal lands who had higher blood quantum levels would control their anger (outwardly and inwardly) more than Indian people with lower blood quantum levels. American Indian people who lived on tribal lands were expected to control their anger (outwardly and inwardly) more than Indian people who had not lived on tribal lands. American Indians with higher levels of education were more likely to control their anger (outwardly and inwardly) compared to American Indians with lower levels of education. In reviewing the 2 (QUANTGRP) x 2 (RESERV) with ACO and ACI, I found no interaction effect for QUANTGRP x RESERV,  $F(2, 147) = .69, p = .50$ , nor did I find a main effect for ACO and ACI by

Table 7

Means and Standard Deviations for Anger Expression-Out and Anger Expression-In

Subscale Scores by Educational Level Groups and Reservation Status Groups

---

Educational Level	Reservation Status	
	Never Lived on Indian Tribal Lands	Lived on Indian Tribal Lands
<hr/>		
High School or Lower		
Anger Expression-Out	m = 15.36 sd = 3.54	m = 14.27 sd = 2.74
Anger Expression-In	m = 18.75 * sd = 4.52 n = 28	m = 15.67 sd = 3.74 n = 15
<hr/>		
College or Higher		
Anger Expression-Out	m = 15.50 sd = 3.24	m = 14.60 sd = 2.94
Anger Expression-In	m = 17.35 * sd = 4.62 n = 48	m = 16.65 sd = 4.74 n = 60

---

\* p < .05



RESERV,  $F(2, 147) = .023, p = .98$ , or QUANTGRP,  $F(2, 147) = .91, p = .41$ . In taking a close look at the means and standard deviations for the four individual groups, I found that there was little difference for controlling anger outwardly and inwardly for Indian people who had lower levels of blood quantum and lived on tribal lands compared to Indian people who had lower levels of blood quantum and never lived on tribal lands ( $23.60 > 22.68; 22.44 > 22.14$ , respectively). I found that Indian people with higher blood quantum levels who never lived on tribal lands tended to control their anger outwardly and inwardly more than Indian people with higher levels of blood quantum and who lived on tribal lands ( $23.82 > 23.24; 23.36 > 23.36$ , respectively). Hypothesis 1 (c) was not supported by this analysis. The means and standard deviations for anger control-out and anger control-in subscale scores by blood quantum and reservation status groups are shown in Table 8 below.

In Hypothesis 1 (ci), I stated that American Indian people who lived on tribal lands were likely to control their anger outwardly and inwardly more than American Indian who had not lived on tribal lands. In analyzing the 2 (RESERV) x (SCHOOL) MANOVA with ACO and ACI scores, I found no interaction effect for RESERV x SCHOOL,  $F(2, 146) = .56, p = .57$ , nor did I find any main effects for ACO and ACI by RESERV,  $F(2, 146) = .43, p = .65$ , or by SCHOOL,  $F(2, 146) = .46, p = .63$ . My examination of the individual group means and standard deviations revealed very little difference in the outward and inward control of anger for Indian people who had never lived on tribal lands compared to Indian people who had lived on tribal lands ( $23.68 > 22.90$ ). Additionally, very little difference was found for the outward and inward control

Table 8

Means and Standard Deviations for Anger Control-Out and Anger Control-In Subscale Scores by Blood Quantum Groups and Reservation Status Groups

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Reservation Status	Blood Quantum	
	Less than $\frac{3}{4}$	$\frac{3}{4}$ to Full (4/4)
<hr/>		
Never Lived on Indian Tribal Lands		
Anger Control-Out	m = 22.68	m = 23.82
	sd = 5.30	sd = 4.70
Anger Control-In	m = 22.14	m = 23.36
	sd = 5.37	sd = 5.38
	n = 44	n = 33
<hr/>		
Lived on Indian Tribal Lands		
Anger Control-Out	m = 23.60	m = 23.24
	sd = 5.12	sd = 4.85
Anger Control-In	m = 22.44	m = 23.26
	sd = 4.71	sd = 5.51
	n = 25	n = 50

---

of anger for Indian people who had higher levels of education and lived on tribal lands compared to Indian people who had lower levels of education and lived on tribal lands ( $23.48 > 22.87$ ;  $22.80 < 23.40$ , respectively). Hypothesis 1 (ci) was not supported by this analysis. The means and standard deviations for anger control-out and anger control-in subscale scores by educational level and reservation status groups are reported in Table 9 below.

In Hypothesis 1 (cii), I stated that American Indians with more education would control their anger outwardly and inwardly more than American Indians with less education. My review of the 2 (QUANTGRP) x 2 (SCHOOL) MANOVA with ACO and ACI scores indicated no interaction effect for QUANTGRP x SCHOOL,  $F(2, 162) = .004, p = 1.00$ . There was no main effect for ACO and ACI by QUANTGRP,  $F(2, 162) = .83, p = .44$ , or SCHOOL,  $F(2, 162) = .004, p = 1.00$ . In reviewing the four individual group means and standard deviations, I found that scores for all groups in all levels were very nearly matched. Hypothesis 1 (cii) was not supported. The means and standard deviations for anger control-out and anger control-in subscale scores by blood quantum and educational level groups are reported in Table 10 below.

In Hypothesis 1 (d), I further stated that American Indian people who never lived on tribal lands, had lower levels of education, and lower blood quantum levels would have higher scores on overall anger expression compared to American Indian people who lived on tribal lands, had higher levels of education, and higher blood quantum levels. In analyzing the 2 (QUANTGRP) x 2 (RESERV) ANOVA, I found no interaction effect for

Table 9

Means and Standard Deviations for Anger Control-Out and Anger Control-In

Subscale Scores by Educational Level Groups and Reservation Status Groups

---

Educational Level	Reservation Status	
	Never Lived on Indian Tribal Lands	Lived on Indian Tribal Lands
<hr/>		
High School or Lower		
Anger Control-Out	m = 23.68	m = 22.87
	sd = 5.46	sd = 4.66
Anger Control-In	m = 23.07	m = 23.40
	sd = 5.64	sd = 5.34
	n = 28	n = 15
<hr/>		
College or Higher		
Anger Control-Out	m = 22.90	m = 23.48
	sd = 4.89	sd = 5.00
Anger Control-In	m = 22.29	m = 22.88
	sd = 5.23	sd = 5.26
	n = 48	n = 60

---

Table 10

Means and Standard Deviations for Anger Control-Out and Anger Control-In

Subscale Scores by Blood Quantum Groups and Educational Level Groups

---

Educational Level	Blood Quantum	
	Less than $\frac{3}{4}$	$\frac{3}{4}$ to Full (4/4)
<hr/>		
High School or Lower		
Anger Control-Out	m = 23.19	m = 23.10
	sd = 5.64	sd = 5.30
Anger Control-In	m = 22.56	m = 22.12
	sd = 5.56	sd = 4.96
	n = 16	n = 59
<hr/>		
College or Higher		
Anger Control-Out	m = 23.25	m = 23.25
	sd = 5.07	sd = 4.69
Anger Control-In	m = 23.32	m = 23.03
	sd = 5.53	sd = 5.33
	n = 28	n = 64
<hr/>		

AXIND score by QUANTGRP x RESERV,  $F(1, 148) = .22, p = .64$ , nor did I find a main effect,  $F(1, 148) = .84, p = .36$ . This analysis did not support hypothesis 1 (d). A summary of the means and standard deviations for anger index scores by blood quantum and reservation status groups is shown in Table 11.

In analyzing the 2 (QUANTGRP) x 2 (SCHOOL) ANOVA with AXIND scores, I found no interaction effect for AXIND score by QUANTGRP x SCHOOL,  $F(1, 163) = .011, p = .92$ . I found no main effects for AXIND score by QUANTGRP,  $F(1, 163) = 2.41, p = .12$  or SCHOOL,  $F(1, 163) = .004, p = .95$ . This analysis did not support hypothesis 1 (d). A summary of the means and standard deviations for anger index scores by blood quantum and educational level groups is in Table 12 below.

An analysis of the 2 (RESERV) x 2 (SCHOOL) ANOVA with AXIND scores revealed no interaction effect for RESERV x SCHOOL,  $F(1, 147) = .04, p = .85$ . Neither did I find any significant main effects for AXIND scores by RESERV,  $F(1, 147) = 1.89, p = .17$ , or by SCHOOL,  $F(1, 147) = .11, p = .75$ . This analysis did not support hypothesis 1 (d). Table 13 provides a summary of the means and standard deviations for anger index scores by reservation status and educational level groups.

### Post-Colonial Stress Scales Analyses

In Hypothesis 2, I stated that American Indian people who did not live on reservations, had lower levels of education, and lower blood quantum levels would report more post-colonial stress (general distress and distrust of Whites) compared to Indian people who did live on reservations, had higher levels of education, and higher blood quantum levels. The 2 x 2 ANOVA conducted with the PCSSTOT scores by QUANTGRP and RESERV revealed no interaction effect for PCSSTOT scores by

QUANTGRP x RESERV,  $F(1, 148) = .74, p = .39$ . The analysis revealed a main effect for PCSSTOT scores by QUANTGRP,  $F(1, 148) = 6.76, p = .01$ , but no main effect was found for PCSSTOT scores by RESERV,  $F(1, 148) = 1.50, p = .22$ . The main effect suggests that American Indian people with lower levels of blood quantum reported more PCSS distress and distrust of Whites than American Indian people with higher levels of blood quantum. Hypothesis 2 was supported. Table 14 summarizes the means and standard deviations for the PCSSTOT scores by blood quantum and reservation status groups.

In reviewing the 2 x 2 ANOVA conducted with the PCSSTOT scores by QUANTGRP and SCHOOL, I found no interaction effect for PCSSTOT scores by QUANTGRP x SCHOOL,  $F(1, 163) = .022, p = .88$ . A significant main effect was found for PCSSTOT scores by QUANTGRP,  $F(1, 163) = 4.31, p = .04$ , but not for SCHOOL,  $F(1, 163) = .04, p = .85$ . The significant main effect suggested that American Indian people with lower levels of blood quantum reported more distress and distrust of Whites than American Indian people with higher levels of blood quantum. This analysis did support hypothesis 2. Table 15 summarizes the means and standard deviations for PCSSTOT scores by blood quantum and educational groups.

A review of the 2 x 2 ANOVA conducted with PCSSTOT scores by RESERV and SCHOOL, I found no interaction effect for PCSSTOT scores by RESERV x SCHOOL,  $F(1, 147) = .28, p = .60$ . I found no main effects for PCSSTOT scores by RESERV x SCHOOL when considered separately,  $F(1, 147) = .47, p = .50$ ,  $F(1, 147) = .05, p = .83$ , respectively. Hypothesis 2 was not supported. Table 16 provides summarizes the means and standard deviations for PCSSTOT by educational level and reservation status groups.

Table 11

Means and Standard Deviations for Anger Index (AXIND) Score by Blood Quantum

Groups and Reservation Status Groups

---

Reservation Status	Blood Quantum	
	Less than $\frac{3}{4}$	$\frac{3}{4}$ to Full (4/4)
<hr/>		
Never Lived on Indian Tribal Lands		
AXIND	m = 36.52	m = 34.06
	sd = 12.74	sd = 12.06
	n = 44	n = 33
<hr/>		
Lived on Indian Tribal Lands		
AXIND	m = 35.60	m = 31.16
	sd = 11.65	sd = 12.78
	n = 25	n = 50
<hr/>		



Table 12

Means and Standard Deviations for Anger Index (AXIND) Score by Blood Quantum

Groups and Educational Level Groups

---

Educational Level	Blood Quantum	
	Less than $\frac{3}{4}$	$\frac{3}{4}$ to Full (4/4)
<hr/>		
High School or Lower		
AXIND	m = 36.56	m = 33.29
	sd = 11.61	sd = 13.20
	n = 59	n = 64
<hr/>		
College or Higher		
AXIND	m = 36.66	m = 32.91
	sd = 12.32	sd = 13.20
	n = 59	n = 64
<hr/>		

Table 13

Means and Standard Deviations for Anger Index (AXIND) Score by Reservation

Status Groups and Educational Level Groups

---

Educational Level	Reservation Status	
	Never Lived on Indian Tribal Lands	Lived on Indian Tribal Lands
<hr/>		
High School or Lower		
AXIND	m = 35.36	m = 31.67
	sd = 11.81	sd = 10.92
	n = 28	n = 15
<hr/>		
College or Higher		
AXIND	m = 35.67	m = 32.88
	sd = 13.00	sd = 12.95
	n = 48	n = 60
<hr/>		

Table 14

Means and Standard Deviations for Post-Colonial Stress Total Scores by Blood Quantum

Groups and Reservation Status Groups

---

Reservation Status	Blood Quantum		
	Less than $\frac{3}{4}$	$\frac{3}{4}$ to Full (4/4)	
<hr/>			
Never Lived on Indian Tribal Lands			
PCSSTOT	m = 51.34 *	m = 47.76	
	sd =12.18	sd = 12.75	
	n = 44	n = 33	
<hr/>			
Lived on Indian Tribal Lands			
PCSSTOT	m = 55.64 *	m = 48.50	
	sd =13.37	sd = 11.42	
	n = 25	n = 50	

---

\* p < .05

Table 15

Means and Standard Deviations for Post-Colonial Stress Total Scores by Blood Quantum

Groups and Educational Level Groups

---

Educational Level	Blood Quantum	
	Less than $\frac{3}{4}$	$\frac{3}{4}$ to Full (4/4)
<hr/>		
High School or Lower		
PCSSTOT	m = 53.13 *	m = 48.18
	sd = 11.24	sd = 11.79
	n = 16	n = 28
<hr/>		
College or Higher		
PCSSTOT	m = 53.22 *	m = 48.94
	sd = 13.14	sd = 11.93
	n = 59	n = 64

---

\* p < .05

Table 16

Means and Standard Deviations for Post-Colonial Stress Total Scores by Educational

Level Groups and Reservation Status Groups

---

Educational Level	Reservation Status	
	Never Lived on Indian Tribal Lands	Lived on Indian Tribal Lands
<hr/>		
High School or Lower		
PCSSTOT	m = 48.61	m = 51.47
	sd =11.33	sd =12.21
	n= 28	n =15
<hr/>		
College or Higher		
PCSSTOT	m = 50.38	m = 50.73
	sd =13.26	sd =12.65
	n= 48	n =60

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## CHAPTER V

### DISCUSSION

My purpose in this study was to explore the relationships of educational level, reservation status, blood quantum (perceived as relevant for determining *Indianness* among various American Indian people) with post-colonial stress, and the experience and expression of anger among American Indian people. There were several important findings from this study that I will discuss in this chapter.

I found a significant interaction effect of blood quantum groups and reservation status for state and trait anger scores when these scores were considered together. The mean scores for trait anger (15.82, 16.64, 17.23, 17.92) are fairly high for this sample, but the average score for trait anger, in general, would need to reach 21 or higher to be considered clinically significant. On the other hand, the mean scores for state anger (16.58, 17.02, 18.09, 19.80) are high for this sample and 19 or higher is considered clinically significant. In the follow up univariate analyses, the interaction effect was only significant for state anger scores. State anger is an emotional state at a particular time and it is the intensity of this anger that is measured by the STAXI-2 (Spielberger et al., 1999). Examination of the state anger scores by blood quantum group and reservation status revealed that Indian people with lower blood quantum levels (less than 3/4) and who lived on tribal lands had, on average, the highest levels of state anger followed by Indian people with higher blood quantum levels (3/4 to full) who lived on tribal lands; Indian people with higher blood quantum levels (3/4 to full) who did not live on tribal

lands had the next highest average state anger followed by Indian people with lower blood quantum levels (less than 3/4) who did not live on tribal lands. Indian people with higher levels of blood quantum (3/4 to full) who lived on tribal lands had the lowest average state anger scores.

These findings may corroborate the Trimble et al. (1996) study wherein the researchers addressed the rejection of mixed heritage Indians by full-bloods. Many Indian people who are of mixed heritage (e.g., American Indian and white) are not considered ethnically pure and are not viewed characteristically Indian in terms of knowledge of traditional ways (Trimble et al., 1996). It may be that Indian people living out of an environment that runs counter to their perceived comfort zone, will be angrier possibly out of frustration in one's inability to "fit in", understand the language, etc. When a person appraises his or her relationship to the environment in a particular way, then a specific emotion which is tied to that appraisal pattern always follows (Lazarus, 1994).

In addition, these findings may corroborate internal racism as a secondary effect of post-colonial stress syndrome discussed in the seminal writings by Duran and Duran (1995). In this piece of literature, Duran (1995) references his earlier research regarding internalized hatred (self-hatred). He reported that when self-hatred is externalized, violence may occur in American Indian communities and much of this violence can be interpreted as a venting of anger toward someone that is seen as helpless (or different) by a perpetrator that has internalized this self-hatred. In reality, the root of the anger is toward the oppressor and the perpetrator is attacking a projection of him or herself

experiencing oppression at the hands of the dominant society and a vicious cycle is created.

The findings also imply that Indian people with more blood quantum (3/4 to full) are more likely to be angry at a given moment if they did not live on tribal lands compared to if they did live on tribal lands. It is possible that this group of Indian people is more apt to hear racial slurs and derogatory comments directed toward their race than if they were living on tribal lands and they may have a tendency to feelings of anger. It is also possible that this group of Indian people has a very close connection with the traditional culture of their particular tribe and they may be angered at any given time that they feel they are not accepted for their manner of being when living outside of tribal lands. It may also be possible that this group of Indian people is very proud of their heritage and the hurt they feel at any given moment (e.g., their children in public schools being made to celebrate the taking of their lands) may actually be expressed as anger.

To exemplify this statement, on a yearly basis, in the months of April and October, American Indian children in Oklahoma public schools are exposed to the celebration of their ancestral lands being taken from them. In general, teachers seem totally insensitive to the feelings of Indian children in this regard. U.S. history continues to be taught in our nation's schools in a biased manner against American Indians. These are examples of insensitivities acted out toward this race at the level of society that could change these situations to make a positive impact on American Indian children.

American Indians are the constant target of negativity from politicians regarding taxes, revenue from gaming, tobacco sales, and so forth. This negativity is expounded by the media, both written and oral. This, in turn, creates a cycle of prejudiced slurs,



discriminatory statements and acts by misinformed members of the White society directed toward the American Indian population. This is especially so in the states with the largest and most diverse American Indian populations. The majority of these states receive a large amount of federal funding as a result of this population. A large portion of this funding (e.g., Impact Aid, JOM, etc.) supports the public schools attended by Indian children. In addition, many of the tribes remit generous portions of their revenue from gaming to the states for the use of public schools in their tribal jurisdiction, for public bridges, roads and highways; hence the hurt and anger Indian people feel in hearing the negative and derogatory remarks made toward their race.

These examples may corroborate the findings Whitbeck et al. (2004) reported about the development of their instruments for measuring historical trauma. The researchers write that they had a sense that historical losses experienced by American Indian people were not confined to any one single catastrophic period, but rather they are ongoing and ever present in daily reminders of loss. Whitbeck et al. (2004) believe that these daily reminders partnered with persistent discrimination are tantamount to the historical trauma American Indian people experienced.

This anger may very well be a result of experienced racism and discrimination as addressed in the Whitbeck et al. (2004) study and previous studies (Brave Heart & De Bruyn, 1998; Chester et al, 1999; Evaneshko, 1999; Henderson et al., 1998; Herman-Stahl et al., 2003; King, 1999; Trimble et al., 1996). Whitbeck et al. (2004, p. 409) stated “After enduring a long history of prejudice and indignities, American Indians remain the only major ethnic group that is still the subject of national and local team mascots, sports chants, stereotypical statuary and widely accepted derogatory language and place names

(e.g., squaw).” Trimble et al. (1996) addressed the constant harassment of Indian people fueled by bigotry and racism as possible causes for an increase in incidence of mental health problems. King (1999) learned through his needs assessment survey of the mental health needs of the American Indian population in Denver, Colorado that racial prejudice was reported as a current problem contributing to mental health issues by 26% of those sampled (374) adults in the Denver area. Chester et al. (1999) learned through their mental health needs assessment of off-reservation Indians in Northern Arizona that 55% of those sampled (235) reported that they have experienced discrimination because of ethnicity. Evaneshko (1999) found in her mental health needs assessment of Tuscon, Arizona urban American Indian population that 14% of those sampled (174) reported a belief that cultural disruption at the hands of the dominant white culture has contributed to their distress. Baron et al. (1999) found in their mental health needs assessment with American Indians in the Butte, Montana area that approximately 55% of the sample (74) surveyed perceived racial discrimination as a problem leading to mental health issues for this population.

In my analysis of anger expression-out and anger expression-in subscale scores by blood quantum by education level groups, there was a trend for anger expression-out and anger expression-in by blood quantum group. The anger expression-out subscale assesses the expression of anger (aggression) toward other persons or objects in the environment and the anger expression-in subscale assesses the holding in or suppression of angry feelings. Follow-up univariate analyses revealed a significant main effect for anger expression-in scores by blood quantum group and not for anger expression-out

scores. Indian people with lower levels of blood quantum were more likely to suppress their anger compared to more Indian people higher levels of blood quantum.

According to cognitive dissonance theory, whenever a person becomes aware of the fact they carry within them a cognition that is inconsistent with other cognitions they may experience pressure to reduce the inconsistency (dissonance). It may very well be that Indian people with less than  $\frac{3}{4}$  blood quantum experience higher levels of anger suppression because they've become aware of the inconsistency of the angry feelings with the American Indian value of tranquility (La Fromboise et al., 1990), psychological worldview of interconnectedness (Duran, 2000), and balanced life. In order to reduce cognitive dissonance, they may decide to make a more determined effort to suppress their anger.

In my analysis of anger expression-out and anger expression-in with reservation status by educational level, there was a significant main effect for anger expression-out and anger expression-in scores by reservation status. However, follow-up univariate analyses revealed that this main effect was only significant for anger expression-in scores. Indian people who had never lived on Indian tribal lands suppressed their anger more than Indian people who had lived on Indian tribal lands. This anger suppression may be a coping skill, a survival tactic, or a respectful acknowledgement of American Indian values.

This finding appears to be consistent with the Brave Heart and De Bruyn (1998) theory of historical and unresolved grief of American Indian people. In their study, they compared the American Indian peoples' experienced historical traumas and resulting psychological repression to that of the Jewish Holocaust survivors. They determined that

many Jewish people have not found an effective way of coping and most have expressed a great need to control (suppress) their emotions because they fear that, if given free reign, their emotions might drive them insane. These survivors feared the uncontrollable rage locked within them. They were fearful that they could be consumed by their thoughts of avenging the deaths of their loved ones; therefore, making them not much better than their oppressors. It is possible the Holocaust survivors are able to cope by turning to the strength they find in their faith and families. Generally, they seem very connected to their religious rituals and they seem to have a tendency to support each other morally, emotionally, and financially. They appear to be a very close-knit community which may derive from a wish to provide a secure world for their loved ones.

Post-colonial stress refers to the psychological distress manifested by images of collective traumas experienced by American Indian people at the hands of the U.S. Government and continues today via acts of discrimination and racism toward them by some members of the society of White people. It was measured by two factors: post-colonial distress and distrust of whites. There were significant differences in post-colonial distress by blood quantum groups and reservation status groups in this sample. Indian people with less than  $\frac{3}{4}$  blood quantum were more distrustful of whites compared to those with higher levels of blood quantum ( $\frac{3}{4}$  to full-blood) regardless if they lived on or never lived on Indian tribal lands. Indian people who never lived on tribal lands tended to have higher post-colonial stress and higher distrust of White people compared to those who did live on tribal lands.

These findings appear to corroborate the Herman-Stahl et al. (2003) results regarding American Indian biculturalism. Biculturalism was defined as the extent to

which one is oriented to both ones' own culture and the majority culture. They found that biculturalism is relevant for substance use behavior of American Indian people.

Bicultural Indian individuals tend to drink more and are more likely to have an alcohol use disorder. Biculturalism may be adaptive for people living in integrated communities, but may be less effective for people living in more ethnically homogenous communities such as reservations. For American Indian people living on reservations, biculturalism may lead to an increase in acculturative stress in attempting to achieve competence and success in both the American Indian and dominant society.

The results of this study did support the hypothesis that American Indians who lived on reservations or tribal lands and with higher levels of blood quantum (3/4 to full-blood) would experience and express less anger and less post-colonial stress than Indian people with lower levels of blood quantum (less than 3/4) who lived on reservations or tribal lands. The group with lower levels of blood quantum (less than 3/4) who lived on reservations or tribal lands had a tendency to experience more state anger (in the moment anger) at the time the questionnaires were administered. This may be relevant as several of the respondents expressed discord in their comments written on some of the protocols. Several of the comments were negative in regard to the types of questions asked about levels of perceived Indianness.

The results of the study supported the hypothesis that American Indians not living on a reservation and having lower levels of blood quantum (less than 3/4) would experience and express more anger and more post-colonial stress than Indian people with higher levels of blood quantum (3/4 to full) and not living on a reservation or tribal lands. The group of Indian people with higher levels of blood quantum (3/4 to full) who did not

live on a reservation or tribal lands actually experienced and expressed more “in the moment” (state anger) than the group with lower levels of blood quantum (less than  $\frac{3}{4}$ ) who did not live on a reservation or tribal lands. The group of Indian people with lower levels of blood quantum (less than  $\frac{3}{4}$ ) who never lived on tribal lands tended to experience higher post-colonial stress and higher distrust of White people than the group with higher levels of blood quantum ( $\frac{3}{4}$  to full).

Interestingly, this is, most likely, the population of American Indian people most apt to be seen by clinicians. This fact should encourage clinicians to develop a willingness to adapt their conventional treatment models in order to meet the unique needs of this group of American Indian people. The Post-Colonial Stress Scale is a good indication of a willingness to adapt conventional modalities of assessment. To expand on the use of this instrument, a clinician might conduct a thorough review and assessment of individual responses in developing a feasible treatment plan with any one member of this group.

The hypothesis regarding educational level was found not related to anger or post-colonial distress. The findings indicated that no matter the educational level attained American Indian people tended to experience high levels of post-colonial distress and high levels of distrust of White people. It is important to note that although significance was not reached, my examination of the means and standard deviations (see Table 5, p. 60) indicated American Indian people with higher levels of blood quantum regardless of educational level attained tended to have more state and trait anger. This may be a construct for further study.

Additionally, the overall findings may indicate that state anger while significant may not be theoretically significant. Fundamentally, the theory upon which this study is based incorporates both state and trait anger regarding the intergenerational post-colonial stress of American Indian people: (1) state anger as defined is a subjective or situational feeling that fluctuates; (2) trait anger, on the other hand, as defined is a stable personality dimension of anger proneness to experience anger. It seems feasible that Indian people feeling an undercurrent of consistent anger regarding historical trauma and loss would be tantamount to trait anger. This, too, may be a construct for further study.

#### Limitations of the Study

It is important to address the methodological limitations of this study. First, the number of different tribes represented was somewhat small; therefore, the results may not generalize to tribes not represented. This sample was also small compared to the fact that there are more than 500 Indian tribes in the nation (U.S. Census, 2000). Because of the wide diversity of tribes, future researchers may want to focus on specific tribal culture and its impact on anger or post-colonial stress. Considering these limitations one requires caution in making any inferences from the findings.

A second limitation of the study relates to the inherent problem of verified blood quantum. As there is an ever-increasing issue of intertribal marriage, documentation of full-blood quantum becomes difficult to verify. In most cases, the off-spring of an intertribal marriage may only be enrolled in one tribe as most tribes do not allow members to enroll in more than one tribe. Because many American Indian people are enrolled in tribal membership as near to birth as is feasible, many may actually reach adult status believing their degree of Indian blood to be  $\frac{1}{2}$  or less. Others in this type situation, grow

to adult status fully aware of their full-blood status, but do not have the official capacity to prove such. The reality of either situation is that the individuals may be full-blood, but considered ½ degree blood quantum by default. Therefore, inferences regarding blood quantum must be made with caution.

A third limitation to the study relates to the demographic sheet utilized for the original study and from which the independent variables were chosen. The collapsing of groups to counter the unbalance of numbers within cells may have biased the results in regard to reservation status. In addition, the actual designation of reservation status may have been confounded given that tribal lands incorporate more than just reservation lands. For example, in Oklahoma, rural could be considered tribal lands or not and reservation is, generally, accepted as tribal land. In Oklahoma there is only one reservation (Osage), but there are several counties that are considered under tribal jurisdiction. If an American Indian person lives within these tribal boundaries, they may have various sovereign rights in accordance with the laws of the tribe of that particular area.

There is also the issue of *checkerboarding*, even on federal reservations. Checkerboarding relates to the fact that, over the years, Congress has given non-Indians the right to own land on Indian reservations and today the majority of Indian reservations have parcels of land owned by non-Indians scattered throughout the reservations. The term, checkerboard, has come into recent use to describe the haphazard way of determining Indian land versus non-Indian land (Pevar, 2002). “We have feed lands. We have allotted lands. We have trust lands. We have tribal lands; it’s called checkerboarding....” (U.S. Bureau of Census focus group participant, September 23-25,



2003). Although many of the participants actually do or have lived on reservations, a better idea of reservation status might have been generated had the demographic sheet been better stratified. Caution is advised in making any inferences in this regard.

A fourth limitation to the study relates to the self-report nature of all data collected across the primary independent variables. This may have led to the measures sharing overlapping method variance and may not have allowed for the detection of independent relationships of key variables with the outcomes; e.g., educational level. This may also account for the non-significant findings regarding trait anger. It may be unlikely that shared method variance posed a significant problem because several non-significant relationships were observed among the measures. Regardless, interpretations of the findings should be made with great caution.

A fifth limitation to the study is the reliability of the Anger Expression-Out (AXO) subscale. The alpha coefficient for the AXO subscale was low ( $\alpha=.55$ ), deeming it necessary to exercise caution when interpreting the results of hypotheses related to this subscale.

#### Areas for Further Research

A fertile area of research might be to utilize the Post-Colonial Stress Scale (Winterowd & Miville., 2000), The Historical Loss Scale, and The Historical Loss Associated Symptoms Scale (Whitbeck et al., 2004) in a combined study as significant findings (i.e., perceptions of historical loss leading to emotional responses associated with anger; level of blood quantum associated with level of anger and PCS) have resulted in research with these instruments. Future researchers may want to consider diversity of tribal culture and its impact on anger and post-colonial stress

Although no significant findings resulted regarding educational level, this, too, is a construct to be studied regarding historical loss and post-colonial stress. An analysis of the findings indicated that regardless of the educational level attained, American Indian people tended to experience high post-colonial distress and had a high distrust of White people whether they lived on or did not live on tribal lands.

Future researchers might consider adding a qualitative aspect to similar studies. A well developed qualitative study may provide information that may lead to unequivocal answers from American Indian people. These straightforward answers may help fill this gap in research and may help lead to healing for the wounded souls of American Indian people.

#### Implications for Practice

Trimble et al. (1996) argued that understanding the American Indian client's ethnic identity and level of acculturation can increase the effectiveness of treatment. Regardless what instrument of measurement a clinician might use to assess level of acculturation, it is important that some time be taken to determine this aspect of an American Indian person's life and how this might affect their day-to-day living either positively or negatively. As previously stated, utilizing the Post-Colonial Stress Scale (Winterowd & Miville, 2000) is a good indication of a willingness to adapt modalities of assessment and treatment with the American Indian population. Use of this instrument will allow a clinician to determine the level of any PCS or distrust a client might be experiencing. Exploring aspects of the client's American Indian identity should equip the clinician with an understanding of the context in which the client lives and should help lead the client-therapist relationship to a viable state of trust and mutual respect.

A valid measurement of post-colonial stress may be helpful to counselors who work among large populations of American Indian people such as reservations. Counselors within the reservation schools might utilize the instrument or similar ones to get students to think about emotions and help them create an outlet for those emotions. These instruments may act as a pathway to help the students open up to being able to identify, dissect, and rename their stress and/or anger in a caring and safe environment.

Interventions tied to the results from the measurements such as these could be a helpful way to possibly prevent any future atrocities such as that committed on March 21, 2005 at the high school on the Red Lake Indian Reservation in Minnesota. A statement made in regard to this incident indicated that young Indian people do not have a voice as they are ‘to be seen and not heard’ sounded quite familiar (Lennard, 2005).

The above referenced statement brought to mind the reality of biculturalism within traditional American Indian communities. Barkhausen (2005) wrote, “I think his (Weise) comments demonstrate his disdain for being Indian despite his arguments in favor of racial purity among the tribe...he argues he has blood from more “pure” European races...maybe Weise thought Indian was the last thing he wanted to be. This attitude is not uncommon, nor is it new. It began with the boarding school generation of the late 1800’s...They (Indian children) were made to believe that being Indian was a bad thing and by absorbing into mainstream American (white) society was the only way they could cleanse themselves of the horrible reality that they had been born Indian...When they tried to find work in cities they were not accepted, because no matter how brainwashed into thinking they could be white, they were still just “dirty Indians” in the minds of white Americans. Some tried going home to their reservations, but they’d lost touch with

their language and culture and were not accepted there either. They turned to alcohol and often raised their children with the same psychological and physical abuse they experienced in the boarding schools...I think the only remedy for the self-hatred that exists among so many American Indian youth is the resurrection and revitalization of Indigenous traditions...I can only wonder how things might have turned out differently if Weise had a traditional Ojibwe upbringing, was well-acquainted with his native tongue and traditions, and belonged to one of the many societies that traditional Ojibwes have for young men to give them a proper understanding of their place and value within their society.”

Jeff Weise, the young man who committed this atrocity, was bi-racial (American Indian/White), but identified more with his American Indian heritage. Regrettably, he was “marginalized” by members of his own race inclusive of nuclear family, extended family, and tribal peers. Paradoxically, his most vital place of acceptance was a neo-Nazi internet site wherein he was given free reign to espouse racial purity amongst the American Indians.

An intervention similar to the Educational Responsibility model (Schneider, 1996) based on reality therapy, but modified to the American Indian child/adolescent population might be very useful in allowing them to have a voice that will be heard and within the confines of a safe environment. This intervention and/or classroom management tool could help the students learn social skills that may be useful to them both on and off the reservation. It could help them learn to brainstorm ideas for classroom rules of conduct, talk about pressing social issues, talk about how it feels to be marginalized, talk about

what the differences in blood quantum might mean, and help them work together toward solutions to these and other issues in a child or adolescent's life.

In addition, the measurement(s) could be utilized with American Indian parents, grandparents, and other adults not only for the reasons previously stated, but to help them, through a respectful manner toward tribal values, realize that these feelings may not totally disappear, but they can learn to circumvent them. Much like the interventions utilized with the students, similar interventions could be developed for adults.

### Summary

To summarize, the concepts of soul wound, post-colonial stress disorder, intergenerational trauma, intergenerational oppression, historical unresolved grief, historical trauma, historical loss and/or American Indian Holocaust all provide a label for the long history of inhumane atrocities, indignities, discrimination and prejudice that American Indian people have endured. To view these concepts as if they are past history would be another act of indignation directed toward American Indian people. For professionals in the field of psychology to acknowledge that these experiences are ongoing and ever present in the lives of American Indian people is the first step on a long journey to healing.

Although the current state of knowledge as well as the diversity among American Indians (culture, language, blood quantum, reservation status, level of education) preclude a standardized approach to assessment and treatment, additional steps have been taken by members of the profession in the development of instrument measures that actually connect symptoms and feelings to the historical and ongoing trauma or losses. Hopefully, more steps will be taken with immediate and more extensive research being

conducted in this area of study. Eventually, adoption of these instruments by clinicians who are willing to adapt their assessment and treatment modalities to accommodate this population will be where the journey of two roads becomes the journey of one road.

## REFERENCES

- Aragona, J. C. (1983). Physical child abuse: An interactional analysis. (Doctoral dissertation, University of South Florida, Tampa, 1983). *Dissertation Abstracts International*, 1225B.
- Averill, J. R. (1982). *Anger and aggression: An essay on emotion*. New York:Springer-Verlag.
- Averill, J. R., Catlin, G., & Chon, K. K. (1990). *Rules of hope*. New York: Springer-Verlag.
- Barkhusen, Mathew (2005, March 24). Tragedy at Red Lake: A history of self-hate among Indian youth. *SNAG Magazine*. Retrieved April 19, 2005 from <http://www.alternet.org/wiretap/21594/>
- Barron, L., Oge, L., & Markovick, J. (1999). North American Indian alliance mental health needs assessment report. *American Indian and Alaska Native Mental Health Research:Denver*, 8 (3), 13-25.
- Beals, J., Manson, S. M., Shore, J. H. Friedman, M., Ashcraft, M. Fairbank, J. A., & Schlenger, W. E. (2002). The prevalence of post-traumatic stress disorder among American Indian Vietnam veterans: Disparities and context. *Journal of Traumatic Stress*, 15 (2), 89-98.
- Benedict, R. (1934). *Patterns of culture*. Boston, MA:Houghton Mifflin.

- Berryhill, E. (1998). Examining the life perspective scale: An investigation of an American Indian acculturation instrument. *Dissertation Abstracts International-58* (12), 6800. (UMI No. 9817721).
- Brave Heart, M., & De Bruyn, L. M. (1998). The American Indian holocaust: Healing historical unresolved grief. *American Indian and Alaska Native Mental Health Research: Denver*, 8 (2), 56-79.
- Briggs, J.L. (1970). *Never in anger: Portrait of an Eskimo family*. Cambridge, MA:Harvard University Press.
- Burris, L. J. (2001). The sociohistorical meaning of anger for elders of an American Indian tribe. *Dissertation Abstracts International-A*, 62 (08), 2891. (UMI No. 3021608).
- Chester, B. Mahalish, P., & Davis, J. (1999). Mental health needs assessment of off-reservation American Indian people in Northern Arizona. *Amerian Indian and Alaska Native Mental Health Research: Denver*, 8 (3), 25-41.
- Choney, S., Berryhill-Paapke, E., & Robbins, R. (1995). The acculturation of American Indians: Developing frameworks for research and practice. In J. Ponterotto, J. Casas, L. Suzuki, & C. Alexander (Eds.), *Handbook of multicultural counseling* (pp.73-92). Thousand Oaks, CA: Sage Publications Inc.
- Debo, A. (1941/1989). *The road to disappearance: A history of the Creek Indians* (6<sup>th</sup> ed.). Norman, OK: University of Oklahoma Press.



- Deffenbacher, J. L. (1992). Trait anger: Theory, findings, and implications. In C. D. Spielberger, & J. N. Butcher (Eds.). *Advances in Personality Assessment* (pp. 177-201). Hillsdale, N.J: Lawrence Erlbaum Associates.
- Deffenbacher, J. L., Oetting, E. R., Lynch, R. S., & Morris, C. D. (1996). The expression of anger and its consequences. *Behaviour Research and Therapy*, 34 (7), 575-590.
- Deffenbacher, J. L., & Swaim, R. C. (1999). Anger expression in Mexican-American and white non-Hispanic adolescents. *Journal of Counseling Psychology*, 46 (1), 61-69.
- Duran, E., & Duran, B. (1995). *Native American post-colonial psychology*. Albany, NY: State University of New York Press.
- Duran, E. (2000). *Buddha in redface* (3<sup>rd</sup> ed.). New York, Lincoln, Shanghai: Writers Club Press.
- Evaneshko, V. (1999). Mental health needs assessment of Tucson's urban Native American population. *American Indian and Alaska Native Mental Health Research: Denver*, 8 (3), 41-62.
- Henderson, E., Stephen, J. D., Kunitz, J., & Gabriel, R. (1998). Boarding and public schools: Navajo educational attainment, conduct disorder, and alcohol dependency. *American Indian and Alaska Native Mental Health Research: Denver*, 8 (2), 24-46.
- Herman-Stahl, M., Spencer, D. L., & Duncan, J.E. (2003). The implications of cultural orientation for substance use among American Indians. *The American Indian and Alaska Native Mental Health Research: Journal of the National Center*, 11 (1), 46-66.

- Jones, M. C., Dauphinais, P., Sack, W. H. & Somervell, P. D. (1997). Trauma-related symptomatology among American Indian adolescents. *Journal of Traumatic Stress*, 10 (2), 163-174.
- Josephy, A. M., Jr. (1968). *The Indian Heritage of America*. New York: Alfred A. Knopf.
- King, J. (1999). Denver American Indian mental health needs survey. *American Indian and Alaska Native Mental Health Research: Denver*, 8 (3), 1-12.
- La Fromboise, T., Trimble, J., & Mohatt, G. (1990). Counseling intervention and the American Indian tradition: An investigative approach. *Counseling Psychologist*, 18(4), 628-654.
- Lazarus, R. S. (1991 b). Progress on a cognitive-motivational-relational theory of emotion. *American Psychologist*, 46, 819-34.
- Lazarus, R. S. (1993). From psychological stress to the emotions: A history of changing outlooks. *Annual Review of Psychology*, 44, 1-21.
- Lazarus, R. S. (1994). Universal antecedents of the emotions. In P. Ekman, & R. J. Davidson (Eds.), *The nature of emotion: Fundamental questions* (pp. 163-171). New York, NY: Oxford University Press.
- Lazarus, R. S. (2000). Toward better research on stress and coping. *American Psychologist*, 55, 665-673.
- Leighton, D., & Klucholn, C. (1947). *Children of the people*. Cambridge, MA: Harvard University Press.
- Lennard, J. (2005, March 22). Ten dead in US school shooting. *Guardian Unlimited*. Retrieved April 17, 2005, from <http://www.guardian.co.uk/usa/story/0,12271,1443324,00.html>

- Marsella, A. J. & Yamada, A. M. (2000). Culture and mental health: An introduction and overview of foundations, concepts, and issues. In I. Cuellar, & F. A. Paniagua (Eds.), *Handbook of multicultural mental health* (pp. 3-24). San Diego, CA:Academic Press.
- McKay, M., & Rogers, P. (2000). *The anger control workbook*. New York, NY:MJF Books.
- Pape, N.E. (1986). *Emotional reactions and anger coping strategies of anger suppression and expression*. (Doctoral dissertation, University of South Florida, Tampa).
- Pevar, S. (2002). *The rights of Indians and tribes (3<sup>rd</sup> ed.)*. Carbondale,IL: Southern Illinois University Press.
- Pinchette, E. F., Berven, N. L., Menz, F. E., & La Fromboise, T. D. (1997). Effects of cultural identification and disability status on perceived community rehabilitation needs of American Indians. *The Journal of Rehabilitation*, 63 (4), 38-45.
- Schneider, E. (1996). Giving students a voice in the classroom. *Educational Leadership: Journal of the Department of Supervision and Curriculum Development, N.E.A.*, 54 (1,) 22-26.
- Shore, J. H., & Manson, S. M. (1981). Cross-cultural studies of depression among American Indians and Alaska Natives. *White Cloud Journal*, 2 (2), 5-12.
- Snipp, C.M. (1996). State institutions and social policy. In S. Pedraza, & R. G. Rumbaut (Eds.). *Origins and destinies: Immigration, race, and ethnicity in America* (pp. 390-403). Belmont, CA:Wadsworth.
- Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., Yoshinobu, L., Gibb, J., Langelle, C., & Harney, P. (1991). The will and the

- ways: Development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology*, 60 (4), 570-585.
- Snyder, C. R., Sympson, S. C., Ybasco, F. C., Borders, T. F., Babyak, M. A., & Higgins, R. L. (1996). Development and validation of the state hope scale. *Journal of Personality and Social Psychology*, 70 (2), 321-335.
- Spielberger, C. D., & Gorsuch, R. L. (1966). The development of the state-trait anxiety inventory. In C. D. Spielberger, & R. L. Gorsuch (Eds.), *Mediating processes in verbal conditioning*. (Final report to the National Institute of Health, U.S. Public Health Service on Grants MH-7229, MH-7446, and HD-947). Tampa: University of South Florida.
- Spielberger, C.D. (1980). *Preliminary manual for the state-trait anger scale (STAS)*. Tampa, FL: University of South Florida, Human Resources Institute.
- Spielberger, C. D., Jacobs, G. A., Russell, S., & Crane, R. S. (1983). Assessment of danger: The state-trait anger scale. In J. N. Butcher & C. D. Spielberger (Eds.), *Advances in personality assessment* (pp. 112-134). Hillside, NJ: Erlbaum.
- Spielberger, C. D. (1988). *State-trait anger expression inventory*. Odessa, FL: Psychological Assessment Resources.
- Spielberger, C. D., Reheiser, E. C., & Sydeman, S.J. (1995). Measuring the experience, expression, and control of anger. In H. Kassinove (Ed.). *Anger disorders: Definitions, diagnosis, and treatment* (pp. 49-76). Washington, DC: Taylor & Francis.
- Spielberger, C. D. (1999). *Manual for the state-trait anger expression inventory-2*. Odessa, FL: Psychological Assessment Resources.

- Spielberger, C. D., Sydeman, S. J., Owen, A. E., & Marsh, B. J. (1999). Measuring anxiety and anger with the state-trait anxiety inventory (STAI) and the state-trait anger expression inventory (STAI). In M.E. Maruish (Ed.). *The use of psychological testing for treatment planning and outcomes assessment* (2<sup>nd</sup> ed., pp. 993-1021). Mahwah: Lawrence Erlbaum Associates.
- Spindler, G., & Spindler, L. (1971). *Dreamers without power: The Menomini Indians*. New York: Holt, Rinehart, and Winston.
- Stoner, S. B. (1988). Undergraduate marijuana use and anger. *Journal of Psychology*, 122, 343-347.
- Sue, D. W., & Sue, D. (1999). *Counseling the culturally different: Theory and practice*. New York: Wiley & Sons.
- Tanaka-Matsumi, J., Seiden, D. Y., & Lam, K. N. (1996). The culturally informed functional assessment (CIFA) interview: A strategy for cross-cultural behavioral practice. *Cognitive and Behavioral Practice*, 3, 215-234.
- Trimble, J. E., Fleming, C. M. Beauvais, F., & Jumper-Thurman, P. (1996). Essential cultural and social strategies for counseling Native American Indians. In Pedersen, P. B., Draguns, J. G., Walter, J. L., & J. E. Trimble (Eds.), *Counseling across cultures* (pp. 177-209). Thousand Oaks, CA: Sage.
- Trimble, J. E., & Bagwell, W. M. (Eds.) (1995). *North American Indians and Alaska Natives: Abstracts of psychological and behavioral literature, 1967-1994* (Bibliographies in psychology, no. 15). Washington, DC: American Psychological Association.

- Trimble, J. E. (1981). Values differentials and their importance in counseling American Indians. In P. Pedersen, J. Draguns, W. Lonner, & J. Trimble (Eds.). *Counseling Across Cultures* (Revised and Expanded Edition, pp. 203-226) Honolulu, HI: University Press of Hawaii.
- U. S. Bureau of Census (2000). *American Indians and Alaska Natives statistics by social and economic factors: 2000 census*. Washington, DC:U. S. Government Printing Office.
- Utter, J. (1993). *American Indians: Answers to today's questions*. Lake Ann, MI:National Woodlands.
- Whitbeck, L. B., Adams, G. W., Hoyt, D. R., and Chen, X. (2004). Conceptualizing and measuring historical trauma among American Indian people. *American Journal of Community Counseling*, 33 (3/4), 119-130.
- Whitbeck, L. R., Chen, X, Hoyt, D. R., and Adams, G. W. (2004). Discrimination, historical loss and enculturation: Culturally specific risk and resiliency factors for alcohol abuse among American Indians. *Journal of Studies on Alcohol*, 65, 409-418.
- Willis, D. & Bigfoot, D. (2003). On native soil: The forgotten race: American Indian. In J. Robinson, & L. Jones (Eds.), *Diversity in human interaction: The tapestry of America* (pp. 77-91). New York: Oxford University Press.
- Winterowd, C., & Miville, M. (2000). *Post-Colonial Stress Scale/Acculturation Behavior Scale*. Stillwater, OK:Oklahoma State University.
- Winterowd, C., Miville, M., Willmon, S., Dudley, A., Schultz, L., Sheader-Wood, J., Warner, L., Big Foot, B., & Cannon, A. (2001, August). *Anger, acculturation,*

*post- colonial stress, and hope among American Indian peoples.* Poster session presented at the 109<sup>th</sup> annual meeting of the American Psychological Association, San Francisco, CA.

Young, T. J. (1991). Locus of control, depression, and anger among Native Americans. *Journal of Social Psychology*, 131(4), 583-584.

Zvolensky, M. J., McNeil, D. W., Porter, C. A., & Stewart, S. H. (2001). Assessment of anxiety sensitivity in young American Indians and Alaska Natives. *Behaviour Research and Therapy*, 39 (4), 477-493.

APPENDIX A

SCRIPT



## Script

You are invited to participate in a research study exploring culture and anger issues among American Indian/Native American peoples. This research will help us gain a better understanding of Indian peoples in hopes of providing better services.

Participation would involve completing three questionnaires related to culture, anger, hope, and stress. What you share is confidential. In fact, you will not write your name on any of the questionnaires, so there is no way to track your answers to your identity. Whether you participate or not in this study will not affect the services you receive through Indian Health Services.

APPENDIX B  
CONSENT FORM

### INFORMED CONSENT FORM

You are invited to participate in a research study exploring cultural and anger issues among American Indian/Native American peoples. Participation in this study would involve completing three questionnaires related to culture and emotions such as anger, hope, and stress.

We recognize there are diversity of experiences in cultures of American Indian people. You may find that some of the questions in this study are general in nature and not culture-specific—that is, it may not apply to a particular tribe/nation or region. We don't intend to offend you by the nature of the questions in this study. But we believe that answering them will provide a better understanding of American Indian peoples in hopes of providing better services.

You may also find that some of the questions are personal and sensitive in nature. Your participation in this study is voluntary, there is no penalty for refusal to participate, and you are free to withdraw from this study at any time. You may also choose not to respond to any question. This study is in no way affiliated with Indian Health Services. Your participation in this study will not affect your services at Indian Health Services, and no one will know how you answered the questions in this study.

Your confidentiality will be strictly maintained. Please DO NOT write your name on any of the questionnaires. This consent form and the questionnaires will be gathered separately. The questionnaires will be collected in anonymous envelopes to ensure your privacy.

If you have questions about this research study, you can contact Dr. Carrie Winterowd or Dr. Marie Miville at 434 Willard Hall, Oklahoma State University, Stillwater, OK 74074, (405) 744-6040. You may also contact Sharon Bacher, IRB Executive Secretary, 202 Whitehurst Hall, Oklahoma State University, Stillwater, OK 74078, (405) 744-5700.

I have read and fully understand the consent form. I sign it freely and voluntarily.

Signed: \_\_\_\_\_ Date: \_\_\_\_\_

APPENDIX C  
DEMOGRAPHIC SHEET  
POST-COLONIAL STRESS SCALE

NOT FOR DISTRIBUTION OR PUBLICATION

(Permission granted by authors for insertion into the Schultz dissertation)

Page 1

ID # \_\_\_\_\_

Directions: Please answer each question by filling in the blank, checking the blank, or circling the number that best describes you.

- 1) How old are you? Age \_\_\_\_\_
- 2) Gender:  Female  Male
- 3) What Native American Indian tribe (or tribes) are you from? (please list all)  
\_\_\_\_\_
- 4) Your degree of Indian blood:  
 less than 1/16  1/16  1/8  1/4  1/2  3/4  4/4
- 5) Where have you lived? (check all that apply)  urban  rural  reservation (tribal area)
- 6) How many years of school have you completed?  
 a) 1-6 years (elementary school)  
 b) 6-12 years (junior high and/or high school)  
 c) 12-16 years (associate/technical school or college)  
 d) 17 or more years (graduate school)
- 7) What is your present occupation? \_\_\_\_\_
- 8) Are you:  a) Single  
 b) Partnered/Common Law  
 c) Married  
 d) Separated  
 e) Divorced  
 f) Widowed
- 9) How many brothers and sisters do you have?  
 none  1  2  3  4  5  6  7  8 or more
- 10a) How have you been raised in your Indian cultures? (circle one number)  
1.....2.....3.....4.....5.....6.....7  
traditional not Indian  
(close ties with tribe) (close ties with dominant culture)
- 10b) How do other American Indians view you?  
1.....2.....3.....4.....5.....6.....7  
traditional not Indian  
(close ties with tribe) (close ties with dominant culture)



- l) do Indian art l) 1.....2.....3.....4.....5.....6.....7
- m) use or know the Indian language m) 1.....2.....3.....4.....5.....6.....7
- n) attend Indian dances n) 1.....2.....3.....4.....5.....6.....7
- o) know or participate in tribal politics o) 1.....2.....3.....4.....5.....6.....7
- p) know or share Indian history p) 1.....2.....3.....4.....5.....6.....7
- q) work in Indian communities/population q) 1.....2.....3.....4.....5.....6.....7

15) In general, how much do you agree with each of the following statements? (circle the number that best represents your feelings for each item)

1.....2.....3.....4.....5.....6.....7  
 not at all a great deal

- a) It saddens me to see how Indian peoples have been treated. a) 1.....2.....3.....4.....5.....6.....7
- b) It saddens me to see how Indian peoples are treated today. b) 1.....2.....3.....4.....5.....6.....7
- c) I don't feel comfortable around Whites. c) 1.....2.....3.....4.....5.....6.....7
- d) I don't feel comfortable around Indian people. d) 1.....2.....3.....4.....5.....6.....7
- e) When I think about what my family has taught me (e.g., parents, grandparents, significant people in my life), I learned not to trust Whites. e) 1.....2.....3.....4.....5.....6.....7
- f) I feel angry when I think of how Indian peoples have been treated by Whites. f) 1.....2.....3.....4.....5.....6.....7
- g) I feel angry when I think of how Indian peoples are treated today. g) 1.....2.....3.....4.....5.....6.....7
- h) I blame losses in my life on how Indian peoples have been treated. h) 1.....2.....3.....4.....5.....6.....7
- i) I feel the losses of Indian people still have not been recognized. i) 1.....2.....3.....4.....5.....6.....7
- j) I feel Indian people are not valued. j) 1.....2.....3.....4.....5.....6.....7
- k) I blame alcoholism among Indian peoples on European colonization. k) 1.....2.....3.....4.....5.....6.....7
- l) I grieve the loss of my culture. l) 1.....2.....3.....4.....5.....6.....7

16) In general, how much do you agree with the following statements?: (Write the number that best represents your feelings for each item):

- 1. Definitely False
- 2. Mostly False
- 3. Somewhat False
- 4. Slightly False
- 5. Slightly True
- 6. Somewhat True
- 7. Mostly True
- 8. Definitely True

- \_\_\_ 1. If I should find myself in a jam, I could think of many ways to get out of it.
- \_\_\_ 2. At the present time, I am energetically pursuing my goals.
- \_\_\_ 3. There are lots of ways around any problem that I am facing now.
- \_\_\_ 4. Right now I see myself as being pretty successful.
- \_\_\_ 5. I can think of many ways to reach my current goals.
- \_\_\_ 6. At this time, I am meeting the goals that I have set for myself.



## VITA

Lahoma Schultz

Candidate for the Degree of  
Doctor of Philosophy

Dissertation: THE RELATIONSHIP OF EDUCATIONAL LEVEL, RESERVATION STATUS, AND BLOOD QUANTUM WITH ANGER AND POST-COLONIAL STRESS AMONG AMERICAN INDIANS

Major Field: Counseling Psychology

Biographical: Born in Dewar, Oklahoma, February 11, 1951, the daughter of George and Mollie (Jones) Hicks. Enrolled member of the Muskogee (Creek) Nation. Degree of Indian Blood: Full (Creek/Seminole).

Education: Graduated from Star-Spencer High School, Oklahoma City Public School System in May 1969; received Bachelor of Science degree in Secretarial Science from Northeastern State University, Tahlequah, OK in May 1974; received secondary teacher certification in Business Education/Social Science Education from Northeastern State University, Tahlequah, OK in July 1975; received Masters of Science degree in Counseling Psychology from Northeastern State University, Tahlequah, OK in May 1994; completed the requirements for the degree of Doctor of Philosophy at Oklahoma State University in July 2005.

Experience: Employed as a secondary teacher on the Navajo Reservation/Monument Valley High School; employed as an elementary teacher by the U.S. Bureau of Indian Affairs; employed as a clerk stenographer by U.S. Bureau of Indian Affairs; employed as a social worker by the State of Oklahoma; employed as a vocational rehabilitation counselor by the State of Oklahoma; employed as a graduate assistant by Oklahoma State University; completed a paid internship at Texas Tech University, Lubbock, TX (APA accredited site); currently employed as an assistant professor at Southern Arkansas University, Magnolia, AR.

Professional Memberships: American Psychological Association, Society of Counseling Psychology, Clinical Psychology, Society for the Psychological Study of Ethnic Minorities, and Graduate Student member; National Association of Multicultural Rehabilitation Concerns; National Rehabilitation Counseling Association; National Rehabilitation Counseling Association; American Counseling Association; Licensed Professional Counselor; Certified Rehabilitation Counselor; Certified Sports Counselor

