CIRCLE OF LEARNING:

CULTURAL ASPECTS OF AMERICAN INDIAN HIV/AIDS PREVENTION

BY

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Submitted to the Faculty of the Graduate College of Oklahoma State University in partial fulfillment of the requirements for the Degree of DOCTOR OF EDUCATION
May, 2005
CIRCLE OF LEARNING: CULTURAL
ASPECTS OF AMERICAN INDIAN HIV/AIDS PREVENTION

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ACKNOWLEDGEMENTS

I owe thanks to many people who have helped me, endured me, and stood by me.

To the gatekeepers who helped, not only distribute surveys in their respective communities, but became a part of the research as they gathered in a “talking circle” to help determine what the data revealed. My gratitude to John Hawke Cocke’, Glenn Arnold, Don Little, Dr. Laura Morrison, Linda McIntosh, Barbara Williams, Denise Smith, MPH, Gloria Bellymule-Zuniga, R.N., Cordelia Clapp, Valerie Eschiti, R.N., Ellen Simmons, R.N.

A special thanks to my committee and advisor. Dr. Gary Conti, who solidly believes in the strengths that diverse and non-traditional students bring to the university. His commitment, energy, humor, wisdom, and patience have all influenced and directed my path to completion. Thanks to Dr. Lynna Ausburn, Dr. Kouider Mokhtari, and Dr. Tim Peterson who brought such wonderful qualities and guidance to my dissertation.

Thanks to my children and their families, Leaf and Holly Running-rabbit and my daughter Amanda and her husband Steve. And, to my wonderful grand children, River Sage and Ella Wren Running-rabbit and Zoe Bear Russell. Thanks to Pattye Tackett-Moore who encouraged me to write and to begin a path in education in the 80's, and to my great circle of friends, especially my longtime friend, who has been a sister to me, Judy Ward who daily called me to cheer me on; and to Janet, Jeanie, Claudette, Debbi, Sharon, Karen, Mary, Kay, Tommy, Rosie, Carolyn, Joy -- thank you for your support and patience.

Mvto! (Thank you)
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CHAPTER 1
INTRODUCTION

Introduction

The increase in the diversity of our country and the implications of health care issues for people of color, including HIV/AIDS, bring culture to the forefront. Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) are pandemic and are a significant health concern. It has no boundaries, and it is taking its toll across the world. In the United States, it is disproportionately affecting people of color: African American, Latinos, and American Indians (SIECUS Report, 1999). Even though the basic facts about transmission have not changed in years, people are still putting themselves at risk through their behaviors.

The complexion of the United States is also changing. In 2000, African Americans, American Indians, Alaska Natives, Asian Americans, Pacific Islanders and Hispanic Americans accounted for 30% of the population, and by 2025, they are projected to account for 40% of the population (Galambos, 2003; U. S. Census, 2000). Since the beginning of the HIV/AIDS epidemic, HIV/AIDS has affected communities of color (Kaiser Family Foundation, Policy Fact Sheet, 2004). Minority Americans now represent the majority of new AIDS cases as well as deaths among persons with AIDS in the United States (Centers for Disease Control [CDC], HIV/AIDS

For American Indians, HIV is a serious threat due to a smaller population, risk factors which can increase HIV transmission, cultural values and taboos, as well as the great diversity that exists among American Indians (Vernon & Jumper-Thurman, 2002). History also plays a role in HIV/AIDS prevention in the American Indian community because it is a disease that could plaque American Indian communities as effectively as smallpox once did. Historical legacy, cultural values, and culture all play an integral part in prevention programs for American Indians (Center for AIDS Prevention Studies [CAPS], 2002). Understanding culture and providing culturally specific messages in an environment that is conducive for learners are key components in prevention messages.

Culture

There has been a dramatic shift in the demographics of the United States, and it is predicted that ethnic
minorities will be the majority within the next two decades (Galambos, 2003). When working within the health care system, culture is central, and health care professionals must understand its role in order to respond adequately (Bonder, Miracle, & Martin, 2001). Culture can be thought of as “an integrated pattern of learned beliefs and behaviors that are shared among a group of people and includes styles of communication, views on roles and relationships, values, practices and customs” (U. S. Department of Health & Human Services Health Resources, 2002, p. 3). Cultural differences may present a complexity because providers and patients bring different perspectives, which are culturally based (p. 3). Cultural patterns can also affect people’s perception of reality, which may include their fear, beauty, stigma, or health (Huber & Gillaspy, 1998).

Cultural Similarities

In HIV prevention, culture is the lens through which HIV has been understood since the beginning (Parker, 2001). It has been the underserved, oppressed, and marginalized that have been adversely affected since the first cases in the 1980's--gay men, injection drugs users, and people who exchanged sex or drugs for money.

There is a direct relationship between culture and health practices. How people approach their health and healthcare is often based on their beliefs and cultural
values (Ahmann, 2002). With changing demographics and the increasing disparities in minority health services, it is important for health officials to increase their understanding of the role culture plays in HIV prevention (p. 2). Treatment and prevention must take into account the “relevant social, emotional, and cultural issues” (Weaver, 1999, p. 32).

Although each cultural group is unique, these groups have much in common. There are many similarities between African American, Latino and American Indian cultures (Applewhite, 1995; Perez-Stable, 1997; Tsotigh, 1996). These include the importance of spirituality, family, and community. Similarities also include the oral tradition of storytelling or folk tales that teach culture, morals and values, humor, time or orientation to the present, distrust, and oppression (Applewhite, 1995; Perez-Stable, 1997; Tsotigh, 1996). Although cultural values are an important consideration, acculturation, cultural, and social views on sexuality and sexual orientation also may be key factors in HIV prevention.

Culture is not just about differences. It is also about understanding the similarities. The similarities in communities of color can provide some understanding of similar cultural values, history, and communication. The similarities between African American, Hispanic American and American Indian cultural values are striking. Attitudes,
actions and beliefs are “mediated by historical and cultural factors” (Huber & Gillaspy, 1998, p. 192). The similarities may be consistent with the historical legacies of the three groups.

**Historical Legacy**

African Americans and American Indians “entered this society more or less involuntarily through slavery, conquest and/or colonization; therefore, each group may have utilized strategies of strong extended family, network, collectivism and group loyalty” (Kim & McKenry, 1998, ¶ 5). African American history includes dehumanizing events such as slavery, Jim Crow Laws, and the Tuskegee experiment. The Tuskegee Experiment was a government project that studied poor African American men who had syphilis. The men were not told they had syphilis nor were they treated when penicillin was available. For 40 years poor black men suffered and died (Jemmott & Jemmott, 1994). That study has had a long-lasting effect on HIV prevention in the African American community (Johnson, 2000). This fear and distrust of the government and medical community has had an impact on HIV prevention efforts. For Hispanic and Latinos, immigration issues, fear of the government, economic, and social issues all are factors that can increase the risk of HIV and impede HIV prevention messages (Centers for Disease Control, HIV/AIDS Among Hispanics, 2002). Hispanics, Latinos, Mexicans, and Puerto Ricans all have been
historically oppressed (Gimenez, n.d.). Today, immigration increases the vulnerability, fear and oppression of Hispanic population (Regional Population Study, 2002).

**American Indians**

There is an on-going discussion about which term, Native American or American Indian, should be used when referring to an American Indian person or a person indigenous to North America. Ask a Native person which term is preferable, and one will get a variety of responses—American Indian, Native American, Indigenous, First Peoples, Alaska Native, to name a few. The correct terminology should be a person’s tribal affiliation, i.e., Muscogee (Creek), Cherokee, or Osage. However, the two most common terms used are American Indian and Native American. For this research, American Indian will be the primary term used unless another term is used by another researcher. The term American Indian is often used by American Indians because it is the only ethnic term with American appearing first. Because anyone who is born in America can use the term Native American based on their birthplace (Utter, 2001).

The population of identified American Indians has dropped dramatically during the last several hundred years. Infectious diseases, including smallpox and measles, were a “far more lethal weapon than any weapon in the European arsenal” (Broken Promises, 2004, p. 2) in killing American Indians. During the first two hundred years after European
contact, most American Indian people were killed by smallpox, typhus, and measles. Entire communities were wiped out (p. 2). The most devastating disease among Native people was smallpox because they were highly vulnerable to the new virus (Vernon, 2001; Vernon & Jumper-Thurman, 2002). Smallpox was often given to Native people through gifts of blankets infected with the disease; in some cases, whole Indian nations were wiped out (Weaver, 1999). Today, HIV/AIDS could devastate some American Indian communities just as smallpox once did.

Historical factors have affected American Indians socially, mentally, psychologically, and economically. It is the adult population that has most been affected. Many adult American Indians still experience the mistrust and psychosocial effects of colonization, boarding schools, and relocation (Witko, 2002). When exploring the arena of HIV prevention education within the American Indian context, it is important to consider history because of the lasting effects on American Indian adults.

**Adult Learning**

**Andragogy**

One of the philosophical foundations of adult education is the concept of andragogy (Merriam, 2001). A key concept in andragogy and adult learning is the value of experience that an adult can bring to the learning environment. Knowles (1970) defined andragogy, the basis of adult
education, as "helping human beings learn" (pp. 38-39). Andragogy is based on six assumptions: (a) adults have a need to know why and how the learning will benefit them; (b) adults have a self-concept of being responsible for their own decisions, (c) adults bring to the table a rich and varied volume of experiences; (d) adults become ready to learn what they need to know in order to effectively deal with their real-life situations; (e) adults are motivated to learn what they perceive will help them in their life situations; and (f) while adults may have some external motivators, the most powerful motivators are internal (Knowles, Holton & Swanson, 1998, p. 64). Adults can bring a wealth of experience, stories, and knowledge to the educational setting.

Learning How to Learn and Learning Strategies

Learning how to learn involves acquiring the knowledge and skill to learn effectively in whatever learning situation a person encounters (Smith, 1976, p. 19). The three components of learning how to learn are the learner's needs, learning style, and training (p. 16). The basic needs relevant to adult learning are basic skills, general understanding of learning, and self-knowledge. The training component involves the effort to help people become more successful in the educational environment. Learning style involves the way learners' process information and how they feel and behave in a learning situation (p. 25).
The situational learning frame of the learning how to learn concept has given birth to further exploration into learning strategies. Such exploration has contributed to the discovery of the adult learning concept of learning strategies. Adults need a variety of skills to help them address their changing learning needs in both formal and informal settings (Conti & Kolody, 2004).

While individual learning styles are “more stable, learning strategies are techniques an individual may use for specific tasks” (Fellenz & Conti, 1989, p. 8). Research has identified three distinct groups of learning strategy preferences among learners (Conti & Kolody, 2004). They have been named Navigators, Problem Solvers, and Engagers.

**Empowerment**

Two theorists synonymous with empowerment education are Myles Horton and Paulo Freire. Both theorists believed that people must have input into decisions that affect their lives (Conti, 1977). The Highlander Folk School, founded by Horton, was designed to help community, religious, and civic organizations work toward a democratic goal (Adams, 1975, p. 87). Horton believed that people knew the answers to their problems. Learning is a holistic process in that it involves learning from people they worked with, learning from each other, and learning together. At Highlander, learning is also incorporated the cultural aspects and experiences of the participants, music, dance, song, and
storytelling. The song “We Shall Overcome”, became the anthem of the Civil Rights Movement and was written at Highlander utilizing cultural experiences, music, and song (Nashville Public Library, 2003) This experiential process “resulted in personal empowerment and social change as evidenced by the many Civil Rights leaders who attended Highlander, such as Rosa Parks and Martin Luther King, who were able to impact others and create social change” (Adams, 1975, p. 122).

Freire’s theory developed out of “illiteracy, poverty, and oppression and considers the power relations between educator and the adult student” (Merriam & Caffarella, 1999, p. 324). A key concept is change--a change brought about by reflecting on one’s own beliefs, values, and attitudes (p. 326).

American Indian Adult Learning

Indigenous learning is important in adult development and learning (Merriam & Caffarella, 1999). Communities should integrate modern learning, which provides tools for survival, within the cultural context of the community (Cajete, 1994). Contained within traditional American Indian culture are the concepts of wisdom, spirituality, and community (Utter, 2001). Language is also integral to many when discussing their culture. “Language defines our lives. It heralds our existence, it formulates our thoughts and it enables all we are and have” (Fischer, 2000, p. 100). When
a language is lost, the culture is lost.

One of the most important elements of Native American teaching and learning involves "learning how to learn" (Cajete, 1994, p. 222). It is key in every approach to education. In essence, education is “learning about life through participation and relationship with the community” (p. 223). In order do this, open communication and trust are important in order “to establish a reflective dialogue that includes the participants and their collective experience” (p. 223). It also involves the cultivation of human capacities—listening, observing, experiencing with all of one's senses, developing intuitive understanding, and respecting time-tested traditions of learning (p. 222). Those traditional learning strategies are based on an inherent philosophy among the tribes. Although there are over 500 tribes within the U.S. with many different traditions, there is a common philosophy among American Indian people which includes wisdom, spirituality, community, stories, and a holistic concept of health and life. Two main similarities exist today within Native populations: a) nature-based, traditional life ways and b) shared response to Euro-American society (Deloria, 1973).

The goal of adult education is to help people reflect on their place in society. Freire's (1970) philosophy was to begin with the way that the members of a group communicate about their world and their experiences within
their cultural context. In order for education to be effective, it must be relevant to the individual’s experiences, cultures, and histories (Beck, 2000; Cajete, 1994). For American Indians to “find relevance in their learning process, they must also see a reflection of themselves and their histories in it” (Beck, 2000, ¶ 48).

**HIV/AIDS**

Since the first cases in the United States were discovered in 1981, HIV/AIDS has become a leading health concern (Centers for Disease Control [CDC], 2003; Ramirez, Crano, Quist, Burgoon, Alvaro, & Grandpre, 2002). It was eventually named Human Immunodeficiency Virus (HIV), the virus that causes AIDS. Acquired Immune Deficiency Syndrome (AIDS) is the result of HIV (CDC, 1999). Transmission of HIV has not changed in the past two decades. The virus is linked to risky behaviors. HIV is spread through oral, anal or vaginal sex or direct blood contact, such as sharing needles with an infected person. It can also be transmitted by an infected mother to her unborn baby in utero, through delivery, or after delivery through breast feeding (CDC, 1999).

HIV is a significant health concern for people of color (Sexuality Information and Education Council of the United States [SIECUS], People of Color, 1999). Although the rate of new infections is declining, new diagnoses in communities of color are increasing (Ramirez, et al., 2002). American
Indians are considered at high risk for contracting HIV infection, but not because of race.

**American Indians and HIV/AIDS**

For American Indians, social, behavioral, and economic factors all play a role in this disease. Poverty, unemployment, alcohol, substance abuse, sexually transmitted infections, poor health, poor diet, and related diseases are instrumental in the destructive path of HIV in the American Indian community (Center on Child Abuse and Neglect [CCAN], 2000; Center for AIDS Prevention Studies [CAPS], Fact Sheet, 2002). Historical factors such as oppression and acculturation have to be considered as well.

One social factor, which may also increase HIV infection, is homophobia (Vernon & Jumper-Thurman, 2002). Homophobia increases the stigma which surrounds HIV, especially in a culture that often is inhibited about discussing sexuality (CAPS, 2002, Fact Sheet) Community norms, attitudes, cultural traits, and values might also influence health risk behaviors in American Indians (Sileo & Gooden, 2003).

The U. S. Census (2000) indicates there are 4 million people who can be identified as American Indian/Alaska Native, either alone. This is not a simple task and depends on who answers the questions (American Indian Policy Center, 1998). The U.S. Census, state and federal government and tribes all may have different standards (National Native
American AIDS Prevention Center [NNAAPC], 2002). There are also people who have American Indian ancestry but may not know which tribe or may not be enrolled in their tribe (NNAAPC, 2002).

AIDS cases for American Indian people continue to be less than 1% within the American Indian population (CDC, 2003; Ramirez et al., 2002). For those who work in the HIV/AIDS field, there is a concern that the number is under reported due to racial misidentification and the lack of access to testing and healthcare (Center on Child Abuse and Neglect, 2000; Thoroughman, Frederickson, Cameron, Shelby & Cheek, 2002; Vernon, 2001).

According to Oklahoma State Health Department (2004), the rate of AIDS among American Indians is 10.1 per 100,000 as compared with 6.2 per 100,000 for Whites. This is a serious threat to the future of the Native community since the American Indian population is considerably smaller than the Caucasian population (Satcher, 2000). There are many factors, including small population numbers, invisibility, lack of outreach, neglect of HIV/AIDS issues, alcoholism, and misclassification, which put Native communities at high risk for devastation (Vernon, 2001; Weaver, 1999). The misclassification of American Indians has been estimated from 10% to as high as 50% misclassification rate (Broken Promises, 2004; Frederickson, Cameron, Shelby, & Cheek, 2002; Intercultural Cancer Council, 2001). This can occur
HIV prevention needs to take into consideration more than basic facts. Essential to working within any community of color or unique group of people, including American Indians, is an understanding of the culture. Prevention strategies need to integrate the inherent cultural values and the legacy of the community.

HIV/AIDS Prevention

HIV prevention comes in many venues. Evidence-based intervention models may include programs in the community, schools, clinics, or religion-based programs (Satcher, 2001). The National Institute of Health (NIH) (1997) has identified several factors that may influence a HIV risk behavior intervention. These strategies include: 1) target individuals at every level; 2) ensure programs are cultural sensitive, including ethnicity, language, social class and sexual orientation; 3) have an intervention which is appropriate in time; and 4) acknowledge and address community myths.

The National Native American AIDS Prevention Center (NNAAPC) has also identified several culturally specific factors which are culturally acceptable and specific to American Indian communities (NNAAPC, 2002). These factors
include acknowledging the historical effects, utilizing a holistic approach to health, traditional healing and spirituality, and understanding the family and community roles, orientation to the present, communication, modesty, and beliefs about sexual orientation (p. 4).

In order for prevention to be effective it also needs to have a theoretical foundation. The Health Belief Model, Social Cognitive, and Empowerment Model are three theoretical models which have been used in HIV prevention and have success in combining culture and adult education principles.

Problem Statement

For American Indians, the number of HIV infections continues to rise with high concentration areas in Alaska, Oklahoma, Washington, Arizona, and California (Center on Child Abuse and Neglect [CCAN], 2000). Because of the many social and health problems American Indians face, health care and prevention programs are potentially more challenging for them than in the general population (U.S. Department of Health and Human Services, 2002).

Numerous obstacles that play a role in HIV/AIDS in the American Indian community are culturally based. These obstacles also include denial and mistrust. Many American Indian people believe that it is a "White man's" disease (Ramirez et al, 2002, p. 30). There is suspicion due to the historical legacy of blankets contaminated with smallpox
which often brings up a suspicion that history is again repeating itself (CANN, 2000). This can make American Indians less likely to trust or access services (p. 4).

The American Indian community has many of the factors, including high rates of alcoholism, poverty, cultural taboos, and homophobia, that put its members at risk for HIV infection. Mistrust in the public health system and Western medicine often compounds the problem. The rise of infection rates in the American Indian population illustrates that current programs continue to be ineffective.

HIV prevention programs in American Indian country are challenging. American Indian communities may be based in cities, rural areas, or reservations. Oklahoma is a more diverse state because of lack of reservations. Prevention efforts may also be contrary to their cultural norms, knowledge levels, and behavior patterns (Sileo & Gooden, 2003). This may affect the knowledge, attitudes, and beliefs about this disease.

Although very little literature exists on the study of American Indian prevention strategies and implementation, the need for community input and participation and the consideration of American Indian cultural values in the programs is a necessity (Ramirez, et al., 2002). The health disparities in communities of color require new approaches to HIV prevention and care that will meet the needs of those most at-risk (U. S. Department of Health and Human Services,
Over the past twenty years, HIV/AIDS prevention and education has evolved from a grassroots movement to the national forefront. Using cultural strategies became an important element in HIV/AIDS education. National prevention programs were developed for African Americans and Latinos, but not for American Indians. Understanding and using cultural strategies within the American Indian community is deemed important in the HIV/AIDS field and the American Indian community. Yet, research has been limited within the American Indian community. Even less research has been conducted in Oklahoma. There is a lack of knowledge that surrounds American Indian people and the utilization of cultural strategies in HIV/AIDS education. To increase the effectiveness of HIV/AIDS training and education, it is important to gain input from community participants to ascertain what cultural strategies are important in HIV education and to determine what learning strategies American Indians in Oklahoma prefer.

**Purpose**

The purpose of this study was to describe cultural strategy preferences of American Indians who live in Oklahoma for HIV training. To accomplish this the following data were gathered: acculturation level, gender, orientation, cultural and learning strategies. The following research questions were used to address the
purpose of this study. Specific hypotheses were written to address the measurement portions of the questions. In order to ascertain the information, surveys were distributed throughout the state of Oklahoma by American Indian community leaders, who were identified as gatekeepers. These surveys were the Cultural Strategies Survey (CSS), which was developed for this study to measure the support of using culture in HIV prevention, and the Assessing The Learning Strategies of Adults (ATLAS), which was used to assess the learning strategy preferences. Additionally, after the survey data were analyzed, a meeting was held with the gatekeepers to gain their input on the meaning of the data.

**Research Questions**

1. What is the profile of American Indian people in Oklahoma on the Cultural Strategies Survey?
2. What is the interaction between (a) gender and acculturation level and (b) the Cultural Strategies Survey?
3. What is the interaction between (a) sexual orientation and acculturation level and (b) the Cultural Strategies Survey?
4. How do the ATLAS scores compare to the norms of ATLAS?
5. What is the relationship between learning strategies and cultural instructional strategies?
6. What is the relationship of acculturation levels and the cultural strategies?
7. Do inherent groups exist among the American Indians people concerning preferences of cultural strategies for HIV prevention?

Several statistical procedures were used to answer the
research questions. To describe the demographic characteristics of the American Indian participants, frequency distributions were used. The following procedures were used for each research question.

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<td>2-way ANOVA; t-test to compare means</td>
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Definitions

Acquired Immunodeficiency Syndrome (AIDS): This is a result of Human Immunodeficiency Virus (HIV) infection, which makes the immune system less able to fight infection (American Red Cross, 1998).

American Indian: For this paper, the term American Indian and Native American may be used interchangeably and refers to enrolled members of Federal and/or state recognized tribes as well as people who are self-identified as American Indian. Many older American Indians prefer the term American Indian believing that anyone born in the United States is a Native American. There is no single legal definition for the term Indian. American Indians view themselves first as tribal members (Utter, 2001). See Native American.

Assimilation: The complete absorption of one group into another group’s cultural tradition (Utter, 2001).

Blood Quantum: Some tribal governments use a variety of methods to determine membership, some with blood quantum requirements, others without. For those tribes that do not maintain minimum blood quantum requirement, degree of blood is still used for statistical purposes and may determine the level of services an individual may receive from the tribe. Some federal programs require a minimum blood quantum to be considered for services. Many American Indians have a Certificate of Degree of Indian blood (CDIB), issued by Bureau of Indian Affairs (Utter, 2001). Blood quantum is
measured in fractions and is based on material or paternal lineage.

Circle of Life: This inherent philosophy, of almost all Native Americans, is based on the concept of balance that is integral to a person’s well being. It is a holistic philosophy that incorporates the spiritual, mental, emotional and physical. This concept may have different names such as Red Road, Medicine Wheel and may have four or seven quadrants (American Red Cross, 1996; Cajete, 1994).

Elders: In the American Indian community, unlike western society this term does not denote a chronological age. It is a compilation of a number of variables, which can include a position of leadership, experiences along the Journey of Life, the gifts of knowledge provided by the Creator, and the status that one enjoys by virtue of service and sharing in the community (Rowland, 1994, p. 13).

Human Immunodeficiency Virus (HIV): The virus that causes AIDS. HIV weakens and eventually destroys the body’s immune system, making it easier for life threatening cancers or opportunistic infections to invade the body (American Red Cross, 1998).

Indian Health Service (IHS): The primary federal health resource for American Indians.

Indigenous Peoples: This term refers to the original inhabitants of the Western Hemisphere and the survivors thereof, prior to the advent of colonization in 1492.

Native American: This term is generally used synonymously with American Indian. However, this term came into usage in the 1960's to denote groups served by the Bureau of Indian Affairs: American Indians and Alaska Natives (Indians, Eskimos and Aleuts of Alaska). Later the term also included Native Hawaiians and Pacific Islanders in some Federal Programs. It came into disfavor by some American Indians (Utter, 2001). See American Indian.

Non-Natives: Refers to people who are not recognized as or do not identify themselves as American Indian.

Prevention: In this context, prevention refers to education, training and behavior that helps individuals protect themselves and others from HIV infection and a variety of strategies to stop the spread of HIV, including the most effective ways to prevent HIV infection and ways
to reduce the risk of infection (American Red Cross, 2002).

Risk Behavior: Activities that put people at increased risk of becoming infected with HIV, the virus that causes AIDS. In this case, risk behaviors are oral, anal, or vaginal sex with an infected partner, direct blood contact such as sharing needles of any kind with an infected person, mother-to-child if mother is infected. Non-injection drugs and alcohol are also risk behaviors because of the effect on decision-making (American Red Cross, 1998).

Sexually Transmitted Infection (STI): An infection that spreads during sex through genital contact between people; for example, gonorrhea, herpes, and syphilis. STIs can increase the risk of transmitting or contracting HIV infection (American Red Cross, 1998).

Tribe: There is no universal definition for the term tribe. For government purposes, a tribe is a group of American Indians that have been recognized as constituting a historically continuous political entity for governmental purposes (Utter, 2001).
Culture

Culture is shared by people and “distinguishes insiders from outsiders” (Bonder, Martin, & Miracle, 2001, p. 35). One concept of culture is that “a person’s behavior reflects the influences that shape human experience” (p. 36). The following is based on that premise: (a) culture is learned and transmitted from one generation to another through observation and discourse; (b) culture is localized (created through specific interactions with specific individuals); (c) culture is patterned; (d) culture is evaluative; and (e) culture has continuity, with change, which means that cultural identity is stable but that one’s cultural knowledge changes over a life course and shapes the individual (p. 36).

The cultural values of the dominant community are often very different than the cultural values of multi-ethnic groups. As the numbers of people of color increase, this difference will become more evident. When defining culture, it is generally from a broad perspective and that means the details of a community’s culture and its cultural values are missing.

Cultural Comparisons

In 1982, people of color, which includes African Americans, Latinos, and American Indians, accounted for less
than a third of all AIDS cases, but today they account for 
62% of all people living with AIDS (AIDS Action Policy, 
2002). These health disparities continue to require new 
prevention efforts.

Because of this new shift, there has been initiatives 
to create standards which relate to basic cultural 
competence and healthcare (Ahmann, 2002; Galambos, 2003; U. 
S. Department of Health and Human Services Administration, 
2002). However, in the HIV field, there has “not been a 
common vision for how culture should inform intervention 
design” (Wilson & Miller, 2003, p. 184). Culture needs to 
be recognized as a central focus in health prevention 
(Airhihenbuwa & Obregon, 2000). Even with the evidence, the 
specific cultural context is often omitted (p. 6). 
Additionally, there are other factors which also have to be 
considered. A person’s behavior, age, sex, sexual 
orientation, socioeconomic, education, religion, 
acculturation level, and place of habitation whether in a 
rural, urban, or suburban area all contribute to a person’s 
identity (U. S. Department of Health and Human Services, 
2002).

Culture is an important element in understanding and 
working with the people who make up the tapestry of a 
community. Native Americans, African Americans, and Latinos 
are not a single culture, but they really make up many 
cultures. “A person is not a bundle of cultural facts but
rather a complex bundle of cultural influences and other factors (Bonder, Martin, & Miracle, 2001, p. 38).

The basic model of cultural awareness is not enough. Part of the challenge is the fact that many of the theories and models for HIV prevention are based on European American framework (Wilson & Miller, 2003). They may prove ineffective in many cultures. “Heterosexist values that permeate mainstream values are often the basis for HIV programs and inherently may prove harmful to some groups of people” (Wilson & Miller, 2003, p. 186). It has been suggested that because different groups hold different beliefs, it is important to understand and assess those specific cultural beliefs before developing a program (p. 190).

When reviewing culture, it is important to note the similarities as well as the differences between and within different groups. The African American, Latino, and Native American communities have commonality in many of the cultural values including the importance of spirituality, family, and community; the use of storytelling and humor; an orientation to time; and the distrust or historical legacy. All of these may be considerations in developing HIV prevention programs.

There is a common bond between indigenous people. It may be from the historical legacy and colonial experience (Hill, 2000). People are who they are because of their
Cultural Similarities Among Communities of Color

The largest communities of color in Oklahoma are African Americans (7.9%), Latinos (5.2%) and Native Americans (7.9%) (U. S. Census, 2000). These groups have similarities of spirituality, family and community, storytelling, humor, time, distrust, and sexual orientation that can help in understanding and assessing the cultural impact on health issues.

Spirituality

The church is not isolated and is an important element in the society in which it operates. It often promotes the growth of cultural values. Spirituality is a core element to African American, Latino, and Native American culture. The relationship between the church and the Civil Rights Movement is part of African American legacy. From a historical perspective, churches had an important role in the Civil Rights Movement as they provided guidance and support for people (Brown & Hunter, 1999). Churches have also provided support in coping with racism, physical illness, and psychological distress (Kim & McKenry, 1998) and served as a focal point for political activism and emotional assurance (Snowden, 2001). The church still provides caring, acceptance, and a sense of belonging (Hastings Center Report, 2003; Snowden, 2001). Religious belief is very strong in the African American community.
HIV/AIDS has been a difficult topic for African American churches. There was shame and denial because to discuss HIV/AIDS meant talking about men who had sex with men (Brown & Hunter, 1999). There were also mixed messages about HIV. HIV was a white gay disease; then it was from Haitian immigrants, and then it was from sex industry workers. Then it was decided that “it came from Africa, specifically from the African green monkey” (Brown & Hunter, 1999, p. 10). After a great loss of life, HIV/AIDS has become a topic from the national pulpit by the Balm in Gilead, Inc., as well as the National Baptist Convention (p. 11). The Balm in Gilead is a national organization which tries to mobilize African American churches in the fight against HIV. Many churches are now becoming involved in the fight against this disease.

For Hispanic families, especially immigrants, the church also serves as a place to congregate (Regional Population Study, 2002). However, it is important to note that Hispanics are very diverse, and spirituality is expressed in many ways. One of the oldest and most common bonds are Roman Catholicism and the Spanish language. Most Hispanic Americans are Roman Catholic, which is the dominant religion in their counties of origin since colonization; however, there are some who are Protestant (p. 6). The
church is a place which helps preserve their ethnic identity and culture. Parents may want their children to assimilate from an economic stance; however, socially, the church helps maintain the right moral and social attitudes (Regional Population Study, 2002, p. 7).

Some spiritual beliefs also may lie in folk healing, such as Curanderismo and Santeria. Mexican folk healing is a belief in the supernatural connection to the spirit world. It is a view of “the divine will of God and the centrality in all aspects of life” (Applewhite, 1995, p. 248). Santeria, which comes from the roots of African religion and Catholicism, is a belief that allows people to seek spiritual or emotional relief through prayers, blessings, and burning of candles and is a way to remove evils from the environment (Suaraez, Raffaelli, & O’Leary, 1996).

Spirituality is also a core value for American Indians. Spiritual traditions are often “incorporated into formal and informal practices of daily life” (Garrett & Garrett, 2002, p. 149). There is great diversity in spiritual and religious beliefs practiced by American Indians including Christianity, Catholicism, or Native American Church. The traditional perspective of American Indian spirituality is based on the relationship between humans, animals, earth, and the ecosystem. That “interconnectedness and interrelatedness of human beings to the earth is what provides the first principle of spirituality” (Deloria &
A dimension of spirituality is the Circle of Life, which is sometimes called the Medicine Wheel. It represents the many relationships in life. Most often it involves sets of four: the four directions; the four aspects of nature (mental, spiritual, emotional, and physical); the life cycle of child, youth, adult, and elder; and the four physical elements of the world (fire, earth, air, and water).

Spiritual or religious observances are important to the Native community and may include ceremonies of name giving and of spiritual cleansing of individuals, homes, or businesses (Duran, 2002, p. 12). Smudging, which is burning cedar, sage, and sweet grass and fanning the smoke over an individual or group while praying, is also “a form of cleansing and purifying and is sometimes done before important events or meeting, which provides a way to gain spiritual support” (Still Smoking, 1996, p. 93). Ceremonies are “to offer thanks for, to create and to maintain a strong sense of connection through harmony and balance of mind, body and spirit with the natural environment” (Garrett & Garrett, 2002, p. 46). Almost any event one attends within the Native community, whether it is a meeting, program, a luncheon, or a conference, will begin with some type of opening ceremony. It could be a song, prayer, or smudging. The opening establishes a balance and a focus for the topic or discussion, and it ensures that the meeting is started
and met with good intent.

Traditional beliefs about health, as well as aspects of living, evolved from Indian religion (Duran, 2002). Health is being in harmony or balance with oneself and includes the mental, physical, spiritual, and emotional aspects of a person. For example, if someone has a physical element, it relates to the balance of all aspects (mental, physical, spiritual, and emotional). As a child, when I was sick, one of my aunts used to ask me if someone or something had upset me because everything is connected because if one part was out of balance, then it might cause my sickness. It also means being in harmony with others as well as with one’s environment. As they relate to health, “spirituality and religion are inseparable from one’s health” (Duran, 2002, p. 3). Illnesses and misfortunes may also originate from spirit loss, spells, and even witchcraft; natural causes may include imbalance, breaking cultural taboos, or disharmony (Sileo & Gooden, 2003). American Indian medicine focuses on the spiritual side whereas western medicine is primarily concerned with the physical side (Duran, 2002).

Many Native Americans also believe that spiritual power provides the road to responsible behavior (Weaver, 1999). Spirituality and religion often provide the foundation for family support and responsibility. A general premise of responsible behavior is built around the fabric of family and community support.
Family, Community, and Legacy

“Abusua Ye Dom” means the extended family is a force. Among the Akan peoples of Ghana, the extended family is the foundation of society and is responsible for the material and spiritual well being of all of its members (American Red Cross, African American Program, 1999). Honoring members of a community as well as having close family bonds are very important (Hastings Center Report, 2003; Snowden, 2001). It encompasses extended relationships as well as variations from white, middle-class value systems (Bowser, 1992; Kim & McKenry, 1998). People who have been helpful and assisted the family become a part of the family as aunts, uncles, brothers, or sisters (Bowser, 1992). Family lineage can lie in the mother or the father, but it is secondary to the extended family. Within this family structure, elders are highly respected and often make decisions for the family. The grandmother may be delegated by the family to make decisions, including those concerning health care (Office of Minority Health, n.d.). This environment provides a safe haven from stigma and social rejection (Kim & McKenry, 1998; Snowden, 2001).

Latinos also tend to view the family as a primary support system. The family or familismo is very important to Latinos (Cultural Factors and Health of NC Latinos, 2003) and involves loyalty a hierarchical order among siblings and a duty to care of family members (Griggs & Dunn, 1996).
Health issues are often considered a family matter and not solely based on the individual (Cultural Factors, 2003). Similar to African Americans and Native Americans, family systems also include non-blood relatives (Office of Minority Health, n.d.). In the Hispanic culture, elders are also highly respected, and children are taught to be respectful of parents and elders (Office of Minority Health, n.d.).

Two elements central to family perspectives is machismo and marianismo, which prescribes acceptable relationships between men and women (Wood & Price, 1997). Machismo traditionally refers to a concept of chivalry that embraces courtesy, charity, and courage (Baron, 1991). However, from a stereotyped role, machismo is when the Latin male expresses an attitude to a person considered inferior to him (Wood & Price, 1997). The traditional female social pattern is called Marianismo, and refers to the traditional Latin female relationship to the mother of Christ, Mary (Wood & Price, 1997). She plays the good and dutiful mother and wife.

The same sense of community and family that is inherent in the African American and Latino community is also important in the Native American culture. The importance of extended family is important in understanding the relationships between individual, the family, and the community. It is recognized “as the cornerstone of American Indian society” (Duran, 2002, p. 1). In the Native American
social structure, children may be raised by the extended family (NNAAPC, 2002). Aunts might be considered mothers, and uncles might be considered fathers. Members of a person’s clan or even from another tribe might be considered as brothers, sisters, mothers, or another family role (p. 6). Family is more than blood lines. Being adopted in the Indian Way as a brother or sister brings the same responsibility as a blood brother or sister. The community can be a resource, financially, emotionally, and spiritually, for Native community members.

In the Native community, elders are generally highly respected (Office of Minority Health, n.d.). In Western culture, elder means chronological age. However, in Native American communities the term elder “denotes a sense of experience along the Journey of Life, the gifts of knowledge the Creator has provided, and the status one enjoys from the service and the sharing they provide to the community” (Rowland, 1994, p. 13). In order to gain access and the support of the tribal community, elders are considered the gatekeepers of culture in Native communities. Elders are often the ones to pass information from one generation to the next through storytelling.

Storytelling is a traditional way to pass information from one generation to the next for African Americans, Latinos and Native Americans. Like Native Americans, Latinos also have stories about creation, animals,
tricksters, and morals and values (Perez-Stable, 1997). Storytelling for all three groups provides a way to teach cultural values, morals, values, and social structure. Storytelling

Storytelling in the African culture since ancient times was a way to pass traditions, beliefs, and codes of behavior, and it provided a way to maintain social order (African American Storytelling, n.d.). During slavery, storytelling was vital for the community because slaves were not allowed to keep written records. Oral traditions included naming, singing, drumming, transmitting culture, and storytelling (Jones, 2003). Continuing African oral practices became vital in maintaining that sense of community (Bowser, 1992). The social structure is reinforced by oral networks and serve as the pulse of the community and family (Bowser, 1992). Stories bind people together (Jones, 2003). They also connect the past to the present which helps maintain a record of major events and the lessons which serve as a guide (Jones, 2003). In the African American community, verbal information that is passed and accepted may have more credibility than written information (p. 287).

Latino folktales are considered some of the best in the world (Perez-Stable, 1997). They contain elements from the Mayans and Aztecs as well as the Romans, Arabs, Celts, and others who invaded Spain (Perez-Stable, 1997). Like legends
in the Native American culture, folk tales serve as a way to teach culture, creation, history, morals and values (p. 30). Most Latino folk tales often share similarities to African American and Native American tales, such as tricksters, humor, and magic.

Stories and legends are the heart and soul of Native people (Erdoes & Ortiz, 1984). They are connected to the earth, and many have been told for many years. Legends are different from folk tales and fairy tales because they seem to be chaotic and sometimes unfinished (p. xii). For example, Coyote might be a powerful creator one moment, then be a trickster, and then the very next moment be a coward. Legends help teach history which “promotes and emphasizes the extended family networks and builds a sense of belonging as well as survival” (Duran, 2002, ¶ 13).

Coyote and other trickster counterparts like Raven have been around for hundreds of years providing education and lifelong learning (Atleo & James, 2000). They are like a magic looking glass. They provide a structure for social order by teaching morals and values, dealing with conflict, and by addressing daily life. Stories as well as humor and jokes bring real life into perspective. American Indian people have used humor to deal with many of the experiences they have encountered (Deloria, 1988).

Humor

Humor in the African American community began its roots
in slavery as an underground heritage. Rhymes, jokes, stories, and satire became techniques for survival (Andrews, 2000). African American folk tales or stories also often include a trickster “which both undermine and reinforces cultural norms” (p. 89). It provided “a way to cope with and laugh at strictures of white culture” (p. 89). Trickster tales often dealt with deception in order to “outwit the opponent and retain his humanity in the face of racial oppression” (p. 90).

Humor also has implications as a political tool (p. 91). “The humor brought to the Civil Rights movement by Dick Gregory did more than people might realize” (Deloria, 1988, p. 146). By sharing the “humorous but ironic situation of the black to all people, the urgency, importance, and morality of Civil Rights was communicated” (p. 146).

Hispanic culture is full of “Chispa”, which is the witty nature of the Latino culture. Life is never taken too seriously, and Hispanics seem to have little trouble laughing at themselves (Hispanic Research, 2002).

Stoic is a word that is often used to describe American Indians; however, humor has always been an integral part of life. The “best way to understand people is to know what makes them laugh” (Deloria, 1988, p. 146).

A white man took a liking to an old chief and invited him to dinner. The old chief hadn’t eaten a steak in a long time and eagerly accepted. He finished one steak in no time, but looked hungry.
So the white man offered to buy him another steak. As they waited, the white man said, “Chief, I sure wish I had your appetite”. The chief replied, “I don’t doubt it. You took my land, you took my mountains and streams, and my buffalo. You took everything I had except my appetite, and now you want that too.” (Deloria, 1988, p. 161)

Humor helps life be redefined and accepted (Deloria, 1988, p. 146). Although not discussed much in literature or anthropological insight, humor is very integral in Indian life (p. 146). Sometimes humor is inter-tribal, and sometimes it is inter-group, as in African American and American Indian jokes. Tribes often share jokes about the past, especially jokes about Columbus. Because all tribes have suffered from white invasion, there is a common bond and unity in relation to Columbus jokes (p. 147). Humor between African American and Native American stemmed from discussion about civil rights. Because of long standing treaty rights, Native Americans felt a protection of their own existing rights (p. 162). For example,

An Indian and a black man were in a bar one day talking about the problems of the respective groups. The black man reviewed all of the progress his people had made over the past decade and tried to get the Indian inspired to start a similar movement of activism among the tribes. Finally, the black man concluded, “Well, guess you can’t do much, there are so few of you.” Yes, said the Indian, and there won’t be very many of you if they decide to play cowboys and blacks.” (p. 162)

However, humor can be misunderstood between groups because there is so little communication between minority communities (p. 163).
Far more than research can, satire and irony can provide great insight into a group’s psyche and values (Deloria, 1988, p. 146). Humor helps people survive. It allows people “to laugh at themselves, laugh at others, and hold life together without allowing anyone to drive them to extremes” (p. 167). The history of assimilation, relocation, treaties and diseases, wars, Columbus, Custer, white expansion, and the Bureau of Indian Affairs all provide a solid humor bank for Native Americans (Deloria, 1988). For example,

One day an anthropologist quizzed an Indian on what they called America before the white man came. The Indian replied, “ours.” (DeLoria, 1988, p. 166)

With poverty, homelessness, discrimination, alcohol and drugs as a reality of many American Indians today, humor can provide a basis for laughter.

**Concepts of Time**

Many different cultures around the world have different perspectives of time. Time was slow-moving in early African culture, and it related to the practical tasks and is the opposite of clock time (Jones, 2003). Taking care of family, visiting with friends, and finishing a task all take priority over appointments. Time is secondary to daily life concerns (Office of Minority Health, n.d.).

For most Latinos, the time someone arrives as well as the time a social event starts are flexible (Office of Minority Health, n.d.). Latinos are also generally more
concerned with the present than with the future, and being late is not meant to be disrespectful (Cultural Factors and the Health of NC Latinos, 2003). Like African Americans and Latinos, for American Indians personal priorities may take precedence over getting someplace on time.

The term Indian Time in the American Indian community does not mean being late. It means things get done when they are meant to get done or means handling what needs to be taken care of first. For American Indians, being late is also not a sign of disrespect. Because the future is often “vague and ambiguous, it’s not unusual for the focus to be immediate gratification” (NNAAPC, 2002, p. 6). Living each day is often the emphasis. This is in direct opposition to the dominant society’s approach to time.

Historical Legacy

A discussion of distrust is wrapped in the legacy of oppression, injustice, and exclusion of people of color. The historical perspective may provide the reasons that ethnic groups’ social networks may operate similarly (Kim & McHenry, 1998). There may “be some common characteristics among the three groups because they have entered society through slavery, conquest and/or colonization” (¶ 5).

This legacy plays a role in the distrust that the African American community has of the white community. Personal experiences, slavery, segregation, racism and the Tuskegee Syphilis Study all are contributing factors to this

Our history is a big part of the distrust about HIV/AIDS. From Africa to slavery, our families were torn apart. After slavery was abolished, Jim Crow laws were put in place. Then the struggle to bring the Civil Rights Movement to the forefront. And, racism, it’s still here, but now it’s just institutionalized. Then, add that to Tuskegee. Trust? There is no trust!

The Tuskegee Study, in particular, has implications for distrust of the government for health care and for HIV prevention for African Americans (Herek, Gillis, Glunt, et al., 1998). This 40-year government-funded study was conducted by the U. S. Public Health Service from 1932 to 1972, and in it 399 black men in Alabama were purposely left to die from untreated syphilis. (American Red Cross, African American Programs, 1999; Johnson, 2000; Porche, 1997). Many African Americans believe that once again with HIV, the government is trying to pull something over on the community (Johnson, 2000).

In 1948, the United States acquired the Southwest from Mexico, and the very first Mexican Americans were incorporated into the U.S. (Stein, 1985). Similar to American Indian history, enculturation was also a systematic process. Names were anglicized, and their language was prohibited to eliminate the Hispanic influence (Smith, 2000). Today immigrants and especially those that are not documented are often socially and economically marginal to
society (Kim & McHenry 1998, ¶ 4). Fear of immigration authorities, religious beliefs, cultural factors of machismo and marianismo, and lack of discussion of sexuality are all factors that relate to fear and distrust. All have an impact of HIV prevention.

The result of the historical legacy remains a powerful influence on the cultural identity of many American Indians, particularly the older generation (Garrett & Pichette, 2000). Smallpox-infected blankets, broken treaties, and poor healthcare provide a basis for distrust for American Indians (Vernon, 2001). In 1912, Oklahoma Indians of the Five Tribes became infected with tuberculosis, and a bacterial outbreak in a boarding school was spreading among Indian children (Debo, 1940/1989, p. 279). Although serious, federal officials did not do anything for many years. White Americans historically have not been trustworthy with American Indian people (Skouras, 1998).

Tribes and nations have their own dynamics of language patterns, social order, family structures, and psychological interpretations (Still Smoking, 1997, p. 9). However, even with the great diversity, each tribe has similar historical experiences in the U. S. that have had devastating effects on the health and well-being of Native people (Duran, 2002; Hendrix, 2002). The history of extermination and assimilation also has an impact on trust within American Indian communities (Garrett & Pichette, 2000; Weaver, 1999;
Assimilation and relocation were two policies that have affected the American Indian adult population. Relocation happened more than once. Forcible removal began at the beginning of Andrew Jackson’s presidency in 1829 and continued with his Indian Removal Act of 1830 (Debo, 1940/1989, p. 4). Through bribery, trickery and intimidation five tribes, which eventually became the Five Civilized Tribes in Oklahoma which include the Creek, Cherokee, Choctaw, Cherokee, and Seminole, were forcibly moved from their homelands (Debo, 1940/1989; Strickland, 1980/1981). The suffering and loss of thousands of American Indians became known as the Trail of Tears. Originally, the entire state of Oklahoma except for the Panhandle was deeded to the Five Tribes, but they were forced to give up the western half (p. 5). Oklahoma’s present nature of the state is “based not on aboriginal choice but of white policy” (Strickland, 1980/1981, p. 2). Only a few of the present identifiable Oklahoma tribes were within the state when the Europeans arrived (p. 3), and less than half of Oklahoma tribes are indigenous to the state.

Assimilation, included in the Dawes Act of 1887, disrupted the American Indian approach of communal landholding by trying to force them “to conform to the social and economic structure of white America” (Garrett & Pichette, 2000, ¶ 10). This act increased poverty in the
Indian community, disrupted a communal approach of landowning that was common to American Indians, and freed land for non-American Indians (¶ 10). A second relocation effort was a massive program in the early 1950's. It was designed to relocate reservation Indians to large urban cities such as Chicago and Los Angeles. Although considered voluntary, American Indians were given a one-way ticket, temporary housing, and clothing. Due to discrimination and job competition, many American Indian people could not find jobs. Others did not do well because they were separated from family support and their tribal communities (Center for AIDS Prevention Studies, 2002, Fact Sheet; Garrett & Pichette, 2000). For many American Indian adults and their family members, the impact has affected the adult individuals who were relocated or placed in boarding schools.

The policies of assimilation have had a devastating effect on American Indians. It was 1924 before U. S. citizenship of American Indians was recognized when the Citizenship Act was passed. Similarly, it was 1978 when American Indians were granted religious freedom, by the overturning of the Indian Religious Crimes Code, which was passed in 1889 by Congress (Deloria, 1988). The goal of the government was to civilize the Indians, and the goal of the churches was to Christianize them (Garrett & Pichette, 2000). U. S. policies "of (coercive) assimilation have had
a pervasive impact on Native people and their way of life” (Garrett & Herring, 2001, p. 141).

Homophobia and discrimination are also remnants of historical oppression, yet it mirrors the discriminating behavior of the dominant society (Vernon, 2000). To increase the complexity, the views of the dominant society are often different from those of a cultural community. One specific area, which is important in healthcare and especially to HIV prevention, is sexuality and sexual orientation.

Sexual Orientation

Discussing sexuality is not a comfortable topic in most communities, including communities of color. However, from a HIV/AIDS prevention perspective, the cultural values and the norms that surround sex and sexual orientation must be addressed. Western culture traditionally assumed “homosexual men had sex only with men and identified with the gay community” (Doll, Petersen, White, Johnson, & Ward, 1992, p. 2). However, there is a complexity surrounding sexual orientation and sexual behavior in communities of color, especially in the African American community (Crosby & Grofe, 2001).

On the “down low” is a term used to denote an African American man having sex with a man without the girlfriend, wife, or family knowing. This is a source of controversy in the African American community because men who are on the
“down low” do not consider themselves gay (King, 2004). Since they do not consider themselves gay or bisexual, this is part of the complexity of sexual orientation. African Americans who identify as men who have sex with men are often “isolated by homophobia within their own community and racism by the predominately white gay culture” (Crosby & Grofe, 2001, p. 1).

Western homosexual relationships are often defined by the gender of the sexual partner (Wood & Price, 1997). Although not universal, homosexual encounters in the Hispanic community may be defined by the individual who penetrates and the individual who is penetrated (Carrier, 1995). The insertive partner is considered masculine and may identify himself as heterosexual. Activo or the active role is “the only sexual role consistent with masculine social expectations” (¶ 7). Pasivo males are submissive during anal or oral sex and are often stigmatized because of their sexual role because it is consistent with a female role (¶ 7). The receptive partner is considered feminine (Wood & Price, 1997). Activo males are more often viewed as normal heterosexual men even though partners may be male, and pasivos generally have more difficulty hiding their sexual behavior (¶ 8).

In prevention, factors and values such as machismo, homophobia, family loyalty, sexual silence, and racism all drive sexual behavior as well as a person’s desire to
practice safer sex (The Advocate, 1997). By not identifying as gay or bisexual, these men may not perceive their risk factors from HIV/AIDS and are less likely to protect themselves and/or their partners. Additionally, they may spread the risk to women (Centers for Disease Control, 2000). In the American Indian community, another dimension is added when looking at the historical concepts of gender and sexuality in many tribes.

Historically, many American Indian tribes had alternative gender and sexuality roles which were accepted. Many elders remember when gender-different men and women were respected for their talents, power, and medicine (Gilley, 2002). Although many tribes accepted alternative gender roles, not all tribes have a history of acceptance of alternative gender roles and sexuality (National Native American AIDS Prevention Center [NNAAPC], 2001). European arrival brought Christianity which influenced and changed the social systems and the beliefs about Native gender roles and sexualities (Williams, 1992). In some tribes, “there are no records of alternative roles, however, they may have been destroyed with European arrival” (NNAAPC, 2002, p. 6). There is documentation of many tribes having alternative gender roles involving cross-gender or same sex behavior (Roscoe, 1988). Some tribes “may know about alternative gender roles and sexuality within their tribes, however, they may not embrace the roles as acceptable” (p. 6).
The most common term used today is “Two Spirit”. The term originated in 1989 at a gathering of gay and lesbian American Indians (Lang, 1998). The group wanted a term that “reflected the combination of masculinity and femininity which was attributed to males in a feminine role and females in a masculine role” (p. xiii). The concept of Two-Spirit has been important in prevention programs and is used in many American Indian HIV/AIDS prevention programs. It is an attempt to honor the historical role of Two-Spirits.

However, homophobia does exist and many gay or Two-Spirits leave their communities in order to find acceptance as well as social and sexual freedom (Gilley, 2002). The “lack of communication about sex and especially same sex relations is a major factor in HIV prevention” (p. 237). Additionally, those who leave their communities because of the discrimination may disconnect from their cultural contact, which influences their self-esteem and the basis of their self-identity. “When it is associated with AIDS in the Native community, homosexuality is sometimes hidden with devastating results” (Vernon, 2000, p. 4)

With the conversion to Christianity or Catholicism, “many American Indians absorbed Christian notions about the evilness of sex and disrespect for ceremonies” (Williams, 1992, p. 187). Before 1930, homosexuality was common in many tribes; however, white influence and assimilation changed the beliefs. The levels of assimilation and
acculturation add to the levels of historical trauma and oppression.

American Indian Acculturation

Acculturation is the “process a member of an ethnic minority assimilates to the majority culture” (Sanchez-Way & Johnson, 2000, p. 1). The history of American Indians is important to understanding American Indian cultural identity and acculturation (Garrett & Herring, 2001, p. 139). There is no single criteria to determine who is American Indian. Government agencies and tribes have different criteria to determine eligibility for services. Tribes also differ and may require a minimum blood quantum, a maternal or paternal lineage, or even birth on the tribe’s reservation (Nixon, Phillips, & Tivis, 2000; NNAAPC, 2001). Regardless of “blood quantum, the most popular and most deceiving means of determining a person's ‘Indianness’ or a person's degree of traditionalism comes not only from their ethnic heritage but also from their life experiences and life choices” (Garrett & Pichette, 2000, p. 6).

American Indians may or may not be enrolled in a tribe and may or may not have an understanding of traditional culture. Factors may include family history, lineage, adoption, low blood quantum, or even the choice to not enroll (NNAAPC, 2002). American Indians are not a homogenous group, and “they may differ greatly in their level of acceptance of and commitment to tribal values,
beliefs and practices” (Garrett & Pichette, 2000, p. 6) and through “a variance of customs, language and type of family structure” (Garrett & Herring, 2001, p. 143). Due to these numerous factors, an individual may fall on a continuum from traditional to non-traditional. There is a continuum of categories into which an American Indian individual may fall:

1. Traditional: Generally speaks and thinks in their native language, practices and holds traditional customs and holds traditional values and beliefs.

2. Marginal: May not fully identify with mainstream values and also may not identify with cultural practices of their tribe. May speak English as well as their tribal language.

3. Bicultural: May accept and practice their traditional values and beliefs of their tribal group as well as the mainstream values simultaneously.

4. Assimilated: Accepted by dominant society and embrace only mainstream cultural values, behaviors, and expectations.

5. Pan traditional: Generally accepted by dominant society but seeks to return to and embrace previously lost traditional cultural values, beliefs, and practices of their heritage. They may speak English as well as their tribal language. (Garrett & Pichette, 2000, p. 6)

Within the American Indian population, traditional people may identify with and participate in their tribal ceremonies and practices; bi-cultural would be the individual who has been raised with traditional values but has acquired the behaviors to function of the mainstream community; and assimilated would mean the individual
identifies with mainstream expectations and behaviors (p. 80).

Understanding one’s cultural identity can support and enrich prevention through the utilization of cultural strategies and tools. In the Indian community, there are many ways to learn, many ways to educate, and many kinds of learners. American Indian adults can bring a wealth of experience to the learning environment.

**Adult Learning**

**Andragogy**

The concept of andragogy developed by Malcolm Knowles provides a foundation for working with adults by taking into account the issues and experiences that factor into adult learning. When working with adults and especially those who are from marginalized or oppressed populations, the learner’s self-concept and the role of learner’s experiences are critical factors (Knowles, Holton Swanson, 1998). Two of the assumptions of andragogy, those dealing with self-concept and experiences, specifically relate to American Indians. The role of self concept may affect an adult’s reception to the learning environment. Adults may come to a class, workshop, or training with a need to feel resistant due to previous conditioning from an earlier school experience (p. 65).

Historically, adult education for American Indians was tied to assimilation (Deloria & Wildcat 2001; Imel, 2001).
Adults may have been in learning arenas where they have been treated as incapable of learning or of self-directing (Imel, 2001). Andragogy assumes that adults have a self-concept of being responsible for their lives and have an expectation that others will treat them as capable (Knowles, Holton & Swanson, p. 123). Adult educators have the responsibility to create effective learning experiences which help transition adults to being self-directed learners (p. 65).

When working with American Indian adults, it is important to take this andragogical assumption into consideration based on their past educational experiences. American Indian adult learners may either be of the generation that grew up in boarding schools or adults that grew up hearing their parents’ or grandparents’ stories. The boarding school experience was a study in the relations of power. “Boarding schools served as an institutional training ground for the subservience of the colonized” (Lomawaima, 1994, p. xiv). American Indians who attended boarding schools are a living history of the memories and experiences. Before World War II, boarding schools were harsh, and students were made to feel inferior. “Those memories and experiences continue to shape families, communities and educational endeavors among Indian people” (Lomawaima, 1994).

The second assumption which is critical to American Indian adult learners is the role of learners’ experiences.
There is a mistrust of health officials, which derives from particular histories of deliberate infection, health care that is inferior, and the issue of confidentiality in Indian Health Service (Vernon, 2001, p. 8). There are histories of sexual abuse and violence for American Indian women (Restoration of Native Sovereignty, 2004). Alcohol and drugs often are a factor in the many experiences which American Indian people have endured (Vernon, 2001). Past injustices against American Indians may not have been resolved in the psyche of many Native people (Galbraith, 1998). These prior experiences provide a basis of how adult learners will interact and of what they believe. From an educator's perspective, they can influence the teaching if the experiences are incorporated into the process of learning (Galbraith, 1998, p. x).

There is a need for a more culturally inclusive perspective of adult learning (Wlodkowski, 1996). Important to learning is the goal of creating an inclusive learning environment. A basic challenge to learning environments are the unequal relationships between educator and students. Integrating and understanding the history and cultural values are important in educational setting with adults and elders. Inclusive learning environments work to dismantle this control of power. The power relations between and among learners changes in an inclusive learning environment. Groups of learners, who may have been silenced before, may
feel freer to participate in discussion (Wlodkowski, 1996). Culturally relevant education focuses on transformation and empowerment (Guy, 1999, p. 95).

**Transformational Learning**

The concept of transformative learning suggests that people can be transformed through a process of critical reflection; this concept was pioneered by Jack Mezirow (2000). Transformative learning is a process in which people transform their personal frames of reference in order to act on their own values, feelings, and meanings (Mezirow, 2000). Often our “frames of reference represent culturally held paradigms” (p. 17).

Overcoming adverse conditions, which may be political, social, or economic, is directly related to how learners “view themselves and their ability to change their environment” (Guy, 1999, p. 95). The ability to reflect and dialogue with oneself and with others helps people to learn and change (Mezirow, 1991). Community plays a key role in a person’s journey for transformation and identity. Learners see themselves as a part of a community, whether that is through language, history, geography, or culture. The power of one’s community and its impact on the educational experience of the learner are powerful and should not be underestimated (Guy, 1999, p. 95).

Achieving self-empowerment or gaining more control of “one’s life as a liberated learner is limited by social,
historical and cultural conditions” (Mezirow, 2000, p. 27). Social inequities do influence the way a person understands experience and how they have shaped the way a person thinks and believes (p. 28). With the increasing diversity in the United States, it is important for adult educators “to understand and embrace how diversity relates to transformative learning practice” (Mezirow, 2000, p. 251). Transformational education can include educational methods and cooperative learning strategies such as frequent group exercises and an empowerment focus (Hurdle, 2001). This also helps build social support in health prevention efforts.

One study used the transformational theory in exploring the process of integrating participant’s HIV/AIDS status into identity (Baumgartner, 2002). Participants were involved in the study for four years. For change to occur, it is important to have the ability to reflect and dialogue with ourselves as well as others (Mezirow, 1991). A six-component process of incorporation of HIV into identity was uncovered. The diagnosis of HIV was the beginning of incorporating HIV/AIDS into identity (Baumgartner, 2002, ¶ 12). A post-diagnosis turning point involved some experience that was a catalyst. A third component was immersion (¶ 13). Participants became immersed in the HIV/AIDS community and educated others about the disease. A post-immersion turning point was the fourth component: for
many it involved access to new life-extending medications, and they began to re-examine the centrality of HIV identity (¶ 14). Integration was the next phase which was marked by decentralizing and balancing. Participants found they began an acceptance of living with the disease and began participating in other activities outside of HIV/AIDS work (¶ 15). “Disclosure was woven through the whole process” (¶ 16). Participants first only told significant people in their lives, then they made situational disclosures, and eventually there was public disclosure (¶ 17). The study found that the learning process was transformational and remained stable. Social interaction was a prominent factor in the transformational learning process (Baumgartner, 2002).

Both transformational learning and empowerment are based on the theory that adults can become empowered through adult education (Freire, 1970; Mezirow, 2000). Current research has “expanded the thoughts on transformational learning and meaning making processes— it is not what we know but how we know that is important” (Baumgartner, 2002, ¶ 22). This has provided “insights into the importance of relationships and feelings” (¶ 22). “Our life histories and language are bound up with those of others” (Mezirow, 2000, p. 115). Understanding adult education begins the process to help people learn how to learn and become an active participant in the transformation process.
Learning How to Learn

Learning is all encompassing and can have an impact on the individual. The concept of learning how to learn emphasizes “knowledge and skill essential to function effectively in various learning situations” (Smith, 1976, p. 5). Smith (1982) defines four critical issues for learning how to learn for adults. Adults have a different orientation to learning; an accumulation of experience; special developmental trends; and an anxiety, or ambivalence (p. 38).

From a different yet very similar perspective of learning how to learn, Cajete (1994) defines some characteristics that apply to indigenous people. Four of the characteristics are: learning honors each person’s way of being, doing, and understanding; storytelling, expressed through experience, is an essential vehicle; recognizing that learning requires letting go, growing, and reintegrating at higher levels of understanding; and learning requires overcoming doubt (p. 30). Understanding the nature of adult learners is important in an educational setting.

Through the learning process, individuals learn about life, about self-fulfillment, and about self-actualization (Kidd, 1973, p. 125). Experience is also an integral part of the learning process. The learner is at the center of the experience (p. 129). Individuals react to experiences
as they perceive them. Past experience can also “determine what information will be selected for further attention (Smith, 1982, p. 41). Adults bring a uniqueness that can affect the learning environment (p. 40). In a learning environment that is designed to “produce a major personal change, the learner may need to know about certain implications and peculiarities of such activity” (p. 9). Adults organize new experiences into some relationship to the self, or they may ignore them because there is no perceived relationship (p. 130).

The process of learning how to learn and the integration of a person's life experience are considered important elements in adult education. Learning how to learn was also an “important element in traditional indigenous teaching and learning” (Cajete, 1994, p. 222). The model of adult education has grown with many theories, ideas, and frameworks, and these new approaches contribute to the field of adult learning (Merriam, 2001). Merriam (2001) believes this contribution allows the adult learner to be seen more holistically, integrating imagination and emotions and not just the cognition process. This adult learning process also provides a way to make sense of life.

From an indigenous perspective, learning comes from experience through customs, habits, and practices (Deloria & Wildcat, 2001). One’s understanding and knowledge come from the relationships--physical, psychological, and spiritual
“Modern and traditional education can no longer afford to remain historically and contextually separate entities” (Cajete, 1994, p. 18). This belief is based on the fact that modern education needs to “provides tools essential for survival”, but it must be “within the context of a greater cultural whole” (p. 19).

**Learning Strategies**

Learning styles are usually defined as preferred ways of doing something that is consistent over time (Hilberg & Tharp, 2002). People have individual preferences in learning, and they are important in learning how to learn (Smith, 1982, p. 24). The differences may be in how they process information, in their method of problem solving, or in how they think (p. 23). Learning styles are an “individual’s characteristic ways of processing information, feeling, and behaving in learning situations” (p. 24). Important to this process for the adult learner is a personal awareness of oneself; awareness of the best suited mode of learning (self-directed, collaborative, or institutional); basic skills; and, recognizing the number of options available for learning and change (p. 20).

This is different from learning strategies which can change over time (Hilberg & Tharp, 2002). Learners develop and use strategies in their own learning situations (Conti & Kolody, 2004). One instrument that has been developed to quickly identify learning strategies is the Assessing the
Learning Strategies of Adults (ATLAS) (Conti & Kolody, 1998). This research has uncovered three types of learning strategy preferences which learners use (Conti & Kolody, 2004). The three categories are Navigators, Problem Solvers, and Engagers. Past research on ATLAS "has not shown any association in any way with demographic variables such as gender or race" and learning strategy preference (Conti & Kolody, 2004, p. 185).

The three categories have distinct differences in the strategies that learners initiate. Navigators are the learners who prefer to look "externally at the utilization of resources that will help them accomplish their goals" (p. 185). Perfectionist, logical, order and structured would be terms applied to Navigators. Problem Solvers are reflective thinkers, and they look for external resources; however, the difference is they continue to look for and generate alternative resources (p. 186). Terms that might be applied to Problems Solvers would be curious, intuitive, open-minded to their learning possibilities, and procrastinate but only to allow more thinking time (p. 186). The third category are the learners who love learning. However, they need to be actively engaged. For Engagers, learning is connected to fun, to relationships with the subject, to the teacher and others in the learning environment, and they are great at networking (p. 187).

The increase of diversity leads to a greater
sensitivity and understanding of the learning style and needs of various ethnic groups (Aragon, 1998). Additionally, the basic framework of the dominant society may not work for American Indians. Indian people “have a different way of learning and a different worldview” (Williams, 2002, p. 51).

**Traditional American Indian Learning**

Traditional American Indian learning is surrounded by the strength of the culture. For many, maintaining culture is what help nations remain viable. American Indians are one of the most culturally diverse of the ethnic groups in the United States (Duran, 2002). There are, however, many inherent philosophies and cultural values that are shared by most American Indian groups.

When defining culture from a Native perspective, it is often defined in a number of ways by tribal elders. Darrell Kipp, a member of the Blackfeet tribe and elder, states “our culture emanates from language,” (Thorpe, 1996, p. 185). “Without them [languages] we may become permanently lost or irrevocably changed” (Kipp, 2003, p. 17).

Charlie Soap (2002), a member of the Cherokee Nation, says, “the old people say: know who you are, know your ways. That’s what people mean when they say culture, know the ways of your people, know the Creator” (p. 65). Wilma Mankiller (2002), past Chief of the Cherokee Nation, states:

The most important attribute to our culture, that we all have in common, is our sense of
interdependence, and sense of community. The fact that we live within a value system and culture that enables us to care about one another and help one another is the most precious cultural attribute. Survival of a system of reciprocity among our people is absolutely amazing—strongly tied to our extended families, our clans, communities and nations. Our sense of community is our most important attribute of our culture. (p. 56)

Although each of these premises may sound different, they are each intrinsic to and reflected in the inherent cultural values of American Indians. There are many core values and shared cultural standards and meanings that cross tribes. Community and relationships are an integral piece of cultural values.

Traditional American Indian learning is based on this premise of community and relationships with people and nature (Cajete, 1994). Education from an indigenous perspective involved the entire community. Everyone was “a teacher and everyone, at some point in time, was a learner” (p. 21). By “watching, listening, experiencing and participating, everyone learned what it was to be one of the People and how to survive in the community with others” (p. 176). Daily education included “learning about relationships between people and things, learning about the customs and traditions, community values, as well as how to care for one’s self and others” (p. 176).

The dominant cultural framework for education emphasizes content. Historically, “traditional American
Indian learning occurred in a holistic social context, with the goal of developing the importance of each individual as a valuable contributing member of the social group” (Cajete, 1994, p. 26). In order to do this, open communication and establishing a reflective dialogue that “originates from the participants and their collective experience are needed” (p. 27).

In essence, “education is learning about life through participation and relationship to the community, including people, plants, and animals” (Cajete, 1994, p. 26). Mitakuye Oyasin (we are all related), a Lakota saying, means “that one’s life is connected to other people as well as the physical environment” (p. 26). This interconnectedness of humans to the earth provides the first principle of American Indian spirituality (Deloria & Wildcat, 2001). Often thought of by some as a romanticized belief, it is an acknowledgment of living people’s experiences (p. 14).

The “circle of life or medicine wheel is a traditional way of viewing the world” and is strongly connected to spirituality (Orr, 2000, p. 60). The core of the circle is the respect for the spiritual relationships that exist between all things. It provides a way to “balance the four dimensions without negating any one form of knowing” (p. 60).

The process of traditional American Indian education was informal and occurred during daily experiences.
Education revolved around “experiential learning (learning by doing or seeing), storytelling (learning by listening and imagining), ritual/ceremony (learning through initiation), dreaming (learning through unconscious imagery), tutoring (learning through apprenticeship), and artistic creation (learning through creative syntheses)” (Cajete, 1994, p. 34).

In characterizing indigenous education, there are some main elements (Cajete, 1994). Many have a relationship to the core elements of adult learning concepts.

1. Learning happens of its own accord, if the individual has learned how to relate with his/her inner Center and the natural world.

2. There was the acceptance that experiences of significant hardship were a necessary part of an individual’s education, and that such circumstances provided ideal moments for creative teaching.

3. That empathy and affection were key elements in learning.

4. Each learning situation is unique and tied to the creative capacity of the learner.

5. Teaching and learning are a collaborative contract between the teacher and learner.

6. Learners need to see, feel and visualize a teaching through their own and other people’s perspectives.

7. Life itself is the greatest teacher and that each must accept the hard realities of life with those that are joyous and pleasing.

8. Learning through reflection and sharing experience in community allows us to understand our learning in the context of greater wholes. (p. 211)

From an indigenous learning perspective, there are many ways to learn, many ways to educate, many kinds of learners, and many kinds of teachers; each is honored for their
uniqueness. Indigenous education was lifelong learning (Cajete, 1999).

The experiences of past trauma or hardship provide an individual a source for renewal through transformation. This transformational process can help people understand the meaning in their life. This traditional American Indian philosophy fits the parameters of empowerment and transformation theories in HIV prevention and can provide a foundation to support HIV education in Indian communities.

HIV/AIDS

Global Impact

Globally, the HIV epidemic is more than one epidemic. It is multiple epidemics which varies across culture, communities, economics and governments (Kaiser Family Foundation, 2004). Over 60 million people have been infected with HIV since the epidemic began (UNAIDS, 2002). Millions of people may die prematurely between 2000 and 2020 in 45 of the most affected countries (¶ 4). It is projected that at current rates, 100 million people worldwide will be infected by 2005 (World Economic Forum, 2004).

Although a serious health concern, for many countries it has social, economic, educational, workplaces, poverty, growth, and even the food supply implications (Joint United Nations Programme on HIV/AIDS [UNAIDS], 2002). It pushes people deeper into poverty. Women are left bearing an even bigger burden as workers and care givers. In underdeveloped
countries, women try to maintain farming and agricultural duties. Younger and older women have to take over additional duties when other women become ill. The impact of HIV has caused a decline in school enrollment in many countries. The workforce of countries is impacted because the vast majority of people living with HIV are in their prime of their work life, and million are ill or have died (UNAIDS, 2002).

Understanding and working within the culture of different countries is integral in HIV prevention globally. This is a difficult task because the “variations may be subtle but significant enough to require a different and novel approach” (Kaiser Family Foundation Daily Reports, 2004). Even within the United States, many different communities and different cultures are at risk.

**North American Impact**

Every year there are 40,000 new HIV infections in the United States with a recent demographic shift to increased rates of infection of women and people of color (UNAIDS, 2002). Currently, there are more people of color and more women becoming infected through heterosexual contact. Infections are also increasing in adolescents and in people over fifty.

Today, sexual health is a significant challenge for the United States. A few of the top health concerns are sexually transmitted infections (STI’s), infertility and
cancer related to STIs, unintended pregnancy, and HIV/AIDS. Sexually transmitted infections can increase a person’s risk of HIV/AIDS (CAPS Fact Sheet, 2002). African American and Latino women comprise 25% of the country’s female population but account for 80% of all reported HIV/AIDS cases in the United States (Kaiser Family Foundation, 2004). The facts about HIV transmission have not changed. Research has provided medical, scientific, and public health information about HIV and AIDS. The key risk factors are having oral, anal, or vaginal sex with an infected person; sharing needles (steroid, drug, injection, tattoo, or piercing) with an infected person; and passing the virus by an infected mother to her unborn child in utero, through delivery, or through breast feeding (Centers for Disease Control, 1999). The risk of contracting HIV through a blood transfusion is extremely low due to enhanced screening and testing so the blood supply in the United States is very safe (American Red Cross, 1998; CDC, 1999).

In the United States, the cumulative number of AIDS cases reported is 850,000 to 950,00 as of July 11, 2004 (Kaiser Family Foundation, 2004). According to the Oklahoma State Health Department (2004), there are 2,703 HIV cases in Oklahoma and 4,347 people with AIDS in the state. This number does not reflect people who have not had a HIV test.

As with many of the country’s health challenges, there are serious disparities of those affected (Satcher, 2001).
Communities that are economically disadvantaged and that have racial and ethnic minorities and have persons with different sexual identities and disabled persons are most affected (Satcher, 2001).

During the 1990's, the epidemic dramatically shifted to women. Today, women account for a growing number of new AIDS cases. The number has grown from 7% in 1986 to about 26% in 2002. More than two-thirds (68%) of estimated new AIDS diagnoses among women are due to heterosexual contact and 29% to injection drug use (Kaiser Family Foundation, 2004). Women of color are also impacted greatly. African American women account for 64% of estimated new infections among women and Latinos account for 18% (CDC, 2002; Kaiser Family Foundation, 2004). Women are also a historically disadvantaged group of people who have had environmental and economic barriers which could contribute to the increase of HIV infection (Spector, 1999).

Community is important in the fight against HIV/AIDS. However, defined--racial, ethnic, geographic, culture or shared values--community has great influence on sexual health and determining what responsible sexual behavior is, how it is practiced, and how it is enforced (Satcher, 2001). A shared culture is another form of community. Communities that are defined as having minority status have more negative effects on sexual health (p. 11). Accessing health education and care are hindered by education, employment,
and poverty.

In the African American community, HIV is a major health crises. African Americans represent 12% of the population yet accounted for 50% of new AIDS diagnoses (CDC, 2004). There is also a large and growing Hispanic population in the United States and that community is also heavily affected by the HIV/AIDS epidemic. They include a very diverse ethnic and cultural mixture. According to the Centers for Disease Control (2004), Hispanics also represent a need for concern due to increase in cases. In 2000, Hispanics represented 13% of the U.S. population but accounted for 19% of the total number of new U.S. AIDS cases (CDC, 2004).

Although race and ethnicity are not risk factors for HIV, there are many underlying social and economic conditions, including language, cultural diversity, cultural values, and limited access to health care which can increase the risk in communities of color (CDC, 2002). For some minority communities, historical legacy can lead to distrust and suspicion of public health agencies (Satcher, 2001). The history of smallpox in the Native community (Weaver, 1999) and the Tuskegee Experiment in the African American community (CAPS, 1999) are also factors that are compounded by poverty, alcoholism, and discrimination also are factors (Weaver, 1999). Racism, immigration, homophobia, cultural taboos, and poverty are also forms of oppression for the
Hispanic population (Centers for Disease Control, 2000). Many of the same factors that affect the increase in HIV/AIDS in the African American and Hispanic community also contribute to the epidemic in the Native American communities.

**American Indians and HIV/AIDS**

Like all communities of color, the numbers of American Indian/Alaska Native persons living with AIDS continues to rise. Increase in HIV/AIDS cases overall is less than 5%; however, for Native people, between 1995 and 1996 alone the increase was 18% (Vernon, 2000). Through the end of 2002, American Indians comprised 2,875 AIDS cases from the states and territories that report (CDC, 2003).

Numbers do not accurately reflect the true status of HIV in the American Indian community. Numbers only reflect people who have taken a HIV test and do not take into account those who are afraid to test or are uncomfortable with testing at Indian clinics. It also does not consider the people who are misclassified as another race. Like many people, American Indians underestimate the risk of HIV infection and also believe that it is an urban problem and not relevant to them (Ramirez et al., 2002). There is also incomplete HIV data because not all states have an integrated HIV/AIDS system (CDC, 2001). Ten states account for over half of the people who self-identify as American Indian (U. S. Census, 2000). Those states with the largest
populations are California, Oklahoma, Arizona, Texas, New Mexico, New York, Washington, North Carolina, and Alaska (p. 4). Nine of these states had reported HIV data to the Centers for Disease Control as of December 2001 (CDC, 2001). However, California has not reported HIV cases to the CDC, and two states only recently initiated HIV reporting (CDC, 2001).

Having an accurate count of American Indian HIV and AIDS cases is challenging. Inaccurate reporting of race and ethnicity, coding errors, under reporting, omission of Indian data for urban areas, and the lack of detailed HIV surveillance of American Indians may result in significant undercounting of HIV infections (CAPS Fact Sheet 43E, 2002; Vernon, 2001; Vernon & Jumper, 2002). The race and ethnicity of American Indians are often not classified correctly on data collection forms due to assumptions about skin color, name, and residence and even to misleading self-reporting (CAPS Fact Sheet 43E, 2002; Rowell & Bouey, 1997; Thoroughman et al., 2002). An American Indian’s ethnicity is most often noted as Hispanic or white (CAPS Fact Sheet 43E, 2002). The lack of access to testing and care are also challenging. Due to human nature, people may not believe they or their partners are at risk of HIV infection. Among different American Indian communities, there is also great diversity in spiritual, social, economic, as well as geographic locations that exists (CDC, 2001). Prevention is
needed in tribal communities; however, funding is a challenge. Tribes may not have resources or may focus on other issues deemed more important. Funding in general for HIV prevention is lacking. Funding for AIDS programs are based on a higher proportion of cases per category (Weaver, 1999). With smaller numbers, prevention dollars are often not available for programs. For many tribes, HIV/AIDS is not a priority; therefore, funding goes to other major health issues.

As in many communities, homophobia also presents a challenge. Alternative gender roles and sexualities were accepted by many tribes historically (NNAAPC, 2002). However, today’s Native people who are gay, lesbian, bisexual, transgendered, or identify as Two-Spirit often still struggle against homophobia (p. 6). The implications of health care issues for people of color, including HIV/AIDS, bring culture to the forefront of prevention efforts. Currently prevention is the only tool available to stop HIV transmission.

Health Prevention Theories

HIV prevention is complex. However, a crucial piece in the complexity is the theory. A theory “describes the factors and/or relationships that influence a person’s behavior and/or environment and provides direction on how to impact them” (Center for AIDS Prevention Studies [CAPS], 2002, ¶ 1). Theories utilized in HIV prevention stem from
various disciplines, including psychology, sociology, anthropology, and adult education. In order for a theory to be formalized, it has to be tested in various settings with repeatable (CAPS, 2002, ¶ 2).

There are characteristics of HIV education and prevention programs that have been found to work (CAPS, 2002). Characteristics that have been defined as essential in prevention include having clear objectives and interventions. Programs also need to build a trust level within the group in order for individuals to initiate and maintain change. It is also important to provide: (a) a place to share unsafe experiences as well as support for those who have relapsed, (b) personal sharing in order to lead to personal and group transformation, and (c) laying groundwork for broader changes in community norms (¶ 3).

Numerous researchers cite the importance of recognizing that culture is a key aspect in planning and implementing programs (Airhihenbuwa, 2000; Airhihenbuwa, DiClemente, Wingood, & Lowe, 1992; Wilson & Miller, 2003). Prevention programs that work should focus on the cultural elements. Programs should be for clearly defined target populations (e.g., age, gender, race/ethnicity, culture, or sexual orientation). They should also be for, by, and of the target population; utilize community leaders; use of common language; and be developed for peers by peers (Center for AIDS Prevention Studies, 2002). It is also important to
incorporate cultural resiliency factors in programs to reach and empower the target population.

Culture can influence a person’s attitudes and knowledge about behavior changes. Therefore, it is important that HIV prevention be culturally sensitive and understand the effects of oppression (Croutateau & Morgan, 1992). How people interpret their cultural rules will “define how they view themselves, the world they live in and the sexual behaviors they may engage in” (Wilson & Miller, 2003, p. 196).

AIDS is a disease of marginalized populations (Huber & Gillaspy, 1998). In a review of culturally grounded HIV prevention programs, it was found that culture was almost unanimously synonymous with race/ethnicity (Wilson & Miller, 2003). Race is often used to differentiate groups of people based on their physical traits or characteristics. Race is also applied to “ascribe moral or psychological attributes which facilitates discrimination based on ethnocentric biases” (Huber & Gillaspy, 1998, p. 20). Within the HIV the communitites the most affected are poor, oppressed, and marginalized.

The behaviors that put people at risk are generally surrounded by many factors at many levels. Behavior change theories usually address many of the levels including individual, community, interpersonal, structural, and environmental factors (CAPS, 2002, ¶ 6). The Health Belief
Model, an individual level theory; the Social Learning Theory, which is classified as an interpersonal level; and the Empowerment theory which is community level are often used in HIV prevention programs (¶ 7).

**Health Belief Model**

The Health Belief Model has been in use since its development in the 1950's. It is a widely recognized theoretical model and is one of the most widely used psychosocial approaches used to explain health behavior (DiClemente & Peterson, 1994). The underlying basis of the Health Belief Model has three components: perceived susceptibility, perceived severity, and perceived benefits (p. 8). If people believe they are susceptible to a disease or illness, then they are motivated to change. Research states the importance of using a behavior anchor when asking a question. For example, “If you do not practice safer sex how likely are you to be come infected with HIV?” should be used instead of simply asking, “How likely are you to become infected with HIV?” (DiClemente & Peterson, 1994, p. 15). If people believe that HIV is a risk, then they would be more willing to change risky behaviors.

The second component, perceived severity, addresses the perceived costs of being HIV positive and of having AIDS. One might believe that a person would be afraid of contracting HIV because of death; however, many people who participate in high risk behaviors may not have a fear of
dying (DiClemente & Peterson, 1994, p. 16). One study found “that individuals, who had a high anxiety when seeking HIV antibody testing, were least likely to return for the results” (p. 17), and for some it might be the fear of dying or having a family member or friend die of AIDS.

The third component involves the person believing that the benefits of behavior change will outweigh the inconveniences. In one study, a distinguishing factor was if a respondent received positive feelings from a partner regarding condom usage, then condoms were always used (DiClemente & Peterson, 1994).

Perceived barriers also play a crucial part in HIV prevention and the Health Belief Model. Individuals may assess the cost-benefit analysis of effectiveness versus perceptions that it could be unpleasant, painful, difficult, inconvenient, time consuming, or dangerous (p. 9). The cue to action may be provided through benefit versus susceptibility context. The Health Belief Model is generally supported by researchers of HIV intervention programs due to its ability to modify behavior (Spector, 1999). This provides an avenue to discuss a person’s personal risk, benefits, and perceived barriers as well as prevention barriers.

Social Cognitive Theory

Formerly known as the Social Learning Theory (Bandura, 1977), the Social Cognitive Theory requires skills in self-
motivation and self-guidance and a strong belief in self-efficacy (DiClemente & Peterson, 1994). This model is comparable to the Health Belief Model because it also takes into account a person’s perception of disease susceptibility, threat, and severity (Spector, 1999). The Social Cognitive Theory focuses on the individual and does not take into account strategies for changing community norms. It is a theory that can allow for both cultural integration as well as the western view of health, and it has been found to work well in American Indian communities (Satter, 1999). There are program designs that have integrated cultural aspects. One such intervention with young African American women used the Social Cognitive Theory combined with gender and power theories (DiClemente & Wingood, 1995). The results were that women who participated were significantly more likely than women in the comparison group to report consistent condom use with their partners, to negotiate condom use, and to not have sex when a condom was not available (DiClemente & Wingood, 1995). This five-session intervention included integration of culture by building on gender and ethnic pride, personal responsibility for sexual decision making, sexual assertiveness, and communication training. Skills building included condom use skills and cognitive coping skills (p. 5).

The SISTA Project, or Sisters Informing Sisters about
Topics on AIDS, is also based on the Social Cognitive Theory combined with theories on gender and power (DiClemente & Wingood, 1995). This is specifically geared to African American women and utilizes a cultural base to acknowledge pride and to enhance self-worth in being an African American woman through the use of poetry and artwork by African American women. Dialogue and discussion of cultural and gender triggers help in the discussion of negotiation skills. Based on behavioral theory, it also meets cultural competency in that it was developed by African American women, and it is for African American women. The SISTA Project includes relationship skills and takes a holistic approach (DiClemente & Wingood, 1995). A holistic approach allows the integration of cultural and gender issues and discussion. In turn, this helps build pride and can empower participants.

Empowerment Theory

In social work, especially programs that serve “women, people of color, and other oppressed groups, empowerment is a central theme (Secret, Jordan, & Ford, 1999, p. 120). Empowerment, based on Paulo Freire’s educational model, is a community level intervention and engages groups to identify and dialogue about the current issues. This participatory model helps individuals understand the forces in their lives--political, economic, social, or personal. Empowerment is “an increase in the actual power of the
client or community so that action can be taken to change
and prevent the problems clients are facing” (p. 120).

An HIV/AIDS program for incarcerated women in Oklahoma
utilizes the educational theory of Freire. Program
personnel work with the inmates to establish dialog to learn
about the root causes of HIV. It serves to “establish
personal empowerment and emancipation” (Spector, 1999, p.
50). The topics for dialogue and development of their own
prevention education materials are determined by the women.
They have developed a video “which gives them a voice to
discuss their stories of abuse, neglect, rape, and chemical
dependency” (p. 51).

Empowerment is also central to culturally relevant
adult education. Although there are many meanings, it
embodies “both individual and social transformation” (Guy,
1999, p. 95). According to Freire (1970), empowerment is
also a result of liberatory learning. Individuals who
learn, act, reflect, and become critically conscious can
produce empowerment and self-determination.

Learners who “retain internalized negative or passive
images of themselves are marginalized by the dominant
culture” (Guy, 1999, p. 95). Therefore, it is difficult to
challenge the circumstances of marginalization. Challenging
“the status quo that oppresses them is central to culturally
relevant education” (Guy, 1999, p. 95). Being empowered
helps the learner see the capability and power within
Freire’s theory works with American Indians because “it is an indigenous response to learning” (Cajete, 1994, p. 217). Freire’s theory incorporates dialogue about what is important, it is connected to the culture, and it fosters a learning process that is mutual (p. 217). American Indians need tools and strategies which incorporate their experiences, history, and culture and that provide a basis to recognize their strength and power in their cultural context of American Indian adult learning (p. 218).

Empowerment is the goal that most prevention organizations have for their clients or those who participate. At the core of empowerment is the idea of power. It requires that empowerment can only work if the power changes (Page & Czuba, 1999, ¶ 3). It also depends on the idea that power can expand. This point reflects on common experiences of power rather than how one thinks about power (¶ 5). Power is not isolated but exists within the context of a relationship between people and things. Since power is created in relationships, power and power relationships can change (¶ 7). Empowerment as “a process of change then becomes a meaningful concept” (¶ 4).

An example of utilizing the adult education perspective of empowerment is a women’s writing program at a county jail. Since 1994 incarcerated African American and Latino women have explored women’s literature as a way to
understand and address the issues that stop their own self-actualization. Their creative expression reinforces the reflection and discussion, which destroys the culture of silence of the oppressed women and empowers them through the use of their own words (Baird, 2001). The sharing of personal histories helps provide a grounding in self and identity (p. 1). Although the women did not know about Freire, they validated the Freirian perspective of moving from a “culture of silence” to a level of self-confidence, through their “own words that held meaning for them to assume responsibility for their communities by trying to liberate them” (p. 4).

The oppressive conditions and the status of incarcerated African American women was the basis of another study utilizing the Freirian approach to empowering women. It was built on the context of Freire’s commitment to provide illiterate peasants, who suffered oppression with a process for humanization and empowerment. This Freirian process moved the participants from a culture of silence and self-blame to a high level of self-confidence and responsibility (Baird, 2001).

Freire (1970) believed that education is never neutral. Neither is HIV. It is surrounded by political, religious, and moral issues and disproportionately affects the poor and the disenfranchised. Empowerment is one model that uniquely combines both prevention theory and adult education theory.
into one context. Adult educators in culturally relevant programs “strive to help learners who face oppression on a daily basis take control of their lives” (Guy, 1999, p. 94). HIV prevention is about taking control of one’s life and behavior change. Combining adult education and prevention theories can increase the effectiveness of HIV education to people of color.
CHAPTER 3
METHODS

Design

This study utilized a descriptive design in order to describe what culturally specific information, tools, and strategies are important in HIV/AIDS prevention for American Indians in Oklahoma. Descriptive research tests hypotheses or answers questions and reports "the way things are" (Gay, 1987). It presents new information and asks questions to better understand a subject. Descriptive research is used to obtain information about preferences, attitudes, concerns, or practices of a group of people (p. 11). It involves the "description, recording, analysis, and interpretation of conditions that exist" (p. 25). Common methods to collect data in descriptive research are surveys, interviews, and observations. Data collected from members of a population can determine the "current status of that population with respect to one or more variables" (Gay, 1996, p. 286).

Descriptive research can be qualitative or quantitative. This study gathered both quantitative and qualitative self-report data. Self-report research "requires collecting standardized, quantifiable information from all members of a population or sample" (Gay & Airasian, 2000, p. 280). The same questions must be asked of all research participants in order to describe measures of
central tendency and variability.

The culturally appropriate way to gather information in the American Indian community is to ask for permission or for help through the elders or the gatekeepers in the community. Therefore, 11 gatekeepers were identified in tribal communities across the state to identify participants for the study. They represented Association of American Indian Physicians in Oklahoma City; Bacone College in Muskogee; Cherokee Nation, HIV/AIDS Department in Tahlequah; Claremore Indian Hospital; College of Nursing at University of Oklahoma in Lawton; Eufaula Indian Hospital; Indian Health Care Resource Center, an urban Indian health clinic in Tulsa; Kaw Nation Health Center in Kaw City; Lawton Indian Hospital, an Indian Health Service facility; Muscogee/Creek Nation in Okmulgee; and Western Oklahoma AIDS Task Force, in Oklahoma City. The combination of expertise includes: five nurses who have worked in the HIV field for many years; three who have expertise in prevention programs with gay, lesbian, and Two-Spirit people; and four who have over 20 years in the HIV field with national recognition as providers and educators. Every person has a strong cultural background and is highly respected in their communities. This group was asked to identify other American Indians from within their communities to participate in the study, distribute the surveys, and return the surveys to the researcher.
In addition to the quantitative data that was gathered from the survey by the gatekeepers, the use of gatekeepers provided an opportunity for a qualitative component to gather insights from the community gatekeepers after the data was analyzed. Linkenbach (1995) utilized a reflection-in-action approach which allowed stakeholders to provide their knowledge and insights to the data and which moved the information to a real-life setting. A process such as this allows the community gatekeepers to provide their own insights, beliefs, and thoughts about the meaning of the data (Gay & Airasian, 2000). In order to build a similar mechanism into this study and to get the gatekeepers reactions to the findings, the gatekeepers attended a talking circle after the data were analyzed. A talking circle is similar on the surface to a focus group. A talking circle is a traditional form for dialogue and discussion in Native communities. The talking circle creates an informal, safe, and spiritual space for learning where people could speak freely or they could choose not to speak. This provided more rich and detailed information to the study and also incorporated a traditional cultural strategy. The information received from the community gatekeepers added a real life context for the community.

**Sample**

The most important step in sampling is to define the population. The population is a "group of interest to the
researcher, the group to which he or she would like the results to be generalizable” (Gay & Airasian, 2000, p. 122). The target population for this study was American Indian adults over the age of 18 who live in Oklahoma.

The subset of the population is called the sample. Sampling is “the process of selecting individuals in such a way that they represent the larger group” (Gay & Airasian, 2000, p. 121). If the sample is well selected, the research based on it can be generalized to the population. The validity of the “inference from sample to population rests on the degree to which the subjects in the sample are representative of the people in the population” (Shavelson, 1996, p. 8). For descriptive research, it is common to sample 10 to 20% of the population (Gay & Airasian, 2000). However, beyond a population size of 100,000, a sample size of 384 is adequate (p. 135).

There are over 500 federally recognized tribes within the United States (Federal Register, 2002). In Oklahoma there are 39 tribal headquarters (Oklahoma Indian Affairs Commission [OIAC], 2003) (see Appendix A). The 39 tribes in Oklahoma range in size from the Cherokee Nation, the largest tribe with 145,367 in-state members, to the Modoc Tribe, the smallest tribe with 54 in-state members. Tribes are divided into two regions, the western and eastern sides of the state (Oklahoma Indian Affairs Commission, 2002). According to the 2002 Tribal Survey, 623,159 American Indians are members
of Oklahoma tribes; however, only 286,084 live in Oklahoma (OIAC, 2003). Three tribes, Choctaw Nation, Euchee Tribe, and Iowa Tribe, did not report enrollment numbers to the Commission. The U. S. Census (2000) reports that Oklahoma has the second largest population of American Indians in the United States with 391,949 who live in the state. The discrepancy of the population numbers exists because the Census relies upon self-identification. The Oklahoma Indian Affairs Commission is the agency that provides tribal information for Oklahoma and relies on the tribal enrollment records. The data is based on tribal membership or enrollment in an Oklahoma tribe as reported by each tribe. For this study, the survey participants could self-identify as American Indians.

This study utilized a variety of sampling concepts to obtain a representative sample that was solicited in a culturally appropriate manner. First, purposive sampling utilized the researcher’s knowledge of the group to select key participants (Gay & Airasian, 2000, p. 138). It was the original intent to create a proportional stratified sample based on tribal enrollment. To create a proportional stratified sample allows a researcher to utilize a “sample that the identified sub groups in the population are represented in the sample in the same proportion that they exist in the population” (Gay & Airasian, 2000, p. 126). The original selection of gatekeepers was to ensure that key
tribal areas were represented in order to ensure the population was represented in the same proportion as the existing population. However, because of lack of participation by some tribes and local politics, it was not feasible to have a stratified sample. Therefore, snowball sampling was utilized. This process allowed the researcher to identify key people who then identified other people who might be good participants for the study (Bogdan & Biklen, 1982, pp. 66-67; Gay & Airasian, 2000, p. 139). As a result of this process 471 American Indians completed the survey for this study. This provided a sufficient number for data analysis and was large enough for the American Indian population of Oklahoma because “beyond a certain point (about N=5,000), the population size is almost irrelevant and a sample size of 400 will be adequate” (Gay & Airasian, 2000, p. 135).

**Cultural Strategies Survey**

Descriptive research involves reporting the way things are to obtain information about a group of people’s attitudes, practices, concerns, or interests (Borg & Gall, 1983; Gay, 1987). Surveys, interviews, or observations are the most common way that data are collected. Self-report and observation are the two ways to classify how data are collected in descriptive research (Gay, 1996). In self-report studies, “information is solicited from individuals using interviews, questionnaires, or standardized attitude
scales” (p. 251) and individuals “respond to a series of statements or questions about themselves” (Gay & Airasian, 2000, p. 280). Self-report data were collected in this study by means of a survey. Since no survey existed that fit the needs of this study, the Cultural Strategies Survey was created.

In order to locate an instrument for this study, a search was conducted for existing surveys which were specific to utilizing cultural strategies in HIV/AIDS prevention with established validity. Surveys were found with basic HIV/AIDS knowledge, attitudes and beliefs, but they were not developed from a Native cultural perspective. The researcher was unable to locate any instrument that fit the parameters of utilizing cultural strategies with the American Indian population. Contact was made with the American Indian Academic List Serve; Association of American Indian Physicians; Centers for Disease Control; National Native AIDS Prevention Center; the Oklahoma State Department of Health; and, the University of Oklahoma-American Indian Research Center. Additionally, several national researchers in the American Indian community, who work in the HIV/AIDS arena, were contacted including Dr. John Lowe, University of Florida; Delight Satter, University of California, Los Angeles, Center for Health Policy Research; and, Irene Vernon, author of Killing Us Quietly. However, no instrument that fit the parameters of this specific topic
was identified. Since no instrument could be found that was specific to utilizing cultural strategies in HIV/AIDS prevention, a survey was developed.

The survey included demographic information as well as 18 statements that related to knowledge, attitudes and cultural beliefs about HIV/AIDS. Participants responded on a 6-point Likert scale. It was important to have items that were representative of the basic facts related to HIV/AIDS and that were a good sampling of the total content area of HIV/AIDS and cultural strategies. Each question was developed to address one concept.

It is crucial to ensure that the questionnaire is constructed carefully. Data from a survey can answer the designated research questions. However, there are guidelines in creating a questionnaire.

Survey Development

In creating a questionnaire, validity can be affected by having unclear test directions, ambiguous and confusing test items, as well as vocabulary that is too difficult (Gay & Airasian, 2000, p. 169). In addition, items should be constructed to ensure that they are not leading, too wordy, or based on assumptions (Gay & Airasian, 2000, p. 285). Items in the survey should be relevant to the research as well as attractive and easy for the respondents to read and to fill out (Gay & Airasian, 2000, p. 282). For this survey, it was important to avoid medical or technical
terminology. Since a term might mean different things to different people (Gay, 1987, p. 197), wording was clearly stated.

When conducting surveys, “in order for subjects to have a meaningful opinion, they must have sufficient knowledge of the topic” (Borg & Gall, 1989, p. 432). Most people have a general knowledge of basic HIV/AIDS information from the media, brochures, and workshops. AIDS education has been provided in Oklahoma schools for 15 years; therefore, some adults may have received school-based HIV/AIDS education.

The Cultural Strategies Survey is an 18-item survey with a section to gather demographic data on the respondent’s age, gender, tribal affiliation and membership, acculturation level, and sexual orientation. Gender began as a check-response for male or female; however, one respondent, who identified as Two-Spirit, marked both male and female. Therefore, a third code was added for data input for those who identified themselves as both male and female, which represents the balance of being Two-Spirit. The sexual orientation question had three check responses—Heterosexual, Homosexual (Gay), and Two-Spirit. Two-Spirit is a contemporary cultural term sometimes used by American Indians instead of the term gay or lesbian. Gender in the American Indian community “went beyond male and female” (Roscoe, 1998, p. 110). American Indians who have the understanding and knowledge of alternative gender roles in
American Indian history may prefer the term Two-Spirit or “having both the male and female spirit regardless of the flesh that is worn” (p. 110).

Participants were also asked to identify their acculturation level utilizing a 10-point acculturation scale. The scale ranged from zero (0) for non-traditional to 10 for traditional. Statements related to the extremes of the provided examples allow the respondents to determine their placement from 0 to 10. The example for the Non-traditional or zero (0) position was “I do not participate in Indian ceremonies, do not speak or think in my tribal language, and do not hold traditional values and beliefs.” For the Traditional or 10 position, it was “I participate in Indian ceremonies, speak and think in my tribal language, and hold traditional values and beliefs.”

In order to identify tribal membership or affiliation, a check-mark response was provided to ascertain if they were a member of a tribe or if they identified as American Indian but were not a tribal member. For either response, a space was provided for participants to write down their tribal affiliation if they knew it. In self-identification, some American Indians may not know their tribal affiliation but identify as American Indian. Since tribal enrollment may have specific blood-quantum requirements or a maternal or paternal lineage, some people may not be enrolled in a tribe. This could occur because of family history,
adoption, lineage, low blood quantum, or simply choosing to not enroll (NNAAPC, 2002).

The statements in the survey addressed knowledge, attitudes, beliefs, and culture as it relates to HIV prevention. There were 18 statements. In order to make the process easy for respondents, a 6-point Likert scale was used: 1 = Strongly Agree, 2 = Agree, 3 = Somewhat Agree, 4 = Somewhat Disagree, 5 = Disagree, and 6 = Strongly Disagree.

The survey was printed dual-sided with the Cultural Strategies Survey on one side and ATLAS on the reverse side (see Appendix B). This reduced the risk of one of the questionnaires being lost, and it was easier for the gatekeepers to maintain. Completing ATLAS was a simple task of making a maximum of three check marks.

A cover sheet was provided with each survey for the participants. Their sheet explained the purpose of the survey and included information about the study, contact information, confidentiality, and participant’s rights in a study (see Appendix C). The cover sheet also identified the researcher as American Indian, which is important in Native communities. People are more likely to believe information when it is from members of the same group (Wilson & Miller, 2003). In addition, the gatekeepers received a Consent to Participate in Research form to complete and return to the researcher (see Appendix D).
Validity of Survey

Descriptive research involves more than just asking questions and finding answers. Questions need to be asked that “target the specific area of study” (Gay & Airasian, 2000, p. 11). A too-often-neglected procedure is validation of the questionnaire in order to determine if it measures what it was developed to measure” (Gay, 1987, p. 198).

There are three types of validity that are important for data-gathering instruments in research: content, construct and criterion-related. “The appropriate validation procedure for a given questionnaire will depend upon the nature of the instrument” (p. 198). Construct and content validity are the two types that are relevant to this study. Construct validity is the most important and means “the degree to which a test measures an intended hypothetical construct” (Gay & Airasian, 2000, p. 131). Content validity is the “degree to which a test measures an intended content area” (Gay, 1987, p. 129).

In educational measurement, construct, content, and criterion-related validity are important in order to have appropriate interpretations (Gay & Airasian, 2000). Construct validity is “the most important element because it asks the fundamental validity question: What is this test measuring?” (Gay & Airasian, 2000, p. 167). Constructs are non-observable traits which explain behavior as well as the differences between individuals (p. 168).
Content validity refers “to the degree to which a test measures an intended content area” (Gay & Airasian, 2000, p. 163). Content validity requires both item and sampling validity. Item validity is concerned with whether “the test items are relevant to the measurement of the intended content area” (p. 163). Sampling validity ensures that the test samples the total area of content being tested (p. 163). It is important to have good content validity because it is difficult to measure each and every test item in a content area (p. 163).

Concurrent and predictive validity are the two forms of criterion-related validity. The method of determining validity is the same for each; however, the time frames are different (Gay & Airasian, 2000, p. 164). Concurrent validity “is the degree to which scores on one test correlate to scores on another test when both are administered in the same time frame” (p. 164). Concurrent validity “is determined by establishing a relationship between scores on the test and scores on another established test or criterion” (p. 165). The discrimination method involves “determining whether test scores can be used to discriminant between persons who possess a certain characteristic and those who do not, or those who possess it to a greater degree” (p. 165).

Predictive validity “is the degree to which the predictions made by a test are confirmed by the later
behavior of the subjects” (Borg & Gall, 1983, p. 276). The predictive validity of a test is “determined by establishing the relationship between scores on the test and some measure of success in the situation of interest” (Gay & Airasian, 2000, p. 166). The predictor is the test and the criterion is the behavior which is predicted (p. 166).

Establishing Validity

Construct Validity

The 18 survey items were built on knowledge about HIV/AIDS, personal attitudes or beliefs, and cultural context statements. All of the statements were based on constructs of research, theories, and perspectives from national American Indian researchers and organizations which serve the Native community. The HIV/AIDS knowledge statements were based on the scientific theory of HIV/AIDS transmission from the Centers for Disease Control.

Knowledge

Four items in the Cultural Strategies Survey related to knowledge about HIV/AIDS transmission. These items were based on basic facts and research from key health agencies that provide the expert knowledge about HIV/AIDS for training and informational materials. The following statements reflected the constructs of knowledge about HIV.

2. I can get HIV from sharing a bathroom with someone who has HIV.

3. Snagging would put me at risk of HIV infection.
4. I believe latex condoms are an effective way to protect myself from HIV and other sexually transmitted diseases.

5. If I drink alcohol, I’m more likely to do something that would put me at risk for HIV.

Since the United States is beginning its third decade of this disease, there are sound medical and prevention facts about HIV/AIDS. The Centers for Disease Control (1999) provides the scientific community and the public with accurate and objective information about HIV infection and AIDS. In Oklahoma, several agencies provide formal training for professionals and community-based agencies in HIV prevention, including Association of American Indian Physicians, American Red Cross, and Oklahoma State Health Department. Basic facts are consistent for all training providers to ensure that all prevention educators are providing the same information to the public. These agencies work under the guidelines and in partnership with the national agency, Centers for Disease Control.

The items relating to HIV/AIDS knowledge were written based on the well-established scientific theory and information about transmission and prevention of HIV/AIDS according to the Centers for Disease Control (1999) guidelines. The theoretical basis of HIV/AIDS according to their scientific research states:

Research has revealed a great deal of valuable scientific, medical, and public health information about the human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS). The ways that HIV can be transmitted is clearly
HIV is spread by sexual contact with an infected person, by sharing needles and/or syringes (primarily for drug injection) with someone who is infected, or, less commonly (and, now very rarely in countries where blood is screened for HIV antibodies), through transfusions of infected blood or blood clotting factors. Babies born to HIV-infected women may become infected before or during birth or through breast-feeding after birth (¶ 2).

Some people fear that HIV might be transmitted in other ways; however, no scientific evidence support any of these fears. If HIV were transmitted through other routes (such as mosquitoes, air or water), the pattern would be much different from what has been observed (¶ 4).

No additional routes of transmission have been recorded, despite a national sentinel system designed to detect such an occurrence (¶ 5).

Studies conducted by researchers at CDC and elsewhere have shown no evidence of HIV transmission through insects—even in areas where there are many cases of AIDS and large populations of insects such as mosquitoes. Lack of such outbreaks, despite intense efforts to detect them, supports the conclusions that HIV is not transmitted by insects such as mosquitoes (¶ 16).

Condoms are classified as medical devices and are regulated by the Food and Drug Administration (FDA). Manufacturers in the United States test each latex condom for defects, including holes, before it is packaged. The proper and consistent use of latex or polyurethane condoms when engaging in sexual intercourse—vagina, anal, or oral—can greatly reduce a person’s risk of acquiring or transmitting sexually transmitted diseases, including HIV infection. (¶ 19)

The questions for the survey were written to include
cultural terminology and risks. According to G. Arnold (personal communication, October 30, 2003), Indian Health Care Resource Center, the term “snagging” is a common cultural term defined as a one-night stand or a hook-up. A “snag” is a partner. American Indian HIV educators use the term “snagging” in the context of having sex. Therefore, snagging puts a person at risk because it may be anonymous sex, because a person may know very little about this sex partner, and because it may be outside of a committed relationship. It is also risky because the person’s background of past behaviors is unknown.

Depending on where snagging occurs, there may be alcohol or other drugs involved (T. Chesbro & G. Arnold, personal communication, October 30, 2003). There is a high prevalence of alcoholism in the Native community. In fact, there is at least four times as much alcohol-related mortality, illnesses, accidental deaths, suicides, and homicides as for Caucasians (Thomason, 2000). There is a strong relationship between HIV and alcohol, which is considered a surrogate linkage to the virus. Although it is not a direct route of transmission, because of the high rate of alcoholism in the Indian community, it plays a critical role for the health of American Indians (American Red Cross, 1996; Beauvais, 1998; Vernon, 2001).

Cultural Attitudes and Beliefs

Five items in the survey related to personal beliefs
and attitudes about HIV/AIDS. The statements about attitudes and beliefs were based on research regarding the historical legacy of American Indians, and on basic values regarding sexuality and sex.

1. I can tell by looking if my partner has AIDS.

9. I believe you shouldn’t discuss HIV in the Indian community without permission from the elders.

10. I am uncomfortable talking about HIV with my family.

11. I believe HIV is basically a gay disease.

14. An opening ceremony would not be appropriate at a HIV prevention program.

**Misconception.** Although not specific to Native American people, there is still a misconception that people with AIDS will look sick or be very thin. Based on CDC (2003) scientific guidelines a person cannot tell by looking at someone if they have HIV or AIDS.

**Elders.** Elders are highly respected in Native communities. Many projects, identified as successful, have incorporated elders into prevention programs. They are considered the gatekeepers of culture and their support in HIV prevention is essential (Vernon, 2000, p. 31). Several successful projects such as American Indian Community House, Minnesota American Indian AIDS Task Force, and the Two Spirit Society include elders in primary prevention as a vital strategy to reach Native Americans (Vernon, 2001, p. 88). Some American Indians believe that if “you choose to
ignore the teachings of the elders they have no one to blame but themselves” (p. 97).

**Family.** Generally within American Indian families, the “birds and the bees” are not discussed (American Red Cross, 1996). Family structure for American Indians includes more than a nuclear family. A person’s aunt may be considered a mother, a cousin may be considered a brother, and an uncle might be considered a father. Members of one’s clan or those from another clan may be considered a family member (NNAAPC, 2002). Additionally, someone from a different tribe may be considered a brother or sister or aunt. This “Indian way” family assumes the role and means a commitment of responsibility that is the same as a blood family member.

American Indians generally are very modest and uncomfortable discussing their bodies and topics about sexual behaviors and sexuality (NNAAPC, 2002). The discussion of sex and sexuality may be taught through legends and stories, or if discussed, these topics may be the responsibility of a member of the extended family such as an aunt or uncle (American Red Cross, 1996). In order to discuss sex and sexuality, appropriate cultural methods have to be utilized and often can be challenging (Vernon, 2000, p. 30).

**Sexuality.** Attitudes about sex and sexuality also are a factor in HIV/AIDS education. Discussing the body, sex, and sexuality is uncomfortable for many American Indians and
sometimes even taboo (Office of Minority Health, n.d.). Today that also includes gay, lesbian, or American Indians who identify as Two-Spirit or people who had both female and masculine qualities. Historically, Native people with alternative gender styles were honored and respected in many tribes due to their characteristics (Rowell, 1996). At least 200 tribes had specific names for individuals that characterized Two-Spirit people (Rowell, 1996). However, the influence of Christianity and missionaries changed Native American social systems and beliefs about alternative gender roles (NNAAPC, 2002). Although gender-different people were once accepted as normal aspects of tribal life, they “became viewed as immoral and deviant” (Vernon, 2002, p. 125). Today, American Indians who are Two-Spirit are just as likely to face the same homophobia as the general gay community (NNAAPC, 2002).

**Opening Ceremonies.** Groups may smudge (using the smoke from cedar, sage, or sweetgrass), pray, and reflect on the context of their lives and HIV in the circle (Vernon, 2000).

The cultural statements were written based on existing research on traditional cultural values within American Indian communities and those projects considered successful American Indian programs. Although there is not a formal Best Practices for American Indian HIV prevention, there is documented literature regarding the importance of understanding and integrating cultural strategies when
working with American Indians. Additionally, numerous researchers discuss the importance of traditional tribal values, including community and extended family, harmony with nature, orientation to time, deep respect for elders, and spirituality (Duran, 2002; Garrett & Garrett, 1994; Garrett, 1996; NNAAPC, 2002; Vernon, 2001).

The National Native American AIDS Prevention Center (NNAAPC) is the only national American Indian organization that provides technical assistance for American Indian tribes and organizations in the field of HIV/AIDS. Based in Oakland, California, NNAAPC provides expertise in training, community collaboration, case management, and working within the culture of Native communities and provide resources. NNAAPC also provides foundational material on cultural values and amplifiers, which are factors that can affect American Indian in HIV prevention and care (NNAAPC, 2002). In the Native community, best practices may be thought of as successful projects or projects that work and which use cultural strategies (Vernon, 2001). There is very “little literature on creation, implementation and study of Native prevention strategies” (Vernon, 2001, p. 85). However, what is cited in the literature stresses the need for considering Native spirituality and cultural values and the need for community input as well as community norms (p. 85).

Tribal and Cultural Context

The following nine statements were written based on
existing research on traditional cultural values within American Indian communities and those projects considered successful American Indian programs.

6. I believe HIV/AIDS could wipe out as many Indians as smallpox once did.

7. I would feel comfortable going to my local Indian clinic for a HIV test.

8. I believe the government isn’t doing as much as they could to stop HIV/AIDS.

12. I would rather receive information about HIV/AIDS from another American Indian.

13. I think the Circle of Life (Medicine Wheel) is a good philosophy to use in HIV/AIDS prevention.

15. I would feel comfortable discussing HIV/AIDS in a talking circle with other Native Americans.

16. The Creator protects Native Americans from HIV during ceremonies that include blood (such as Sun Dance or scratching).

17. I would pay more attention to HIV prevention if legends or stories were used.

18. I believe my health is related to the connection between the physical, emotion, mental, and spiritual parts of a person.

In the American Indian community, there are cultural factors or amplifiers that can “magnify the difficulties faced by Native Americans living with or at risk for HIV”. (National Native American AIDS Prevention Center, 2002, p. 4). Some of these factors are issues which relate to HIV/AIDS that have a basis of mistrust and fear which makes HIV prevention more complex. Although there is not a formal Best Practices for American Indian HIV prevention, there is documented
literature regarding the importance of understanding and integrating cultural strategies when working with American Indians. Additionally, numerous researchers discuss the importance of traditional tribal values, including community and extended family, harmony with nature, orientation to time, deep respect for elders, and spirituality (Duran, 2002; Garrett & Garrett, 1994; Garrett, 1996; NNAAPC, 2002; Vernon, 2001).

**Government Mistrust.** Mistrust of health officials and government is one cultural amplifier (NNAAPC, 2002; Vernon 2001). One such arena is based on the Indian Health Service (IHS) and issues of confidentiality. In 1991, a commission that met with tribal leaders, community members, Natives with AIDS, and AIDS providers found that a consistent theme was the concern of confidentiality of IHS (Vernon, 2001). In Native communities, it is common for a patient to have relatives, friends, and acquaintances who work at the clinic and have access to confidential information (NNAAPC, 2002). Because of extended families and the closeness of the community, American Indians are afraid that if they went to an Indian clinic for a HIV test, their information would soon be spread in the Indian community.

There is also a legacy based on deliberate infection and a long history of inferior health care (Vernon, 2001). The government’s “gifts of small-pox infected blankets” which were given to tribes is familiar to most Native
AIDS is often referred to as “the new smallpox because it has the potential to decimate Native populations just as smallpox once did” (Vernon, 2001, p. 1). It is thought of as just another white-caused epidemic by many Native people (Weaver, 1999). A third issue is the lack of funding for HIV/AIDS programs in the Native community because of low numbers (Vernon, 2001) which helps magnify the belief that the government isn’t helping in the fight. “An epidemic which primarily affects those individuals in their most fecund years can destroy a tribe’s future. It has happened before in our history and it can happen again.” (Vernon, 2001, p. x).

American Indian Educator. Providing education for Native communities is most effective when it is done by Native people (Vernon, 2001). Successful projects including American Indian Community House, Northern Cheyenne Board of Health, and The Two-Spirit Society (Vernon, 2001). All of these programs are based on the premise of programs that are “for, of, and by” the target population (p. 85). They also use American Indian elders, youth, tribal and community leaders to provide educational programs.

The Center for AIDS Prevention Studies (2002) has identified some characteristics of HIV education that work. They state that “programs that are for, of and by the people are the most effective way to deliver information” (¶ 5).
It also provides the opportunity to incorporate the cultural and social context of the community’s experiences (Jennings & Asetoyer, 1996; Vernon, 2001; Weaver, 1999).

**Circle of Life.** The Circle of Life, sometimes called the Medicine Wheel, also focuses on an inherent philosophy of spirituality and interrelatedness which is a holistic process. The core of the Medicine Wheel teaching is the respect for the spiritual relationships that exist between all things (Orr, 2000, p. 60). It can express many relationships—the cardinal directions; the elements of the world; or the spiritual, mental, emotional and physical aspects of nature. The circle has no beginning or end.

Utilizing this holistic approach to health provides options to discuss many aspects of prevention, empowerment, and understanding of how HIV relates to all areas of a person’s life. In education the Circle of Life provides a framework for teaching Native values which keeps spirituality at the center (Orr, 2000). Effective prevention strategies “draw on the spiritual resources and strength of the spiritual life of individuals” (Vernon, 2000, p. 85).

**Spirituality.** Spirituality lies at the heart of American Indian cultural values. The concept of spirituality is now being used in adult American Indian education programs (Orr, 2000). Native adult programs can cultivate an indigenous form of knowledge if programs “re-
introduce, preserve, and/or enhance Native spirituality rather than reproducing mainstream education” (p. 59). Strategies that are necessary for prevention to work are consideration of Native spirituality and cultural values (Vernon, 2001, p. 85).

Talking Circle. One American Indian educational process is the talking circle. A talking circle is a tool that has been used for many years in the native community. It allows all members to present their view or comments in a safe space. The format of a talking circle “creates a spiritual space for learning by providing people room to explore issues of great significance to them” (Orr, 2000, p. 59). The Minnesota American Indian AIDS Task Force, one of the largest Indian organizations, includes the talking circle in traditional forms of counseling. A central tenet of spirituality in many programs is the sweat lodge, which provides spiritual help as well as physical help.

Legends and Storytelling. Incorporating traditional, visual, and participatory activities into interventions is important (Satter, 1999). Traditional Native culture is woven through myths and legends, a set of stories that describe and explain the world (RainingBird, n.d.). They have been used for generations to pass on beliefs, cultural knowledge, and customs and serve as a means to teach morals, values, and even sexuality. There are many traditional stories of sexuality, morals, self-esteem, and empowerment
which all have the same goal as HIV/AIDS prevention (American Red Cross, 1996). Programs should incorporate traditional values and healing practices, utilize humor and role playing, and incorporate traditional activities (Brassard, 1996). For prevention programs to work, they must be grounded in knowledge of the beliefs, attitudes, and the behavioral norms of Native people (Weaver, 1999).

**Protection.** This statement involves the cultural perspective that if someone is participating in a spiritual ceremony which may involve the sharing of blood, then they are protected by the Creator. Many Native people participate in ceremonies that involve the piercing of flesh or scratching, which have the potential of spreading infections. There are some tribes that recommend the use of latex gloves, individual thorns, or other tools because of HIV/AIDS (Krist, n.d.; Vernon, 2002). Although this statement is tribal or cultural context of beliefs, it is also a construct that is based on the basic theory that HIV can be transmitted through blood (CDC, 1999).

**Content Validity**

Content validity is generally assessed by experts in the field. In order to evaluate, “experts will review the process of development as well as the test itself and make a determination on how well the items represent the content area” (Gay & Airasian, 2000, p. 165). If a researcher “selects a test for their study, then they assume the role
of expert and determine whether the test is content valid for his or her study” (Gay, 1987, p. 131). If a researcher “selects a test for their study, then they assume the role of expert and determine whether the test is content valid for his or her study” (Gay, 1987, p. 131).

Therefore, the survey was sent to a panel of seven experts in the field of HIV prevention. Five of the experts were American Indians who are employed at Association of American Indian Physicians, Cherokee Nation, Indian Health Care Resource Center, Indian Health Service, and Planned Parenthood. They represented the areas of prevention, case management, medical, sexuality, and support programs. They each understood the traditions and cultural values of American Indians and have been in the HIV/AIDS field an average of 15 years. Two additional experts were non-Native and represented the public health sector. One individual is a researcher for the Oklahoma State Health Department and has been in this field for 15 years. The other has been working in the HIV/AIDS arena for over 20 years. Both have conducted training programs for professionals in HIV/AIDS prevention, and both have a strong understanding of cultural implications for working with American Indians.

The researcher wanted to ensure the items fit into the three areas of knowledge, beliefs, and culture, and that the content area was covered. The panel agreed that the three areas were covered; however, they stated that some were hard
to distinguish between knowledge and beliefs. Items were retained in the survey only if 80% or more of the panel agreed on the wording of the statements. There were no deletions or additions to the survey. Revisions to the statements were made based on the consensus of the experts. One of the main discussion points in the demographic section related to gender. It was suggested that gender needed to include male, female and a male/female response. After major discussion with the experts who were very familiar with the cultural meaning of Two-Spirit, it was agreed to leave gender as male and female.

**Factor Analysis**

One frequently used procedure for assessing construct validity is “the sophisticated statistical technique of factor analysis” (Huck, 2000, p. 106). Therefore, in order to determine how well the survey items related to one another, a factor analysis was performed. Factor analysis provides a way to reduce the data to form a set of related variables (Gay & Airasian, 2000). Factor analysis finds the groups of variables that “are correlated highly among each other” (p. 336). This analysis also identifies “the not-directly-observable factors based on observable factors (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975, p. B-42).

Factor analysis has four steps: (a) compute a matrix for all variables, (b) extract factors to determine the number of factors needed, (c) rotate factors in order to
interpret the meaning, and (d) compute factor scores (Nie, Hull, Jenkins, Steinbrenner & Bent, 1975, p. B-43). The 18-items from the Cultural Strategies Survey were used in the factor analysis. The extraction method was the principal components method. In this method, the first component accounts for the largest variance, and progressively each component explains a smaller segment (p. B-46). In the third step of rotation, the varimax rotation method was used. This is the “most often used method which attempts to minimize the number of variables that have high loadings on a factor” (p. B-54). The rotation helps to interpret the factors. The initial rotation showed 6 factors with an eigenvalue above 1. The eigenvalue is the amount of variance explained by a factor. The plot using the eigenvalues is known as a scree curve because it indicates where the factors tail off to meaningless rubble (Koehigan, 1991, p. 246). Both the scree plot and total amount of variance explained indicated that there were three or four factors. After rerunning the analysis for both three and four factors, the 4-factor analysis was selected as the best explanation of the data (see Table 1). It accounted for 41.8% of the variance, and all 18 items loaded at .4 or above (see Table 1). These factors were named as follows: Factor 1--Traditional ways, Factor 2--Personal Beliefs, Factor 3--Science-Based Beliefs, and Factor 4--The Tribal Context.
<table>
<thead>
<tr>
<th>Items</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
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The Traditional Ways factor addressed cultural activities that relate to traditional ways of doing things or of thinking. The factor contained the following seven items:

13. I think the Circle of Life (Medicine Wheel) is a good tool to use in HIV prevention.

17. I would pay more attention to HIV prevention if legends or stories were used.

12. I would rather receive information about HIV/AIDS from another American Indian.

15. I would feel comfortable discussing HIV/AIDS in a talking circle with other Native Americans.

18. I believe my health is related to the connection between the physical, emotional, mental, and spiritual parts of me.
16. The Creator protects Native Americans from HIV during ceremonies that include blood (such as Sun Dance or scratching).

8. I believe the government isn’t doing as much as they could to stop HIV/AIDS.

In the Native community, there are concepts that are inherent in the culture and have been used for many years. One is the concept of a circle. This holistic belief encompasses numerous areas of traditional life, including the life cycle, spirituality, and health. A strong belief in the Creator, for many, provides a protection against diseases or harm when participating in ceremonials. Because of the distrust of the government, many American Indians would receive information more from another American Indian.

The Personal Beliefs factor represents personal beliefs and attitudes that a person might hold related to HIV/AIDS, the culture, and internal feelings. The factor contained the following six items:

2. I can get HIV from sharing a bathroom with someone who has HIV.

11. I believe HIV/AIDS is basically a gay disease.

1. I can tell by looking if my partner has AIDS.

9. I believe you shouldn’t discuss HIV/AIDS in the Indian community without permission from the elders.

14. An opening ceremony would not be appropriate at a HIV prevention program.

10. I am uncomfortable talking about HIV/AIDS with my family.
These items represent personal beliefs because although item 2, 11 and 1 are fact-based statements, people still have strong beliefs about this disease. In many traditional settings it is important to include the elders in the process. For some American Indians, having the approval of the elders in the community relates to the importance of the topic and is a traditional way before presenting certain information.

The Science-Based Beliefs factor relates to attitudes and beliefs that are based on established knowledge. The factor contained the following three items:

5. If I drink alcohol, I’m more likely to do something that would put me at risk for HIV.

6. I believe HIV/AIDS could wipe out as many Indians as smallpox once did.

4. I believe latex condoms are an effective way to protect myself from HIV and other sexually transmitted diseases.

Science has established many facts related to risky behavior and to preventative actions. Even though these are rooted in established knowledge, people vary in their beliefs and attitudes about them when they integrate them into their behavior patterns. For example, HIV/AIDS has decimated entire villages in Africa. For Americans Indians, HIV could also devastate communities and reservations. With the lack of funding, many areas do not receive education, and there are numerous risk factors within the American Indian communities.
The Tribal Context factor relates to conditions that are influenced by the tribal setting and can only be understood by having familiarity with the tribal context. This factor contained the following two items:

7. I would feel comfortable going to my local Indian clinic for a HIV test.
3. Snagging would put me at risk

Many clinics are tribally controlled and often under Indian Health Service jurisdiction. Lack of confidentiality is a fear for many Indian people because their families and extended families work at the clinics. Lack of confidentiality in facilities in the tribal community is a well-known fact. Snagging is a term that is used in many tribal communities and reservations, and it has a specific meaning related to sexual activities.

Reliability of Questionnaire

Reliability is often not addressed in one-shot questionnaires. However, examination of reliability can provide insights into the consistency with which the participants responded to the items in the questionnaire. Cronbach’s alpha is a “commonly used form of reliability that deals with one test at one time” (Gay & Airasian, 2000, p. 173). Cronbach alpha estimates how all of the items on a test relate to all other test items and to the total test (p. 174). When items are measuring similar things, they can be considered internally consistent. It is a common
analysis tool used for Likert scales (p. 174). It is based on the correlation of the items on a single scale and is based on the internal consistency of these items (Norusis, 1988, p. B-207).

Cronbach’s alpha was used to examine the internal consistency of the items in the Cultural Strategies Survey. This was done in two ways. First, the survey was examined as a questionnaire with its 18-items measuring a single concept; the reliability level for the total questionnaire was .53. In addition, the internal consistency was examined for each of the concepts in the questionnaire based upon the factor analysis results; the reliability levels for each factor were as follows: Traditional Ways—.46, Personal Beliefs—.57, Science-Based Beliefs—.45, and The Tribal Context—.14.

Cronbach’s alpha can be interpreted in several ways. One way is that “it can be viewed on the correlation between this test or scale and all other possible tests or scales containing the same number of items, which could be constructed from a hypothetical universe of items that measure the characteristics of interest” (Norusis, 1988, p. B-206). Another way of interpreting the Cronbach’s alpha is as “the squared correlation between the score a person obtains on a particular scale (the observed score) and the score he would have obtained if questioned on all of the possible items in the universe (true score)” (p. B-206).
This second interpretation is the most logical interpretation for the Cultural Strategies Survey results since it is a one-shot questionnaire. Based on this approach, the overall Cultural Strategies Survey accounted for approximately 28% of the variance in the observed cultural strategies for HIV prevention that exists in the actual American Indian community. Each of the factors in survey explained the following amount of variance: Traditional Ways—21.48%, Personal Beliefs—32.87%, Science-Based Beliefs—20.51%, and The Tribal Context—1.97%. Thus, each of the first three factors explains between one-fifth and one-third of the possible variance in the situation. However, the fourth factor of The Tribal Context only accounts for a very small amount of the variance. Although Cronbach’s alpha depends on both the number of items in the test and the correlation of the items in the test (Norusis, 1988, p. B-207), the 3-item factor of Science-Based Beliefs factor explains much more variance than the 2-item factor of the Tribal Context, and it has much more internal consistency.

“Interpretation of a correlation coefficient depends on how it is to be used” (Gay & Airasian, 2000, p. 326). The correlation coefficients for the overall Cultural Strategies Survey and those of the four factors in the survey are near the midpoint of .5. “With correlation around .50, crude group prediction may be achieved” (Borg & Gall, 1983, p.
While this level may be useful in a relationship study and limited in a prediction study, it is low as an estimate of reliability (p. 324). Although .7 is often used as an acceptable reliability coefficient, lower thresholds have been used (Santos, 1999). One recent study in the *Journal of Sex Research* used a lower Cronbach’s alpha with the factors ranging from .44 to .65 (Traeen, Stigum, & Sorensen, 2002). When there is a multidimensional structure to the data, Cronbach’s alpha will be low (What does Cronbach’s Alpha Mean?, n.d.). Although the questions in the factors are related, they also have multidimensional factors which may result in a lower Cronbach’s alpha. “In practice, researchers often work with multidimensional measures because of the need for parsimony” (Rogers, Schmitt, & Mullins, n.d., ¶7). Given that this is a descriptive study using the questionnaire which was designed for the one time use of gathering data for this study, the findings and conclusions should be interpreted with the caution that the reliability of the instrument is low but that it explains approximately one-fourth of the variance in the situation being studied.

ATLAS

It is important in effective educational settings to understand the learning strategies of learners. To determine the learning strategies of American Indians in Oklahoma, the Assessing The Learning Strategies of Adults
(ATLAS) was utilized (see Appendix B). ATLAS was constructed in order to identify learning strategies in a quick manner (Conti & Kolody, 1998). ATLAS is easy to complete for respondents and can quickly identify learning strategies. It is ordinarily printed and bound in a booklet format on pages which are color coded. It can easily be completed in three minutes or less (p. 16). For this research, it was adapted by the originator, Dr. Gary Conti, to fit a one-page format with a maximum of three check responses.

ATLAS was based on the research findings of the Self-Knowledge Inventory of Lifelong Learning Strategies (SKILLS) instrument. SKILLS is a reliable and valid instrument that measures learning strategies in the five areas of metacognition, critical thinking, metamotivation, resource management and memory. From a data set of 3,070 cases that used SKILLS, cluster analysis was utilized to identify three distinct clusters. Through further research the identification of three groups with similar patterns of learning strategy usage were found and named Navigators, Problem Solvers and Engagers (Conti & Kolody, 1999). By using the items from SKILLS to develop ATLAS, the validity of the SKILLS instrument carries over to ATLAS (Conti & Kolody, 1999).

To determine content validity for ATLAS, discriminant analysis was used to determine the learning strategies
pattern used by each group in comparison to other groups (p. 19). Analyses were then used for the writing of the items. The arrangement and wording for the instrument was based on the qualitative data from field testing (Conti & Kolody, 1999, p. 19). Comparisons of ATLAS scores and group placement of individuals using SKILLS established the criterion-related validity (p. 19). SKILLS and draft version of ATLAS were given to adult learners in Oklahoma, Montana, and Alberta (p. 19). Individual interviews and discussions were conducted to improve the instrument. Approximately 70% of the respondents were placed correctly in their appropriate SKILLS group (p. 19). The results from recent studies shows that the preferred learning strategy was accurately identified in 90% of respondents (Ghostbear, 2001). Further studies reflected a high percentage of respondents who confirmed the identified learning strategy was an accurate description of them (Hinds, 2001; Lively, 2001).

Reliability “is the degree to which a test consistently measures whatever it is measuring” (Gay & Airasian, 2000, p. 169). It can be defined “as the level of internal consistency of stability of the measuring device over time” (Borg & Gall, 1983, p. 281). Reliability is easier to assess than validity. There are a number of different types of reliability, and each is determined in a different manner (Gay, 1987, p. 136). Stability (test-retest reliability),
equivalence, equivalence and stability, internal consistency, and rater agreement are all different types of reliability (Gay & Airasian, 2000, p. 171). The test-retest reliability for ATLAS is .87 (Ghost Bear, 2001, p. 87).

**Data Collection**

**Gatekeepers**

Data collection was conducted in a two-stage process. The first stage was to obtain data from the Cultural Strategies Survey and The Assessing The Learning Strategies of AdultS (ATLAS). This was conducted by community gatekeepers. In the second stage, the community gatekeepers were asked to attend a “talking circle”, which is a traditional American Indian form for dialogue and discussion in Native communities. The talking circle created a safe, spiritual space for learning where people could speak freely, or they could chose not to speak. This provided more rich and detailed information to the study and also incorporated a traditional cultural strategy and real-life context for the community. Gatekeepers were selected based on their knowledge and leadership in their community or workplace, location, tribal affiliation, and access to Native people. One individual represented the tribes in the far western quadrant of Oklahoma and is very active in her community. The western and eastern regions of the state were represented by the locations of the gatekeepers and the areas in which they work and travel.
The community gatekeepers were identified, and after they had accepted the responsibility of disseminating and returning the surveys in the designated time frame, the researcher met with them individually in person or by telephone to provide them with the information regarding the survey distribution (see Appendix C). Each received a follow-up letter, the consent form and an information letter on survey distribution. They received a packet which included 100 surveys and 100 envelopes. The envelopes were provided so each participant could place the completed survey in the envelope prior to returning to the gatekeeper in order to ensure confidentiality. Large pre-stamped and pre-addressed return envelopes were also provided to the gatekeepers to ensure convenience in returning the surveys to the researcher. Under separate cover, the gatekeepers were given a gift of $25.00 as a token of appreciation for their assistance. Generosity and honoring another person are highly valued. It is common to provide a gift to someone who has been helpful in order to honor or to thank someone. The gift was not contingent on the return of surveys.

To ensure that adult American Indians were represented, the gatekeepers were asked to randomly distribute surveys at various locations where American Indians adults congregate. These included, but were not limited to, tribal headquarters, churches, community organizations, senior
centers, casinos, smoke shops, and businesses. Although tribes and tribal entities do hire American Indians who belong to their tribe, they also hire American Indians from other tribes. Therefore, even if surveys are being collected at a tribal facility, there would be many people who may be from another tribe. Each gatekeeper were asked to distribute and return 75 to 100 surveys.

In order for one gatekeeper to distribute in her tribe, Cherokee Nation, which is the largest in the state, it was necessary to be approved by the tribe’s Institutional Review Board (IRB). The Cherokee Nation has had a HIV/AIDS department for many years, and those in the department were very excited about receiving the results of the study. Initial contact was made with the IRB manager for the Cherokee Nation, and the survey was mailed along with the cover letter and the Oklahoma State University IRB approval letter. Additionally, the gatekeeper for the Cherokee Nation hand-delivered a complete packet to the manager with the survey and cover letter. After he reviewed the material, the manager stated he did not feel the study would be beneficial to the tribe. He also mailed the researcher the parameters of Cherokee Nation’s IRB approval process which stated:

1. The tribe ensures that only the research, which matches with tribal research priorities, is supported. The research should offer benefits or services to tribal citizens while eliminating harm to them.
2. The tribe establishes the ground rules for the researcher to be followed before, during and after the completion of the study. It also makes sure the researcher abide by these rules.

3. The tribe ensures that tribal members are not coerced into participation by the researcher, participation is 100% voluntary and participants fully understand the risk.

4. The tribe mandates that study participants are informed of research findings and recommendations are submitted to tribal administrations.

5. Researchers are required to submit data/research papers prior to their publication or presentation.

6. Researchers are encouraged to work with tribal members who are interested in learning research methodology.

After the tribe’s initial IRB committee review, the survey is then sent to the Indian Health Service National IRB and the Area Office IRB for Approval. At that point, the researcher decided to withdraw the survey from the approval process based on the IRB manager’s comments that it was not important to the tribe and because of the requirements which may have been difficult to fulfill. However, the IRB manager called later to say that the survey might have benefit and for the researcher to resubmit the paperwork for approval.

The researcher decided that it would be worthwhile to pursue their process and see if the study would be approved. After numerous discussions and phone calls, another complete set of the paperwork was mailed to the IRB manager and a
follow-up phone call was made to confirm that the paperwork was received. On the day of the IRB meeting, the manager called and said that he did not have all of the information needed and therefore could not approve it at the IRB meeting. The gatekeeper and the researcher knew that the appropriate paperwork had been received, but evidently it was deemed not beneficial enough to review at the IRB meeting. At this point, attempts to secure IRB approval from the Cherokee Nation was terminated, and no attempt was made to collect data in the Cherokee Nation. Because Cherokee Nation is the largest tribe in the state, surveys received from people who identified themselves as Cherokee were collected from places other than tribal headquarters and businesses.

In order to distribute surveys at any Indian Health Service (IHS) facility, approval is also needed through the area Indian Health Service IRB process. After discussing the survey with the Indian Health Service IRB manager and based on his comments and IHS’ time frame of a 9-month approval period, the researcher decided to not pursue the process. Many clinics in Oklahoma are tribally controlled and not under Indian Health Service, and many of the tribes can make their own decisions on survey distribution. Two tribal clinics authorized distribution in their clinics.

The gatekeepers distributed the surveys at many locations. These included American Indian Chamber of
Commerce meetings, American Indian organizations, American Indian Student Associations, bars, churches, community centers, conferences, family gatherings, nutrition centers, pow wows, staff meetings, tribal businesses, tribal colleges, tribal offices, and Two-Spirit gatherings.

**Talking Circle**

The second stage of the data collection process provided the opportunity for the gatekeepers to have input to the data analysis. After the data was analyzed, the 10 gatekeepers were invited to a talking circle to discuss the findings of the study. Then meetings were organized in a manner to reinforce beliefs. First, the format was a talking circle in order to create a culturally safe place for the gatekeepers to talk. Generosity, hospitality, and kindness are important in the Indian community and provide an acknowledgment of a good relationship (Garrett, 1998; Garrett, 1994). Therefore, lunch was provided. Third, the gatekeepers were given another token of appreciation.

It was important to hold the talking circle at a location that was comfortable and easily accessible for the gatekeepers. Therefore, two talking circles were held. One talking circle was held in Oklahoma City at the American Indian Physicians Association Office. Seven gatekeepers were in attendance. In the tradition of learning in the American Indian community, one gatekeeper asked permission to bring an American Indian student who is completing a
nursing degree in order for her to learn about research in the Indian community. Another talking circle was held in Tulsa. Meals were provided at both meetings. Because a few of the gatekeepers could not attend either meeting, information was also disseminated through e-mail, telephone conversations and letters.

At the talking circle meetings, the researcher assumed the stance as observer participant, which allows the researcher to observe as well as interact with the members (Merriam, 1998). This process generally allows the researcher to establish an insider’s identity. However, in this situation, the researcher is American Indian, a member of the Muscogee (Creek) tribe, and is well known in the community.

It is important to separate the insider and outsider in qualitative research. Although being an insider helps the participant process, there is a challenge in balancing the participation and the observation. Even though the insider understands the programs, it is necessary to be able to describe it for the outsiders view (Merriam, 1998). The findings from the study were presented to the gatekeepers using handouts and charts. Discussion was informal and questions centered on their perceptions of what the findings meant for each question, how the findings can be utilized, and what challenges there are in HIV prevention in the Indian community.
Permission was requested to audio-tape the talking circle. The data from this dialogue was analyzed using content analysis to find recurrent themes which described the gatekeepers’ perceptions on findings. After the findings were analyzed, the gatekeepers had the opportunity to review and ensure that it described what was discussed. The findings were sent to the gatekeepers through the mail, through e-mail, or through personal contact in order to obtain their comments.

This process provided an opportunity for the researcher to gain detail from perceptions and thoughts of the gatekeepers about the findings and implications. Thus, the gatekeepers were active participants in the research process from the distribution of materials to providing valuable community insight related to the data for real-life solutions.
CHAPTER 4

FINDINGS

Introduction

Information for this study was gathered from 471 survey respondents who self-identify as American Indian and live in Oklahoma. Eleven community gatekeepers agreed to distribute surveys in their respective communities. The data was gathered in a two-step process. First, surveys were distributed across the state by tribal gatekeepers. Second, after the data were analyzed, the gatekeepers reacted to the findings. The survey provided the primary data from American Indian adults across the state. The data from the surveys included demographic information as well as responses to statements which reflected cultural strategies in HIV prevention and statements which were fact-based regarding the virus. The Assessing The Learning Strategies of Adults (ATLAS) was used to assess the learning strategies of the participants. Statistical analysis included the use of Cronbach’s alpha, frequency distributions, factor analysis, analysis of variance, chi square, t-test, cluster and discriminant analysis.

Gatekeepers

The survey distribution was conducted by community gatekeepers (see Table 2). Each gatekeeper was an American Indian who worked with American Indians. These gatekeepers were selected because of the reputation of being trusted in
their communities and because their knowledge of culture and of HIV/AIDS. The tribal affiliation of the gatekeepers represented both large as well as smaller tribes. They represented urban and rural areas in both the Eastern and Western regions of the state, which is how the Oklahoma Indian Affairs Commission (2003) categorizes the tribes. The gatekeepers were selected based on the variety of experience and knowledge in HIV/AIDS, education, and culture. All of the gatekeepers were experienced and knowledgeable in HIV/AIDS prevention. All of the gatekeepers had extensive experience in working with American Indian people, with health education, or with gender-different populations. All of the gatekeepers also had a strong cultural background.

Table 2: Background of Gatekeepers

<table>
<thead>
<tr>
<th>Gatekeeper</th>
<th>Tribal Affiliation</th>
<th>Organization or Community</th>
<th>Years in the field of health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valerie Eschiti, RN</td>
<td>E. Band Cherokee</td>
<td>University of Oklahoma, School of Nursing, Lawton</td>
<td>23</td>
</tr>
<tr>
<td>Linda McIntosh, RN</td>
<td>Muscogee (Creek)</td>
<td>Eufaula Indian Clinic</td>
<td>Over 20</td>
</tr>
<tr>
<td>Barbara Williams</td>
<td>Cherokee</td>
<td>Eastern Tribal Health</td>
<td>Over 20</td>
</tr>
<tr>
<td>Ellen Wolf, RN, Certified</td>
<td>Muscogee (Creek)</td>
<td>Claremore Indian Hospital</td>
<td>Over 20</td>
</tr>
<tr>
<td>HIV/AIDS Nurse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gloria Bellymule Zuniga</td>
<td>Cheyenne</td>
<td>Association of American Indian Physicians</td>
<td>Over 20</td>
</tr>
<tr>
<td>Don Little</td>
<td>Absentee Shawnee and Seminole</td>
<td>Community Activist/Western Oklahoma AIDS Task Force</td>
<td>15</td>
</tr>
</tbody>
</table>
Three gatekeepers did not return any surveys. Two of these worked at an Indian Health Service Hospital and permission to survey participants was difficult to obtain from the clinics. If a clinic or hospital is under the jurisdiction of Indian Health Service, the IHS has the authority to approve or disapprove of research in one of its facilities. If the facility is under tribal-jurisdiction, it may make its own decision about research, or it can refer to Indian Health Service for approval. Given the decision that was made not to seek IRB approval from the Indian Health Service, it was difficult for those gatekeepers to collect data.

One gatekeeper is the HIV/AIDS educator for Cherokee Nation, which is the largest tribe in Oklahoma. She has worked for the tribe for many years. Although she was eager
to participate in the study, the decision to not seek the IRB approval from the Cherokee Nation also prevented her from collecting data. Nevertheless, although the survey could not be distributed within the tribe or tribal clinics, since Cherokee Nation is so large, there were still 133 Cherokees who completed the survey from community respondents.

**Demographic Data**

The gatekeepers were provided 1,300 surveys. Using these, they solicited the participation of 471 American Indians in this study. Demographic data collected included gender, age, tribal affiliation, sexual orientation, and acculturation. Two-thirds of the participants were females (see Table 3). The gatekeepers believe that it was more comfortable for females to fill out the survey than it was for males. Traditionally, women have held leadership positions in the community and still remain vital today in Indian communities (Vernon, 2001). Females are active in the community or at work and may be more comfortable participating in surveys.

Only one person marked both male and female as gender. The term of Two-Spirit is important in prevention because of the historical perspective of gender in many tribes. Many prevention programs for American Indians provide Two-Spirit prevention programs to teach history in order to build pride and self-esteem, and the gatekeepers felt it was important
to acknowledge the one person since the term from a historical perspective reflects a combination of masculine and feminine roles (Lang, 1998).

The number of respondents who marked heterosexual was 372 (79.0%) and 30 (6.4%) respondents marked homosexual (gay). The respondents who marked Two-Spirit totaled 26 (5.5%) (see Table 3).

Table 3: Distribution of Gender and Sexual Orientation Among Participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>147</td>
<td>31.2</td>
</tr>
<tr>
<td>Female</td>
<td>311</td>
<td>66.0</td>
</tr>
<tr>
<td>Male/Female</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td>Total</td>
<td>459</td>
<td>97.5</td>
</tr>
<tr>
<td>Missing</td>
<td>12</td>
<td>2.5</td>
</tr>
<tr>
<td>Total</td>
<td>471</td>
<td>100.0</td>
</tr>
<tr>
<td>Sexual Orientation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heterosexual</td>
<td>372</td>
<td>79.0</td>
</tr>
<tr>
<td>Homosexual (Gay)</td>
<td>30</td>
<td>6.4</td>
</tr>
<tr>
<td>Two-Spirit</td>
<td>26</td>
<td>5.5</td>
</tr>
<tr>
<td>Total</td>
<td>428</td>
<td>90.9</td>
</tr>
<tr>
<td>Missing</td>
<td>43</td>
<td>9.1</td>
</tr>
<tr>
<td>Total</td>
<td>471</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The age of the respondents ranged from 18 to 89 years of age. Seventy-four participants did not mark their age. The mean age was 38 with a standard deviation of 14. There were 8 respondents over the age of 70. Compared to the general United States population, the American Indian
population is younger (National Native American AIDS Prevention Center, 2002).

Survey participants represented 28 of the 39 tribes in Oklahoma. Ten people (2.1%) either did not know their tribe or did not write it in. Participants were asked to identify if they were a tribal member and if so to write in the tribe. If they identified as American Indian but were not a member of a tribe, they were asked to write in their tribe. There were 36 respondents (7.5%) who marked they did not know their tribe.

Tribes represented from the survey respondents reflected the diversity of the tribes in the state. Cherokee Nation, the largest tribe with an in-state population of 145,367, had 133 (28.2%) respondents. Muscogee (Creek) Nation, with an in-state population of 41,759, had 82 (17.4%), and Comanche Tribe had 50 (10.6%) respondents. Comanche Tribe is in the Western region of Oklahoma and has an in-state population of 7,000 and had 50 respondents (10.6%). Although there are 39 tribal headquarters based in Oklahoma, there were respondents from 16 tribes that are not Oklahoma tribes including Assinibonne, Chahta Nation, Cheyenne River Sioux, Chippewa, Colorado River Tribe, Dine’, Iroquois, Juanemo Band (Acjachemen Nation), Northern Paiute, Taos Pueblo, Tohono O’dom, and Tsimshian/Meccah-Alaskan.

In order to assess the self-identified level of
acculturation, the participants were asked to identify their level of acculturation on a 10-point scale with zero (0) denoting non-traditional and 10 denoting traditional.

There were 408 participants who responded and 63 people who did not respond. Approximately two-thirds were below the mid-point, identifying as less traditional and one-third were above the midpoint, identifying as more traditional. Although Oklahoma has a large American Indian population, it does not have true reservations like other states. The Indian Removal Act of 1830 and the General Allotment Act both played important roles in Oklahoma history. Indian lands were divided and a “surplus was available to white settlers” (Krehbiel, 2003). In order to assimilate Indians into white society allotments were advocated. A reservation community can help build a strong cultural foundation. Tribal members who live on the reservation are in a community where culture is promoted through language, ceremonies, and spirituality.

The Cultural Strategies Survey

In order to assess what cultural strategies are important for American Indians in HIV/AIDS prevention, the Cultural Strategies Survey was designed. The Cultural Strategies Survey had 18 items. The survey was based on the constructs of factual knowledge and attitudes about HIV, and utilizing culture in HIV prevention programs. Responses for each item were indicated on a 6-point Likert Scale: 1--
Strongly Agree; 2--Agree; 3--Somewhat agree; 4--Somewhat Disagree; 5--Disagree; and 6--Strongly Disagree. For data analysis purposes, the data were recoded so that disagreement with a correct concept had a low value and agreement had a high value: 1--Strongly Disagree; 2--Disagree; 3--Somewhat Disagree; 4--Somewhat Agree; 5--Agree and 6--Strongly Agree.

There were 471 American Indians who completed responses on 18-separate items (see Table 4). Although “item-by-item descriptions provide one form of reporting the results of a survey, it can produce an overload of information” (Gay & Airasian, 2000, p. 291). “A better way to report is to group items into clusters that address the same issue and develop total scores across an item cluster” (p. 291). Since the factor analysis produced four factors with clusters of items, the items are reported in that manner.

Table 4: Items for Cultural Strategies Survey

<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I can tell by looking if my partner has AIDS.</td>
</tr>
<tr>
<td>2</td>
<td>I can get HIV from sharing a bathroom with someone who has HIV.</td>
</tr>
<tr>
<td>3</td>
<td>Snagging would put me at risk.</td>
</tr>
<tr>
<td>4</td>
<td>I believe latex condoms are an effective way to protect myself from HIV and other sexually transmitted diseases.</td>
</tr>
<tr>
<td>5</td>
<td>If I drink alcohol, I’m more likely to do something that would put me at risk for HIV.</td>
</tr>
<tr>
<td>6</td>
<td>I believe HIV/AIDS could wipe out as many Indians as smallpox once did.</td>
</tr>
<tr>
<td></td>
<td>I would feel comfortable going to my local Indian clinic for a HIV test.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>8</td>
<td>I believe the government isn’t doing as much as they could to stop HIV/AIDS.</td>
</tr>
<tr>
<td>9</td>
<td>I believe you shouldn’t discuss HIV/AIDS in the Indian community without permission from the elders.</td>
</tr>
<tr>
<td>10</td>
<td>I am uncomfortable talking about HIV/AIDS with my family.</td>
</tr>
<tr>
<td>11</td>
<td>I believe HIV/AIDS is basically a gay disease.</td>
</tr>
<tr>
<td>12</td>
<td>I would rather receive information about HIV/AIDS from another American Indian.</td>
</tr>
<tr>
<td>13</td>
<td>I think the Circle of Life (Medicine Wheel) is a good tool to use in HIV prevention.</td>
</tr>
<tr>
<td>14</td>
<td>An opening ceremony would not be appropriate at a HIV prevention program.</td>
</tr>
<tr>
<td>15</td>
<td>I would feel comfortable discussing HIV/AIDS in a talking circle with other Native Americans.</td>
</tr>
<tr>
<td>16</td>
<td>The Creator protects Native Americans from HIV during ceremonies that include blood (such as Sun Dance or scratching).</td>
</tr>
<tr>
<td>17</td>
<td>I would pay more attention to HIV prevention if legends or stories were used.</td>
</tr>
<tr>
<td>18</td>
<td>I believe my health is related to the connection between the physical, emotional, mental, and spiritual parts of me.</td>
</tr>
</tbody>
</table>

The Traditional Ways factor consisted of 7 items. These items were 8, 12, 13, 15, 16, 17, and 18. Of these items 8, 12, 13, 15, 16, 17, and 18 were positive items, and item 16 was a negative item. Items were scored positive if they were congruent with the scientific principle or theory and with healthy traditional practices. High scores were associated with agreeing with a positive item and disagreeing with a negative item. To accomplish this, the
positive items were recoded as follows: Strongly Agree--6, Agree--5, Somewhat Agree--4, Somewhat Disagree--3, Disagree--2, and Strongly Disagree--1. The responses in the Traditional Ways factor reflect a general bell curve with about half above the mean and half below (see Figure 1). Responses ranged from 12.0 to 42.0 and had a mean of 28.9, a median of 29.0, a mode of 31.0, and a standard deviation of 4.93. Thus, there was a wide distribution of responses concerning support of traditional cultural values related to HIV/AIDS.

Figure 1: Frequency Distribution of Traditional Ways Factor of Cultural Strategies Survey
The Personal Beliefs factor consisted of 6 items. These items were 1, 2, 9, 10, 11, and 14. All six items were negative items. Therefore, the items were not recoded, and high scores were associated with disagreement of a negative item. The items in the Personal Beliefs factor were slightly skewed with the bulk of the scores toward the high-end of the scale (see Figure 2). The responses ranged from 11.0 to 36.0. The Personal Belief factor had a mean of 28.6; a median of 29.0, and, a mode of 30.0. The standard deviation was 4.75. The distribution of responses on responses concerning personal beliefs disagreed with common beliefs.

Figure 2: Frequency Distribution of Personal Beliefs Factor of Cultural Strategies Survey
The Science-Based Beliefs factor consisted of 3 items. These items were 4, 5, and 6. All of the items were positive. Therefore, the positive items were recoded so that agreement with the item had the high value. Items were congruent with the scientific theory on knowledge. The responses in the Science-Based Beliefs factor was skewed with the bulk of the scores in the positive (see Figure 3). Responses ranged from 3.0 to 18.0 and had a mean of 13.4; a median of 14.0, and, a mode of 13.0. The standard deviation was 3.14. The distribution of responses were in agreement with the theoretical basis of HIV/AIDS knowledge.

Figure 3: Frequency Distribution of Science-Based Beliefs Factor of Cultural Strategies Survey
The Tribal Context factor consisted of 2 items. These items were 3 and 7. Both items were positive items and both were recoded to a value of 6 for Strongly Agree. Items were scored positive if they were congruent with the theory of tribal context. High scores were associated with agreeing with a positive item and disagreeing with a negative item. To accomplish this, the items were recoded as follows: Strongly Agree–6, Agree–5, Somewhat Agree–4, Somewhat Disagree–3, Disagree–2, and Strongly Disagree–1. The responses were skewed toward the positive side (see Figure 4). Responses ranged from 2.0 to 12.0 and had a mean of 8.67; a median of 9.0, and, a mode of 10.0. The standard deviation was 2.52.

Figure 4: Frequency Distribution of The Tribal Context Factor of Cultural Strategies Survey
Total scores were also calculated. The responses formed a normal bell curve, with about half of the scores above the mean and the other half below the mean (see Figure 5). Items ranged from 49.0 to 105.0. The mean was 79.9, the median was 80.0 and the mode was 80.0, and a standard deviation was 8.86. There was a wide distribution of responses in the total score.

Figure 5: Frequency Distribution of Total Score for Cultural Strategies Survey

Analysis of Variance

Analysis of variance (ANOVA) is comparing two or more groups to see "if there is a significant difference between"
two or more means” (Gay & Airasian, 2000, p. 491). Whether a simplistic one-way or a complex multivariate, ANOVA focuses on the means (Huck, 2000, p. 326). However, they “differ on the number of independent variables, dependent variables, and whether the samples are independent or correlated” (p. 326).

A one-way ANOVA has a single independent variable and allows “the researcher to use the data in the samples for the purpose of making a single inferential statement concerning the means of the study’s population” (Huck, 2000, p. 326). The analysis draws an inference that “extends from the set of samples to the set of populations” (p. 324).

Two-way analysis of variance (ANOVA) is a parametric test that determines if there is a significant difference between means of two or more independent variables and the interactions between them (Gay & Airasian, 2000, p. 499). A two-way ANOVA is simply when the people are grouped on two variables. The data was analyzed to see how acculturation interacted with gender and how acculturation interacted with sexual orientation. Separate analyses was done for the Total Score and for each of the four factors. The criterion level of .05 was used for testing the significance of each analysis.

For acculturation, the respondents were grouped into two groups: zero to 5 and those above 5. In investigating interaction with gender there were two groups: male and
female. Hypotheses were tested for the total score and for each of the factors. The following hypotheses were tested.

1. **H₀₁** There is no significant interaction between gender and acculturation as it relates to the total score on the Cultural Strategies Survey.
2. **H₁** There is a significant interaction between gender and acculturation as it relates to the total score on the Cultural Strategies Survey.
3. **H₀²** There is no significant interaction between gender and acculturation as it relates to the score on the Traditional Ways factor.
4. **H₂** There is a significant interaction between gender and acculturation as it relates to the score on the Traditional Ways factor.
5. **H₀₃** There is no significant interaction between gender and acculturation as it relates to the score on the Personal Beliefs factor.
6. **H₃** There is a significant interaction between gender and acculturation as it relates to the score on the Personal Beliefs factor.
7. **H₀₄** There is no significant interaction between gender and acculturation as it relates to the score on the Science-Based Beliefs factor.
8. **H₄** There is a significant interaction between gender and acculturation as it relates to the score on the Science-Based Beliefs factor.
9. **H₀₅** There is no significant interaction between gender and acculturation as it relates to the score on the Tribal Context factor.
10. **H₅** There is a significant interaction between gender and acculturation as it relates to the score on the Tribal Context factor.

No significant interactions were found (see Table 5). Therefore, null hypotheses 1, 2, 3, 4, and 5 were accepted. In examining the main effects, significant differences were found for the Cultural Strategies Total Score, Traditional
Ways, Personal Beliefs, and Science-Based Beliefs for acculturation and for Science-Based Beliefs for Gender. No differences were found in the main effect for acculturation or gender for Tribal Context.

Table 5: ANOVA of Cultural Strategies Scores for High and Low Acculturation Levels by Gender

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cultural Strategies Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>102.23</td>
<td>1</td>
<td>102.23</td>
<td>1.34</td>
<td>0.248</td>
</tr>
<tr>
<td>Acculturate (B)</td>
<td>809.84</td>
<td>1</td>
<td>809.84</td>
<td>10.62</td>
<td>0.001</td>
</tr>
<tr>
<td>A x B</td>
<td>260.59</td>
<td>1</td>
<td>260.59</td>
<td>3.42</td>
<td>0.065</td>
</tr>
<tr>
<td>Within</td>
<td>25088.60</td>
<td>329</td>
<td>76.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>26095.73</td>
<td>332</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional Ways</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender (A)</td>
<td>12.84</td>
<td>1</td>
<td>12.84</td>
<td>0.56</td>
<td>0.455</td>
</tr>
<tr>
<td>Acculturate (B)</td>
<td>521.86</td>
<td>1</td>
<td>521.86</td>
<td>22.76</td>
<td>0.000</td>
</tr>
<tr>
<td>A x B</td>
<td>14.03</td>
<td>1</td>
<td>14.03</td>
<td>0.61</td>
<td>0.435</td>
</tr>
<tr>
<td>Within</td>
<td>9353.17</td>
<td>408</td>
<td>22.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9904.36</td>
<td>411</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Beliefs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender (A)</td>
<td>50.14</td>
<td>1</td>
<td>50.14</td>
<td>2.35</td>
<td>0.126</td>
</tr>
<tr>
<td>Acculturate (B)</td>
<td>81.83</td>
<td>1</td>
<td>81.83</td>
<td>3.83</td>
<td>0.051</td>
</tr>
<tr>
<td>A x B</td>
<td>27.79</td>
<td>1</td>
<td>27.79</td>
<td>1.30</td>
<td>0.255</td>
</tr>
<tr>
<td>Within</td>
<td>9016.47</td>
<td>422</td>
<td>21.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9257.85</td>
<td>425</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science-Based Beliefs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender (A)</td>
<td>97.18</td>
<td>1</td>
<td>97.18</td>
<td>10.01</td>
<td>0.002</td>
</tr>
<tr>
<td>Acculturate (B)</td>
<td>73.59</td>
<td>1</td>
<td>73.59</td>
<td>7.58</td>
<td>0.006</td>
</tr>
<tr>
<td>A x B</td>
<td>6.74</td>
<td>1</td>
<td>6.74</td>
<td>0.69</td>
<td>0.405</td>
</tr>
<tr>
<td>Within</td>
<td>4269.52</td>
<td>440</td>
<td>9.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4468.35</td>
<td>443</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Tribal Context</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender (A)</td>
<td>11.69</td>
<td>1</td>
<td>11.69</td>
<td>1.84</td>
<td>0.176</td>
</tr>
<tr>
<td>Acculturate (B)</td>
<td>6.11</td>
<td>1</td>
<td>6.11</td>
<td>0.96</td>
<td>0.328</td>
</tr>
<tr>
<td>A x B</td>
<td>6.10</td>
<td>1</td>
<td>6.10</td>
<td>0.96</td>
<td>0.328</td>
</tr>
<tr>
<td>Within</td>
<td>2394.68</td>
<td>376</td>
<td>6.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2412.45</td>
<td>379</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Interactions were also examined for sexual orientation. For these analyses, sexual orientation was grouped into
The following hypotheses were tested.

\( H_{06} \)  There is no significant interaction between sexual orientation and acculturation as it relates to the total score on the Cultural Strategies Survey.

\( H_{6} \)  There is a significant interaction between sexual orientation and acculturation as it relates to the total score on the Cultural Strategies Survey.

\( H_{07} \)  There is no significant interaction between sexual orientation and acculturation as it relates to the score on the Tribal Ways factor.

\( H_{7} \)  There is a significant interaction between sexual orientation and acculturation as it relates to the score on the Tribal Ways factor.

\( H_{08} \)  There is no significant interaction between sexual orientation and acculturation as it relates to the score on the Personal Beliefs factor.

\( H_{8} \)  There is a significant interaction between sexual orientation and acculturation as it relates to the score on the Personal Beliefs factor.

\( H_{09} \)  There is no significant interaction between sexual orientation and acculturation as it relates to the score on the Science-Based Beliefs factor.

\( H_{9} \)  There is a significant interaction between sexual orientation and acculturation as it relates to the score on the Science-Based Beliefs factor.

\( H_{010} \)  There is no significant interaction between sexual orientation and acculturation as it relates to the score on the Tribal Context factor.

\( H_{10} \)  There is a significant interaction between sexual orientation and acculturation as it relates to the score on the Tribal Context factor.

There was one significant interaction (see Table 6).
It was between orientation and acculturation for Personal Beliefs. No differences were found for the interaction for the Total Score, Traditional Ways, Science-Based Beliefs, and Tribal Context. Therefore, hypothesis 8 was rejected and hypotheses 6, 7, 9 and 10 were accepted.

Because there was a significant interaction in the two-way ANOVA, the simple main effects were examined. “This procedure involves comparing the various levels of one factor at each separate level of the other factor (Huck, Cormier & Bounds, 1974, p. 88). A $t$-test was used in order to compare levels. “When a researcher probes a statistically significant interaction via tests of simple main effects, the various levels of one factor are compared in such a way that the other factor is held constant” (Huck, 2000, p. 413). The $t$-test showed the interaction is within the homosexual group (see Table 7).
Table 6: ANOVA of Cultural Strategies Scores for High and Low Acculturation Levels by Three Levels of Sexual Orientation

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cultural Strategies Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orientation (A)</td>
<td>255.46</td>
<td>2</td>
<td>127.73</td>
<td>1.68</td>
<td>0.188</td>
</tr>
<tr>
<td>Acculturate (B)</td>
<td>199.15</td>
<td>1</td>
<td>199.15</td>
<td>2.62</td>
<td>0.106</td>
</tr>
<tr>
<td>A x B</td>
<td>188.36</td>
<td>2</td>
<td>94.18</td>
<td>1.24</td>
<td>0.291</td>
</tr>
<tr>
<td>Within</td>
<td>23471.51</td>
<td>309</td>
<td>75.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>24645.85</td>
<td>314</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional Ways</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orientation (A)</td>
<td>108.50</td>
<td>2</td>
<td>54.25</td>
<td>2.42</td>
<td>0.090</td>
</tr>
<tr>
<td>Acculturate (B)</td>
<td>193.13</td>
<td>1</td>
<td>193.13</td>
<td>8.62</td>
<td>0.004</td>
</tr>
<tr>
<td>A x B</td>
<td>5.65</td>
<td>2</td>
<td>2.83</td>
<td>0.13</td>
<td>0.882</td>
</tr>
<tr>
<td>Within</td>
<td>8563.42</td>
<td>382</td>
<td>22.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9223.68</td>
<td>387</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Beliefs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orientation (A)</td>
<td>87.57</td>
<td>2</td>
<td>43.79</td>
<td>2.29</td>
<td>0.103</td>
</tr>
<tr>
<td>Acculturate (B)</td>
<td>60.72</td>
<td>1</td>
<td>60.72</td>
<td>3.17</td>
<td>0.076</td>
</tr>
<tr>
<td>A x B</td>
<td>160.04</td>
<td>2</td>
<td>80.02</td>
<td>4.18</td>
<td>0.016</td>
</tr>
<tr>
<td>Within</td>
<td>7576.21</td>
<td>396</td>
<td>19.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7840.01</td>
<td>401</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science-Based Beliefs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orientation (A)</td>
<td>12.90</td>
<td>2</td>
<td>6.45</td>
<td>0.70</td>
<td>0.499</td>
</tr>
<tr>
<td>Acculturate (B)</td>
<td>34.47</td>
<td>1</td>
<td>34.47</td>
<td>3.72</td>
<td>0.054</td>
</tr>
<tr>
<td>A x B</td>
<td>2.91</td>
<td>2</td>
<td>1.45</td>
<td>0.16</td>
<td>0.855</td>
</tr>
<tr>
<td>Within</td>
<td>3796.59</td>
<td>410</td>
<td>9.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3891.91</td>
<td>415</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Tribal Context</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Orientation (A)</td>
<td>14.27</td>
<td>2</td>
<td>7.14</td>
<td>1.12</td>
<td>0.327</td>
</tr>
<tr>
<td>Acculturate (B)</td>
<td>8.80</td>
<td>1</td>
<td>8.80</td>
<td>1.38</td>
<td>0.240</td>
</tr>
<tr>
<td>A x B</td>
<td>18.68</td>
<td>2</td>
<td>9.34</td>
<td>1.47</td>
<td>0.232</td>
</tr>
<tr>
<td>Within</td>
<td>2224.76</td>
<td>350</td>
<td>6.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2263.49</td>
<td>355</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The t-test showed that there is a significant difference in the homosexual groups in the high culture group and low culture group on Personal Beliefs (see Table 7). The high culture group scored lower on the scale on
Personal Beliefs than the low culture group (see Figure 6).

Table 7: t-tests of Mean Differences on Personal Belief Factor for Sexual Orientation Groups and Levels of Acculturation

<table>
<thead>
<tr>
<th>Group</th>
<th>t</th>
<th>df</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heterosexual</td>
<td>1.58</td>
<td>351.00</td>
<td>0.115</td>
</tr>
<tr>
<td>Homosexual</td>
<td>2.62</td>
<td>26.00</td>
<td>0.014</td>
</tr>
<tr>
<td>Two Spirit</td>
<td>0.81</td>
<td>19.00</td>
<td>0.430</td>
</tr>
</tbody>
</table>

Figure 6: Mean Scores for Personal Belief Factor for Sexual Orientation Groups and Levels of Acculturation

Learning Strategy Preference

In order to assess learning strategy preference, participants were asked to identify their preferred learning strategy by completing ATLAS, which identifies three
strategies: Navigator, Problems Solver or Engagers. A chi-square analysis was calculated to determine if there was a significant difference between the observed frequency distribution for the current study and the norms of ATLAS. Chi square is an appropriate test to "compare the proportions observed in a study to the proportions expected, to see if they are significantly different" (Gay & Airasian, 2000, p. 502).

- $H_{0_{11}}$: There is no significant difference in the distribution of the learning strategy preference groups and the norms of ATLAS.
- $H_{1_{11}}$: There is a significant difference in the distribution of the learning strategy preference groups and the norms of ATLAS.

Table 8 shows the expected and observed distribution for the ATLAS groupings of the participants in this study. There was a significant difference in the observed frequency and expected frequency in the number of individuals in each learning type. The norm for ATLAS is a relatively equal distribution of 36.5% for Navigators, 31.7% for Problem Solvers, and 31.8% for Engagers (Conti & Kolody, 1999). However, this study had a disproportionately small number of Navigators (29%) and an increased number of Problem Solvers (35%) and Engagers (34%).
Table 8: Distribution of Observed and Expected Learning Strategy Groups

<table>
<thead>
<tr>
<th>Groups</th>
<th>Observed</th>
<th>Expected</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navigator</td>
<td>130</td>
<td>162.1</td>
<td>-32.1</td>
</tr>
<tr>
<td>Problem Solver</td>
<td>159</td>
<td>140.7</td>
<td>18.3</td>
</tr>
<tr>
<td>Engager</td>
<td>155</td>
<td>141.2</td>
<td>13.8</td>
</tr>
<tr>
<td>Total</td>
<td>444</td>
<td>444</td>
<td></td>
</tr>
</tbody>
</table>

Note: χ² (2, N=444)=10.06, p=.007

A chi-square test was also performed to see if there was a significant difference from the expected norms in the number of people who were identified on ATLAS in either Subgroup 1 or Subgroup 2 for each learning strategy preference group. There was no significant difference in the observed values and the expected values in the number of individuals in each learning subgroup. This study was consistent with previous ATLAS subgroup findings which generally split into two equal groups (see Table 9).

Table 9: Frequency Distribution of ATLAS Subgroups

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subgroup 1</td>
<td>228</td>
<td>51.70</td>
</tr>
<tr>
<td>Subgroup 2</td>
<td>213</td>
<td>48.30</td>
</tr>
<tr>
<td>Total</td>
<td>441</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Note: χ² (1, N=441)=.510, p=.475

Cultural Instructional Strategies by ATLAS

One-way analysis of variance (ANOVA) is a parametric test that determines if there is a significant difference between two or more groups at a selected probability level.
(Gay & Airasian, 2000, p. 491). A one-way ANOVA was performed to look at each of the four dependent variables of Traditional Ways, Personal Beliefs, Science-Based Beliefs, and The Tribal Context in relationship to the independent variable of ATLAS.

$H_{012}$ There is no significant relationship between Total Cultural Strategies scores and ATLAS learning strategy preference.

$H_{12}$ There is a significant relationship between Total Cultural Strategies scores and ATLAS learning strategy preference.

$H_{013}$ There is no significant relationship between Traditional Ways scores and ATLAS learning strategy preference.

$H_{13}$ There is a significant relationship between Traditional Ways scores and ATLAS learning strategy preference.

$H_{014}$ There is no significant relationship between Personal Beliefs scores and ATLAS learning strategy preference.

$H_{14}$ There is a significant relationship between Personal Beliefs scores and ATLAS learning strategy preference.

$H_{015}$ There is no significant relationship between Science-Based Beliefs scores and ATLAS learning strategy preference.

$H_{15}$ There is a significant relationship between Science-Based Beliefs scores and ATLAS learning strategy preference.

$H_{016}$ There is no significant relationship between The Tribal Context scores and ATLAS learning strategy preference.

$H_{16}$ There is a significant relationship between Tribal Context scores and ATLAS learning strategy preference.
Table 10: ANOVA of Cultural Strategies Scores by ATLAS Learning Strategy Preference Groups

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cultural Strategies Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>302.17</td>
<td>2</td>
<td>151.09</td>
<td>1.94</td>
<td>0.146</td>
</tr>
<tr>
<td>Within</td>
<td>24788.82</td>
<td>318</td>
<td>77.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional Ways</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>222.94</td>
<td>2</td>
<td>111.47</td>
<td>4.74</td>
<td>0.009</td>
</tr>
<tr>
<td>Within</td>
<td>9390.52</td>
<td>399</td>
<td>23.54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Beliefs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>121.41</td>
<td>2</td>
<td>60.70</td>
<td>2.72</td>
<td>0.067</td>
</tr>
<tr>
<td>Within</td>
<td>9161.88</td>
<td>410</td>
<td>22.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science-Based Beliefs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>48.03</td>
<td>2</td>
<td>24.02</td>
<td>2.64</td>
<td>0.072</td>
</tr>
<tr>
<td>Within</td>
<td>3881.23</td>
<td>427</td>
<td>9.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Tribal Context</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>4.45</td>
<td>2</td>
<td>2.23</td>
<td>0.37</td>
<td>0.693</td>
</tr>
<tr>
<td>Within</td>
<td>2208.44</td>
<td>364</td>
<td>6.07</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With the participants grouped by their learning strategy preference, no significant differences were found on the total score and three of the factors for the Cultural Strategies Survey (see Table 10). However, a significant difference was found for Traditional Ways (see Table 10). To determine where the significance lies, a Scheffe post hoc was run: Navigators (29.42) and Problem Solvers (29.49) scored higher on Traditional Ways than Engagers (27.89). Therefore, null hypotheses 12, 14, 15 and 16 were accepted, and hypothesis 13 was rejected.

Differences Due to Acculturation

ANOVAs were conducted to determine if there were significant differences between acculturation groups and the Cultural Strategies scores, between acculturation ratings.
and age grouped by quartiles, and between acculturation rating and gender. A one-way ANOVA was performed to look at each of the four dependent variables of Traditional Ways, Personal Beliefs, Science-Based Beliefs, and The Tribal Context in relationship to the independent variables of acculturation levels. Acculturation was grouped for high and low levels.

\[ H_{017} \] There is no significant relationship between Total Cultural Strategies scores and acculturation levels.

\[ H_{17} \] There is a significant relationship between Total Cultural Strategies scores and acculturation levels.

\[ H_{018} \] There is no significant relationship between Traditional Ways scores and acculturation levels.

\[ H_{18} \] There is a significant relationship between Traditional Ways scores and acculturation levels.

\[ H_{019} \] There is no significant relationship between Personal Beliefs scores and acculturation levels.

\[ H_{19} \] There is a significant relationship between Personal Beliefs scores and acculturation levels.

\[ H_{020} \] There is no significant relationship between Science-Based Beliefs scores and acculturation levels.

\[ H_{20} \] There is a significant relationship between Science-Based Beliefs scores and acculturation levels.

\[ H_{021} \] There is no significant relationship between The Tribal Context scores and acculturation levels.

\[ H_{21} \] There is a significant relationship between Tribal Context scores and acculturation levels.
Table 11: ANOVA of Cultural Strategies Scores for High and Low Acculturation Levels

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cultural Strategies Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>456.73</td>
<td>1</td>
<td>456.73</td>
<td>5.90</td>
<td>0.016</td>
</tr>
<tr>
<td>Within</td>
<td>26165.80</td>
<td>338</td>
<td>77.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional Ways</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>526.45</td>
<td>1</td>
<td>526.45</td>
<td>22.76</td>
<td>0.000</td>
</tr>
<tr>
<td>Within</td>
<td>9759.66</td>
<td>422</td>
<td>23.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal Beliefs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>205.06</td>
<td>1</td>
<td>205.06</td>
<td>9.25</td>
<td>0.002</td>
</tr>
<tr>
<td>Within</td>
<td>9599.27</td>
<td>433</td>
<td>22.17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Science-Based Beliefs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>67.33</td>
<td>1</td>
<td>67.33</td>
<td>6.90</td>
<td>0.009</td>
</tr>
<tr>
<td>Within</td>
<td>4422.08</td>
<td>453</td>
<td>9.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tribal Context</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between</td>
<td>1.75</td>
<td>1</td>
<td>1.75</td>
<td>0.27</td>
<td>0.601</td>
</tr>
<tr>
<td>Within</td>
<td>2471.44</td>
<td>387</td>
<td>6.39</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Although there were significant differences on three of the four factors and on the total strategies score, the differences were minuscule (see Table 11). “The fact that results are statistically significant does not automatically mean that they are of any educational value (i.e., that they have practical significance)” (Gay & Airasian, 2000, p. 522). The differences in the means for Total Scores was 2.4 for 18 items which reflected .13 per item. Traditional Ways was only .32 per item; Personal Beliefs was .23 per item; Science-Based Beliefs was .26; and Tribal Context was .06. Therefore, null hypotheses 17, 18, 19, 20, and 21 were rejected. However, all of these differences were too small to have practical significance.

\( H_{022} \) There is no significant relationship between acculturation and the age of
There is a significant relationship between acculturation and the age of participants.

**Table 12: ANOVA of Acculturation Ratings and Age Grouped by Quartiles**

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>193.53</td>
<td>3</td>
<td>64.51</td>
<td>7.24</td>
<td>0.000</td>
</tr>
<tr>
<td>Within</td>
<td>3884.06</td>
<td>436</td>
<td>8.91</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4077.59</td>
<td>439</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To investigate the relationship of acculturation and age, the participants were grouped into quartiles based on their ages: 18-26, 27-37, 38-49, and 50-89. Their rating on the acculturation scale was used as the dependent variable. A significant difference in acculturation score was found due to age (see Table 12). The Scheffe post hoc test revealed that the 18 to 26 age group (3.18) was different from the 38 to 49 age group (4.93) and the 50 to 89 age group (4.71). The 27 to 37 age group (3.99) was not different from the other three groups. The younger people tended to be less acculturated than the older group. However, the older group tends to score around the middle of the acculturation scale whereas the younger group are almost two increments lower. Therefore, null hypothesis 22 was rejected.

There is no significant relationship between acculturation and the gender of the participants.

There is a significant relationship between acculturation and the gender of the participants.
To investigate the relationship of acculturation and gender, the participants were grouped by gender and compared on their acculturation rating. There was no significant difference in acculturation based on gender (see Table 13). Therefore, null hypothesis 23 was accepted.

Groups of Participants

Cluster Analysis

One method to give more meaning to the interactions of variables is multivariate analysis (Conti, 1996, p.70). This process can provide an opportunity to “view the learner more holistically” (p. 67). Cluster analysis provides a way to identify groups in a data set, and discriminant analysis can help determine the differences between the groups. Both cluster and discriminant analysis were used for the 471 respondents using the 18 items of the Cultural Strategies Survey. “Cluster analysis is a multivariate statistical procedure that seeks to identify homogenous groups or clusters” (Conti, 1996, p. 68). To uncover these natural groups inherent among the participants, a “commonly used method for forming clusters is hierarchical cluster analysis” (p. 68). At the beginning of this statistical process, all of the cases are separate. At each successive
step, either individual cases or existing clusters are combined based on similarities (p. 68). This process allows inherent groups to be identified.

An agglomerative hierarchical cluster analysis was computed for the 471 respondents using the 18-items of the Cultural Strategies Survey. In order to measure distance between cases, a squared Euclidean distance was used. The Ward’s method, a widely used method in the social services to link cases, was used to find similar size groups (Conti, 1996). Because participants did not respond for all 18 items, 131 cases were omitted from the analysis, and the final analysis was based on 340 respondents. The cluster analysis showed there were inherent groups in the data, and three groups of 100, 144, and 96 were chosen as the most appropriate solution.

**Discriminant Analysis**

In order to provide additional insight into the meaning of the groups, discriminant analysis can be used (Conti, 1996, p. 70). For interpretation of the existing groups, discriminant analysis “can focus on the discriminating variables that may explain the difference between the groups” (Conti, 1993, p. 91). It “examines people on a set of variables to determine if any of them interact in a combination that can explain the person’s placement in a group” (p. 91).

Two separate discriminant analysis were conducted. For
these analyses, the participants were grouped according to the cluster analysis groupings, and the 18 items of the Cultural Strategies Survey were used as the discriminating variables. The first discriminant analysis was done at the 2-cluster solution level. At the 2-cluster solution, the group sizes were one group at 240 and another of 100. The discriminant analysis was 84.7% accurate in placing the 340 people in their correct groups. Since the groups were found by cluster analysis, the discriminant analysis was expected to have a high degree of accuracy. In the cluster of 100 respondents, 88% were classified correctly. In the cluster of 240, 83.3% were classified correctly.

“Discriminant analysis is a useful tool for identifying the process that separates the clusters and therefore for helping to describe the clusters” (Conti, 1996, p. 71). The structure matrix “contains correlation coefficients that indicate how closely a variable and the discriminant function are related. A high coefficient indicates that the information is similar to the variable” (Conti, 1993, p. 94). The numbers in the structure matrix indicates the correlation of each item to the overall discriminant function; therefore, they can be used to name the process that separates the groups (pp. 93-94). The items with the highest correlations were item 17 (.491), item 12 (.473), item 9 (.398), item 8 (.355), item 13 (.329), and item 5 (.312). These items relate to the process of using a
traditional approach. They are concepts based on a holistic approach to health, on using stories and legends, or on the preference of an American Indian educator. The group of 240 scored higher than the group of 100 on these items.

A second discriminant function was calculated. At the 3-group level, the group of 240 from the 2-cluster level was divided into two groups. These groups of 144 and 96 were used in this second discriminant analysis. The discriminant analysis was 88.3% accurate in placing the 240 respondents correctly in their group; it was 88.2% accurate for the group of 144 and 88.5% accurate for the group of 96. The items in the structure matrix with the highest correlations were item 10 (.463), item 11 (.386), item 18 (.376), item 1 (.361), item 2 (.308), and item 15 (.307). These items relate to using culture in the delivery process of the information. Two of the items related to traditional beliefs such as using talking circle to have a comfort level is discussing HIV and a belief in a more holistic approach to health. Other items related to knowledge and personal beliefs about HIV/AIDS.

Thus, there are three distinct groups among the participants. At the 2-cluster level, for the group of 100, culture is not important in teaching about HIV/AIDS. The group of 240 that supported culture divided into two groups of 144 and 96. The group of 144 had a high degree of knowledge and a strong support of culture. This supported
the integration of cultural strategies such as a talking circle to help promote discussion about HIV and a more holistic belief in health. The group of 96 was somewhat less supportive of culture and less knowledgeable about HIV than the group of 144. The group of 96 also had a more individualistic personal belief focus.
CHAPTER 5
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

As HIV/AIDS has entered its third decade, its severity has increased for communities of color. In the beginning of this epidemic, only a third of the cases were people of color. Today, while people of color “comprise only a third of the U. S. population, they account for 62% of all people living with AIDS” (AIDS Action Policy Facts, 2002). In Oklahoma, the story is the same for people of color. In the beginning, most people were not concerned because it was thought of as a gay disease. For many American Indians, it was also someone else’s problem. Today, complacency abounds and for tribes HIV education is not a priority.

Research consistently says that culturally specific programs work better than programs that do not match the audience (Wilson & Miller, 2003). However, in the American Indian community, research has been limited. Although rates of infection are a concern, there are not many programs in Oklahoma that are targeted to American Indians. Without programs that are validated, funding is hard to attain. Many prevention efforts are based on the values of the dominant society without consideration of determining if cultural values, community norms, or beliefs will affect prevention messages.

Prevention is still the only weapon available to stop
the spread of this disease. Knowing what strategies may be considered important to American Indians in Oklahoma as well as what learning preferences Native people use are important in creating facilitation strategies for effective prevention programs. The purpose of this study was to describe cultural strategy preferences of American Indians who live in Oklahoma for HIV training. This study used a descriptive design utilizing community gatekeepers to distribute the survey to American Indians who live in Oklahoma. These gatekeepers also provided insight into the interpretation of the findings. An 18-item survey, using a 6-point Likert scale, was created to collect information from the items that related to knowledge, attitudes, and cultural beliefs about HIV/AIDS. Demographic data collected included age, gender, tribal affiliation and membership, acculturation level, and sexual orientation. Eleven American Indian gatekeepers distributed the survey in American Indian communities across the state. The study involved a sample of 471 self-identified American Indian respondents in Oklahoma.

Summary of the Findings

Descriptive statistics were used to construct a profile of the demographic variables of the 471 American Indians who participated in the study. The characteristics of the respondents are summarized below:

(a) There were twice as many females as males.
(b) The average age of the survey respondents was
Most participants identified themselves as heterosexual, 30 identified themselves as homosexual, and 26 identified themselves as Two-Spirit.

Two-thirds of Oklahoma American Indians in Oklahoma identified below the mid-point of the acculturation scale.

The 18 survey items were constructed based on the basic knowledge about HIV/AIDS, attitudes and beliefs, and cultural strategy statements. The four knowledge-items were based on scientific and expert knowledge about HIV/AIDS. Five items related to personal beliefs and attitudes and were based on American Indian research and theoretical perspectives. Nine items which related to traditional cultural values were based on national research on culture and prevention for American Indians.

In order to determine how well the 18 survey items from the Cultural Strategies Survey related to one another, factor analysis was used. This procedure provides a way to reduce the information to related variables (Gay & Airasian, 2000). From this analysis, four factors were identified: Factor 1—Traditional Ways; Factor 2—Personal Beliefs; Factor 3—Science-Based Beliefs; and Factor 4—Tribal Context.

Factor 1 was named Traditional Ways. All of the items reflected a cultural and traditional basis of knowledge. Utilizing a holistic approach to health, the balance of life, and stories and legends are often cited as important
educational elements in the American Indian community. A mistrust of the government and preferring to hear information from someone of one’s own culture is considered a cultural element which can affect the receiver of the information. This element of mistrust is not specific to just American Indians but also applies to African Americans and Hispanic/Latinos.

Factor 2 was named Personal Beliefs. An individual’s personal beliefs often override science or basic knowledge. Since HIV has had stigma attached to it from the beginning, it is still believed by some people that it is a gay disease, that it is as easy to get as sharing a bathroom, or that one can identify it by looking at someone. For many communities, including the American Indian community, it is not a topic that is easily discussed. Talking about sex, about sharing needles, or about other risk behaviors are not comfortable topics for many, especially a community that does not talk about sexuality. Although two items which reflected culture fell in this factor, they are also items about which people may have strong beliefs. This could be based on their understanding or lack of understanding of cultural procedures. American Indian communities and events have certain cultural expectations. In traditional settings, most programs, events, or training begins with some type of opening ceremony. This could be a prayer, song, story, or a flag ceremony. That is a very different
concept from most dominant society programs. Elders are often asked for advise and/or permission for certain programs or events.

Factor 3 was named Science-Based Beliefs. HIV prevention programs consistently focus on the aspect of using latex condoms to reduce the risk of infection and on the realization that alcohol is an element that can increase a person’s risk of infection. Smallpox is considered a historical disease that wiped out American Indians; however, today HIV has wiped out villages in Africa. For small American Indian tribes and communities, there is a concern that without adequate prevention and acceptance of the message, small communities and tribes could be devastated.

Factor 4 was named Tribal Context. The two items in it are based on an understanding that American Indian people have by living within the tribal context or within the cultural perspective of the Indian community. These also are not inherent in the tribal community but could be short-term context. American Indian people who live in their community and access an Indian clinic generally have relatives who work within the clinic. There is pervasive joking in the Indian community about the lack of confidentiality within Indian clinics because the amount of family that works there. Within the Indian community family includes extended family and the Indian-way family. The term “snagging” is also a term that one might not understand
the meaning of unless the person lived, worked or participated in the community. Snagging is used from a contemporary basis as picking up a “snag” and having a one-night stand.

Frequency distributions were run on each of the four factors and the Total Scores of the Cultural Strategies Survey. Respondents on the Traditional Ways factor showed a wide distribution, or bell-shaped curve, of responses relating to the cultural concepts. The Personal Beliefs distribution showed that the majority of respondents strongly supported the correct knowledge in their beliefs about HIV/AIDS. For the Science-Based Beliefs factor, the distribution also showed most respondents were knowledgeable about HIV risks. The respondents were also knowledgeable on the statements specific to Tribal Context. The Total Score showed a wide range with a bell-shaped distribution.

Analysis of variance (ANOVA) was used to determine if there were significant interactions between acculturation and either gender or sexual orientation for each of the four factors as well as the total score of the Cultural Strategies Survey. The first analysis tested for interactions within gender and acculturation. Gender had two levels: male and female. Acculturation had two groups: zero to 5 or less traditional and 6 to 10 which reflected more traditional. There was no significant interaction between gender and orientation for any of the Cultural
Strategies Survey scores.

The second analysis tested for interactions between sexual orientation and acculturation. Sexual orientation had three levels: heterosexual, homosexual, and Two-Spirit. There was a significant interaction for Personal Beliefs with sexual orientation and acculturation. In order to compare the levels, a $t$-test showed the interaction was within the homosexual group. The homosexual group with a lower degree of acculturation agreed more strongly on the personal belief items than the group that had a higher degree of traditional values.

The preferred learning strategies of the respondents were assessed through ATLAS. Chi-square was used to compare the responses of the participants to the norms of ATLAS. There were fewer participants who identified as Navigators than the general population norms. There was no difference in the subgroups of ATLAS. An ANOVA was also ran to examine the relationship of the scores on the Cultural Strategies Survey to ATLAS. A significant difference of the American Indian Cultural Strategies scores by ATLAS was found for Traditional Ways.

The findings were taken to the gatekeepers, and the gatekeepers were asked to discuss their implications and meaning for the tribal community. The ideas and several direct quotations from the gatekeepers are integrated into the conclusions for this study.

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American Indians in Oklahoma

Women should be a primary target for HIV prevention.

With the increase in cases of HIV infection in women, including American Indian women, reaching Indian women with prevention education should be a vital part of outreach efforts. The number of women who responded in this study is typical of the role and involvement of American Indian women. In the American Indian community, women’s roles are very important. Because of this the gatekeepers believed that it would be natural for a higher number of females to participate in this project. In addition to their involvement in the community, females also may have been more comfortable completing the survey. According to Don Little, gatekeeper and a community activist, “It is harder to approach men with a survey. Women are also more often involved in the people field, serving in social services, nursing, and community health so they are more comfortable participating.”

Women continue to play an important role, formal or informal, in their community. Like most women, American Indian women want to keep their families safe and healthy. Connecting the information to the benefit of the family and the community can provide a more holistic approach to prevention. Integrating HIV education into existing programs at organizations, churches, tribes, women’s groups, and the community where women are involved provides a way to
disseminate information in the community. Research in women’s learning show relationships or connections are an important element and that women prefer a more affective manner of learning (Jordan, 1997). Although there are national programs specific to other women of color, there are not any specific to American Indian women. Training American Indian women to become peer-leaders could provide a woman-to-woman approach. An American Indian curriculum designed for women and by women would be one method to create a community of educators and learners. Women’s discussion groups could build relationships and provide an avenue to share vital information. Women need to be a priority within the American Indian community.

Generally people think of only two genders; however, there are diverse gender roles in many cultures. In the HIV field, locally and nationally, there are prevention efforts being focused on gay and Two-Spirit people in American Indian communities. In Oklahoma, there are programs that provide support groups for Two-Spirit people to provide cultural information and HIV education. The gatekeepers felt it was important to acknowledge the one person who identified in a traditional perspective as both male/female.

This also leads to a discussion of sexual orientation.

Sexual orientation has always been at the forefront in HIV prevention. The estimated number of the gay and lesbian population in the United States is between 5% and 10% for
people over 18 years of age (Gates, 2001). This study had 11.89% participants who identified as homosexual (gay) or Two-Spirit which is the expected number. The gatekeepers thought this was a good response rate because gay and lesbian American Indians are often invisible and hard to reach. Because of distrust and fear, trust and respect are important in working within the gay, lesbian and Two-Spirit community. There were some other participants who did not answer the sexual orientation question. There may have been some people who were uncomfortable with the question and did not answer, or they may not know have known what the term “Two-Spirit” meant. In the American Indian community, there is a blanket of invisibility about gay and lesbian people, which increases discrimination, stigma, and fear which ultimately increase risk factors. Education needs to be incorporated for American Indian community organizations and tribes about sexual orientation to decrease discrimination.

In general, the American Indian population is a relatively young population with 28% under the age of 15, and almost half of the population is between the ages of 15 and 44 (U. S. Census, 2000). The most affected by this disease are between the ages 15 and 44 (Centers for Disease Control, 2002). Because the American Indian population mirrors the range of age most affected by HIV/AIDS in the general population, education is important in reaching this group. With a relatively young American Indian population,
there are high alcohol and drug use, high childbirth rates, and high numbers of sexually transmitted infections (HeavyRunner & Marshall, 2003). All are risk factors for HIV/AIDS. Education is vital for the Indian community because the age range of those most affected are the future of the Indian community. American Indian community organizations and tribes need to realize that HIV is not a stand-alone disease. It is related to many of the social problems in the American Indian community and education should be integrated into existing drug, alcohol, youth prevention, social services, as well as other community programs.

There is not a consensus on the importance and support of using culture in HIV/AIDS prevention for American Indians in Oklahoma.

The loss of a cultural connection has many ramifications. As generations pass, there will be a continued loss of culture. Tribes should be alarmed. Loss of a cultural connection can also decrease self-esteem and identity for some people. From a health perspective, there can be long-term effects. According to John Hawk Cocke', gatekeeper, many of the social ills that relate to American Indians are interrelated. “Many American Indian people have lost their culture and have a lack of connection to their community. Then, they turn to alcohol and drugs because of lack of self-esteem and identity.” That lack of culture and connection can be seen in the low level of acculturation for
many of the participants found in this study. The
gatekeepers agreed that the variance in acculturation
reflects the lack of knowledge of traditions and culture in
Oklahoma.

Cultural Strategies Survey

HIV prevention is not just about knowledge, attitudes,
and beliefs.

HIV prevention strategies in the American Indian
community include Traditional Ways, Personal
Beliefs, Science-Based Beliefs, and Tribal
Context.

For American Indian people, it is not just the
knowledge, attitudes, and beliefs about HIV/AIDS. There are
many variables that are important in an individual’s
perception of this disease. The factor analysis of the
Cultural Strategies Survey indicated that these concepts
combine into four separate factors for American Indian
people: Traditional Ways, Personal Beliefs, Science-Based
Beliefs, and Tribal Context. The standard conceptualization
of how to approach the topic of HIV prevention may not be
the same as the learner’s perspective of the disease.

Factor 1: Traditional Ways

Although the two factors of Traditional Ways and Tribal
Context were similarly named, they are very different.
Traditional Ways is not the same as culture, which is a much
broader concept. Traditional ways are long-term,
established, and rooted in culture and tradition. They tend
be a more traditional way of doing things. They are the
innate traditional ways in which tribal people operate.

“"I believe there is such a thing as Indian sensibility”, T. C. Cannon, a Caddo-Kiowa, once explained. “This has to do with the idea of a collective history. It’s reflected in your upbringing and the remarks that you hear every day from birth and the kind of behavior and emotion that you see around you. It’s probably true of any national or racial group that’s sort of inbred.” (Strickland, 1980, p. 116).

For American Indians education has to include more than knowledge, attitudes, and beliefs. From an educational standpoint, traditional ways could provide ways to teach HIV which incorporate traditional beliefs and ways of learning that include stories and legends, the concept of the Circle of Life, and spirituality. The basis of mistrust felt by some American Indians also has implications based on the educator or the way the message is presented. Often educators may try to neutralize or negate comments that participants make that reflect government involvement in either starting HIV or in not providing the cure for people of color. American Indians who have been raised in a more traditional environment know the history and have heard the stories about the government and the dominant society. Recently, the researcher was talking with a group of young Indian adults, and the majority believed that the government has a cure for AIDS but that it is not letting people know in order to get rid of the poor people of color. The distrust in some tribal communities is no different for many African Americans who distrust the government because of
such experiences as the Tuskegee experiment or other historical legacies. Their beliefs need to be at least respected and understood. For some American Indians, there is also a higher trust level if the educator or facilitator is American Indian. Educators who teach from an American Indian cultural perspective should be American Indian and understand the culture, or they should co-teach with an American Indian who can facilitate the cultural elements.

Oral tradition has always been important in the American Indian community in providing education to the community. Often not thought of as a tool for education, stories can bring to life experiences and models of behavior. HIV is not easy to talk about because it involves discussing sexual risk behaviors and drug and alcohol abuse. Educators need to realize that for American Indians, alcohol is also a sensitive subject. People need to feel safe in order to participate in discussion. Talking circles can provide a safe and traditional place for discussion.

Many prevention programs are based on theoretical models which are not based on “wellness” but are generally based on “disease prevention” (Gathering Our Wisdom II, 2003, p. 13). In other words, people are encouraged or taught to not engage in risky behaviors. This does not fit within American Indian culture. Many of the central values to Native Americans emphasize wellness, physical and emotional health, and spirituality. The Circle of Life is
beneficial as an education tool in prevention because it is the basis for a holistic approach to health. It is the belief that health is related to a balance of the physical, emotional, spiritual, and mental. A holistic philosophy means working within the whole perspective and not just the parts. From a prevention perspective, explaining to a female that making healthier and safer choices will allow her to care for her family and to live longer in order to be able to teach her children and grandchildren is a holistic approach. This places information in a context of community and family which is a strong value for most Indian women.

Spirituality for American Indian people may take many forms. According to one gatekeeper, you have “your pow-wow people and your church people”. American Indians may be Christian, Catholic, or members of Native American Church. They may participate in ceremonial practices as a basis of their spirituality. There are some cultural ceremonies that involve the sharing of blood. However, because it is spiritual and a traditional way of living, traditional people are more likely to believe that a greater power or the Creator will protect them from harm during these ceremonies. For American Indian educators who have a cultural background, this is a delicate line to walk between culture and prevention. At one of the talking circles, two of the gatekeepers in this study disagreed about whether Indian people were protected by the Creator or whether they
could be at risk during the ceremony. For educators who do not understand culture, it is difficult to understand the power and strength of spirituality in a person’s life. From an educational perspective, having a basis of cultural understanding and being respectful are keys when working within the ceremonial perspective. It is often considered disrespectful to question ceremonial grounds keepers about practices. For American Indians, it is more than just providing knowledge, attitudes, and beliefs. Cultural tools can be important to use as the tool for providing education for some American Indians.

Factor 2: Personal Beliefs

A person’s beliefs about HIV may vary greatly. In the American Indian community, beliefs about culture and cultural ways of doing things also may differ. A person’s beliefs and attitudes may stem from experiences that can be positive or negative. Educators working within the American Indian community should have a good understanding of the complexity of community issues, historical legacy, and cultural ways of doing.

Factor 3: Science-Based Beliefs

People may hold certain beliefs and attitudes regardless of the science of HIV. Although this factor dealt with knowledge-based items, culture still can override science. Educators need to be aware that even though there are scientific messages from the Centers for Disease Control
about reducing risk, culture can have an effect on how people receive the information.

The issue of alcohol fell in this factor. Although, not a direct transmission route, alcohol may be a link for HIV transmission. From a cultural perspective, alcohol is considered an effect of historical trauma, and it is destroying many American Indian lives. Consequently, women are the ones who deal with the aftermath of alcoholism in their partners, families, children, extended families, and communities. Women are considered the care givers in the community. Don Little, gatekeeper who works in the Western part of the state, said, “Men folk still carry on some of the old teaching that women wear the pants and worry about the survival of their families when it comes to lots of areas, including health.” According to Valerie Eschiti, one of the gatekeepers, “Men have a tendency to feel they can handle their alcohol.” Then, the women pick up the pieces. There may be a link between HIV and alcohol, but the focus is not on that connection.

Prevention educators must realize that for some cultural groups, science may not have the credibility to ensure that someone believes the message. Although it may be stated that HIV is only spread in certain ways, the history of a people can have long-term effects. Educators must consider the implications of history for people of color and have strategies to work within that framework.
For some American Indians who know history, the impact of HIV may bring about a very different perception about this disease. “We knew about biological terrorism long before September 11th” was a comment from one of the gatekeepers during a discussion about smallpox. It is estimated “that two-thirds of American Indian populations were wiped out between 1500 and 1900” by smallpox (Weaver, 1998, p. 205), and the government was more interested in counting the dead than in saving Indian people (Broken Promises, 2004). “The story needs to be told how HIV can affect our communities, like smallpox once did,” said Glen Arnold, gatekeeper from the Tulsa community. The contemporary cultural connection is that entire villages have been wiped out in Africa by HIV/AIDS. Lack of knowledge, personal and cultural beliefs about the virus, and mistrust have played a role in their decimation. Without effective education and because of the risk factors, small tribes or communities could be devastated.

Factor 4: Tribal Context

Tribal Context differs from Traditional Ways because it is more contextual. Tribal Context could be short term and/or immediate, or it could change based on community changes. This also involves information that is relevant when a person is connected to and understands the American Indian community. Being comfortable going to a local Indian clinic and using the term snagging are both very connected
to an insiders view of tribal context. For educators, it is important to realize that different vocabularies may exist. There may also be a different receptiveness if someone is not aware of it or if the terms are used in the wrong way or in opposition to the community norms.

All four factors showed how culture, beliefs, facts, and tribal context often cut across all lines. Each have implications for educators. These all are related to American Indians in Oklahoma.

**Traditional Ways**

Using cultural strategies for teaching HIV/AIDS to American Indians in Oklahoma is stereotypical and does not apply to all.

In Oklahoma, there was not a consensus that supported using cultural strategies in HIV prevention. Understanding one’s cultural ways can be tied to the acculturation level. Oklahoma is different from states that have reservations like Arizona or New Mexico because it does not have true reservations in the way most people think of as a reservation. Therefore, American Indians in Oklahoma do not live in a bounded reservation-community. While culture may be useful for about half of the group, it may not be a mechanism to spur additional knowledge about HIV for others.

Tribes maintain that culture is important for survival. If culture is the answer to preserving history, language, and ceremonies, then tribes need to be concerned about their future from a cultural as well as a health perspective. The
history of assimilation in Oklahoma can continue to have long-term effects. As the more traditional people pass on, those inherent ways of thinking will also pass away. The future of tribes is the younger generation. Tribes should consider ways to integrate more holistic ways in healthcare settings. Tribes and American Indian organizations need to provide programs to mentor future leadership and to incorporate cultural education in the schools, colleges, and tribal programs.

From a health education perspective, educators working with American Indian people should not make assumptions about American Indians and cultural beliefs. In Oklahoma, it is difficult to tell who is American Indian and who is not. Many people are not identifiably American Indian. A person may look like or be a full-blood American Indian; however, that person may not have an understanding of American Indian traditions.

American Indian educators may be biased toward using culture in HIV education for all American Indians. Both the American Indian and HIV prevention literature promote using cultural strategies when working within the American Indian community. In order to create that interest or motivation to learn about HIV, it has to be deemed relevant or important to the learners. Often, people believe that HIV will not affect them or their families. The main principle of andragogy is that “adults need to know why they need to
learn something before undertaking to learn it” (Knowles, Holton, & Swanson, 1998, p. 149). HIV educators have a responsibility to expand beyond the basic facts of HIV and increase motivation. For educators who have been in the field a long time, presenting HIV education to community groups is often a repetitive motion of the same basic information being tossed to the audience. Adults learn best when the information is real and presented in real-life context (p. 152). HIV is a real-life problem, regardless of culture. However, people tend to isolate it and not see the connection or link that can tie it to themselves or families. Connecting the education to the health and wellness of the family makes it more personally relevant. Creating links between high teen pregnancy, drug and alcohol abuse, increased rates of sexually transmitted infections, and HIV can make the information more relevant to the community where they live.

Education also involves the training of educators. In Oklahoma, there is not a mandate that people have to go through training to become basic HIV educators. However, there are training options through the Association of American Indian Physicians, Oklahoma State Health Department, and other consultant trainers. People who attend the training to become educators are taught the basic facts of HIV, the social issues of the disease, and how to be non-judgmental in presenting the information. HIV
education should be about motivation which ultimately can lead to social and behavior change. It is more than the facts. Trainers should also be taught skills on how to work with adults. HIV is a topic that some people do not want to learn about, yet they are mandated to become an educator for their job. Motivation is a challenging construct, which makes very unstable (Wlodkowski, 1998). When working with adults, motivation can change in a second. In general, motivation can change because of feeling ill, a room being too small, personal responsibilities, or it being a boring class (Wlodkowski, 1998).

Characteristics of instructors who are motivated include their expertise, empathy, enthusiasm, and clarity (Wlodowski, 1998, p. 150). Expertise is more than facts; it is knowing how to present in a way that is beneficial to the learners. Understanding the audience is also crucial. Educators must understand where the learner comes from—their needs, expectations, experience, as well as their perspectives. Educators need to also have a level of energy and emotion. This characteristic is even more important for long-time educators, who constantly need to enthuse their commitment of energy and creativity. Educators should use language that is easy to understand. Assessing comprehension level is important so that information can be understood and followed by most learners (p. 150). Education is more than facts—an individual’s personal
beliefs can affect the way participants receive the information.

**Personal Beliefs**

Personal beliefs are a key mechanism in learning and supports the foundation of adult learning literature.

Personal beliefs can strongly affect how people react to HIV/AIDS information and can be used as a mechanism for HIV prevention. Education does not necessarily mean it will change someone’s personal beliefs. From an educational perspective these beliefs must be honored. Whether it is a myth about HIV, the distrust of the government, or how an educational program should be conducted, these beliefs can affect the learner’s ability to process the information.

The participants in this study had a strong base of correct knowledge and did not believe the myths about HIV. For many people, HIV is personal. The experience of emotion is not always rational. HIV education is full of images, emotions, and personal implications. Sometimes, emotional experiences “are shaped by a strong inner dynamics” and “give voice to our fundamental sense of irrationality” (Dirkx, 2001, p. 65). Learners can experience very personal meanings within any learning context (p. 66).

In most training/educational settings, personal feelings and emotions are considered “baggage” (Dirkx, 2001, p. 67). From an adult education perspective, the emphasis is on utilizing people’s experiences in education. People
come to the learning environment with stories and experiences that help make learning a more memorable event. Learning can be “a process of making a new or revised interpretation of the meaning of an experience” (Mezirow, 1999, p. 1). Learners also can get confined in their own experiences, biases, and attitudes. Educators often negate, neutralize, or try to change a person’s beliefs and values. It is important for educators to use people’s beliefs and thoughts in the educational process. Personal beliefs and values can be analyzed through critical reflection. Brookfield (1990) identifies three phases for this process:

(1) identifying the assumptions that underlie our thoughts and actions; (2) scrutinizing the accuracy and validity of these in terms of how they connect to, or are discrepant with our experience; and, (3) reconstituting these assumptions to make them more inclusive and integrative. (p. 177)

Educators need more training in how to help people filter and use their experiences for individual growth. Experiences can provide a connection between the information and life.

Science-Based Beliefs

Knowing the facts about HIV does not equal using the facts.

The respondents had a good understanding of knowledge about the transmission factors and the risk of HIV in the American Indian community. However, knowing the facts about
a disease does not constitute a change in behavior. If that were the case, then people who smoke would quit, and people who drink excessively would stop. John Hawk Cocke' and Glen Arnold, gatekeepers, agreed that knowing the facts when one is sober changes if an individual is drinking.

HIV deals with sexual and social behaviors which are very personal aspects of one’s life. Moving to the next level of applying the information to one’s life is a hard level to achieve for some. From an education perspective, Bloom’s Taxonomy states that there are six categories: (a) knowing the facts; (b) grasping the meaning; (c) applying the information or translating the knowledge into a new context; (d) analyzing or connecting the information; (e) synthesis or putting together old thoughts to create new ones; and (f) finally, evaluation (Anderson, Krathwohl, & Airasian, et al, 2001). Although one-time or short-term HIV education will continue, it does not generally promote long-term behavior change. Educators who provide short-term HIV education need to provide information in a way that will motivate participants to want to move past the knowledge phase.

Nationally, there is a new shift in prevention education. Funding for HIV programs is being moved to programs that have long-term effects that show changes in behavior. These are often for people who are HIV-positive, people who are at increased risk for HIV-infection like
injection drug users, or populations that have increased rates like African-American women and gay men. One such model for individual intervention that is used is the Stages of Change, which provides a health prevention model. This five-step model states that for most people, behavior change occurs gradually (Zimmerman, Olsen, & Bosworth, 2000, ¶ 4). Most people start at pre-contemplation, where they may be in denial or it does not apply to them. Next comes contemplation where they may consider the loss or the barriers and preparation in which they make begin with small changes. The fourth step is action which is the actual demonstration of a change, and last is maintenance and/or relapse prevention, where people may relapse and recycle through the stages (¶ 4).

Prevention educators must also realize that for some cultural groups, science may not have the credibility to ensure that someone believes the message. Although it may be stated that HIV is only spread in certain ways, the history of a people can have long-term effects. Beliefs about HIV can be filtered by a person’s history. That has been evidenced by the distrust of the African-American community and HIV education.

Training for educators needs to provide education on models that help the educators understand that prevention has many levels for their learners. It is also important for the educator to build a relationship of trust with the
participants. That is difficult to achieve in a one- or two-session educational program. Learners bring a complexity of issues to the learning environment, and educators need to always remember to be learner-centered. Education that does not stimulate new thinking, changes in behavior, or new thought processes in the learner is empty education.

**Tribal Context**

The cultural context that affect American Indians in their lives is important for HIV prevention education.

The Cultural Context involves information that is relevant when a person is connected to and understands the American Indian community. The comfort level that American Indian people feel going to their local Indian clinic was one item that falls within a Tribal Context. For American Indians who utilize a local Indian clinic, there is an understanding that there is a lack of confidentiality because of family and extended family who work there. Those who do not use an Indian clinic or frequent American Indian community events may not have an understanding of the issues which surround Indian Health Services.

From the standpoint of teaching or facilitating, there is a direct relationship between the availability for HIV testing or treatment and a feeling of safety for some American Indians. Educators must have an understanding of this implication and be prepared to acknowledge the concern,
provide alternative resources, and provide an opportunity for sharing about experiences and dialogue about solutions. Indian people may laugh and make jokes about Indian clinics, but that does not negate the seriousness of the issue. Because of the fear that information would spread from the clinic to the community, Indian people may not go to the local clinic for HIV-testing or treatment if that is their only accessible clinic.

The other item related to the risk of snagging. Snagging, as used today by American Indian HIV educators, is a risk factor of HIV transmission when it is defined as having sex with someone that the person does not know well. For American Indian people who live within the community and understand the Indian lingo, it is used often in conversation, stories, and jokes. In the Indian community, there are comments and jokes about snagging at the pow wow, the Indian rodeo, or at a 49. A 49 is a dance and/or party often held after a pow-wow and after the non-Indians leave. Drinking and snagging sometimes occurs. Because of age or their lack of connection to the Indian community, the term may not be understood or even have the same meaning by some American Indians who do not have a connection to the tribal community. When using the term in written material or in presentations, educators should always define or explain what the term means. This ensures that everyone will have the same level of knowledge and understanding. Educators
need to have an understanding of the language and issues within any given community to ensure that their message is accepted and understood. Educators who work within the American Indian community need to be aware that in a tribal community there are issues and concepts that may have a different meaning in the context of a person’s daily life and they may change periodically.

Sexual Orientation and Acculturation
Homosexuals are highly affected personally by HIV/AIDS.

The gay community has been the most adversely affected since the beginning of this pandemic. Stigma, discrimination, and loss of family, friends, jobs have had a major impact on this community over the years. This disease is personal to homosexual people. When one is personally affected, then personal beliefs can override the cultural elements.

American Indian people who are homosexual often have had no place to go in their own community, so they turned to the White gay community. For years before any other community, the gay community knew about HIV because its members were the ones dying. HIV/AIDS has been and is a very personal disease. Additionally, American Indians who who are less traditional in their culture are able to get to the correct information about HIV. Perhaps personal beliefs drive them more strongly than traditional values toward having the correct information.
From a teaching perspective, this would suggest that personal values clarification, personal status recognition, and personal assessment might be more effective teaching tools than cultural tools for people who identify as homosexuals. This type of education would require commitment from organizations to sustain a longer-term intervention to work on the many issues that homosexual people contend with in their daily lives.

Because men who have sex with men are considered a top priority in HIV prevention programs, there are continued efforts to support men who have sex with men with effective interventions. Even though there is a new shift in HIV prevention from the Centers for Disease Control focuses on using evidence-based interventions for gay men, there were no interventions created specifically for American Indian men.

Educational strategies for gay men should include first and foremost an educator who is a peer who understands the values and culture of the population. Building self-esteem is an effective method of response for health promotion (Effective Sexual Health Promotion, 2003). There are a number of key components which are important in the process. Consistency of the program and the educator are important to build trust. For learners, especially homosexual men, to be comfortable and to affect change, developing a trust between the educator and learner is essential. According to John
Hawk Cocke’, gatekeeper, “Education for any American Indian adult, whether they are traditional or not, needs to have a level of trust and consistency of the educator. Talking about HIV, your behaviors, your experiences, and sexuality will not happen quickly.”

Educators should also use both formal and informal outreach and promote social opportunities to create community. Increasing relationship and negotiation skills are key in responsible sexual health which ultimately helps participants apply their knowledge. Behavior change is not easy. It has to be desirable to the person and must address the person’s needs and feelings, rather than the provider’s needs.

In reality, there is another very crucial level which needs to be addressed. Gay American Indian people, who are more traditional and live within the community, are hindered by lack of HIV education in part because of fear and stigma. Programs cannot be provided in many arenas because it is not openly discussed. Discussing Two-Spirit or homosexuality is almost taboo in most Indian communities, organizations, health clinics, churches, and tribes. Discussion needs to occur on all levels. Sexuality is a “source of significant learning and experience for adults” (Edwards & Brooks, 1999, p. 55). Dialogue and discussion is critical in developing that understanding (p. 55). Education needs to be provided for health and social service organizations on
sexual orientation in general as well as the history of Two-Spirit people and gender in the Indian community. Many tribes do not know the history of Two-Spirit people or the important roles they had in their communities. Opening doors for dialogue could help decrease the stigma and discrimination for people who identify as Two-Spirit, homosexual, or gay in the American Indian community.

**Culture and Learning**

Culture provides the mechanism to talk about HIV for people who have high knowledge of HIV.

Culture can be integrated into HIV prevention programs in order to increase the knowledge level for some.

For some American Indians, culture is not the key to learning.

Three specific groups exist among American Indians in Oklahoma in relationship to cultural issues and HIV/AIDS prevention training. One group is very knowledgeable about the facts and myths about HIV; yet, they are not comfortable talking about it with their family. Another group has a lower knowledge level of HIV/AIDS and is supportive of the use of culture in training. For the third group, culture is not an important vehicle for training about HIV/AIDS prevention.

In prevention education, educators hope that when people have the facts, they will not only use them for their benefit but will also share them with family and friends. Developing a process to discuss and share information is
important for some people. Yet, this is a disease that many people are uncomfortable talking about. The group that was knowledgeable about HIV/AIDS and supportive of using culture also was not comfortable talking to their family about HIV. This group needs a method to help them in gaining a comfort level in understanding their concerns and issues about HIV. Using the cultural tool of a talking circle could help establish a safe and comfortable place to talk about the disease. It provides a delivery mechanism. In a learning environment, using this process of dialogue, participants can share their fears and concerns. They can also hear how others handle discussing this topic with family and friends. The talking circle is not unique to American Indian culture.

Talking circles allow each participant an opportunity to talk or not talk as they choose. It also allows listening and learning from others experiences. Freire’s (1970) culture circles provided the mechanism for a group to dialogue and communicate about their experiences. The “relevancy of what is being learned and why it’s being learned is readily apparent” (Cajete, 1994, p. 217). That concept is considered “an indigenous response to learning” (p. 217). It promotes discussion about what is important to the individuals. It also helps build a relationships among Indigenous people (p. 217). Learning in group settings can also provide learners a way to interact with others on specific issues or realize that others may have the same
challenges (Smith, 1976).

Cultural strategies are easy to integrate into HIV prevention programs for participants in the second group who may need more knowledge-based information but who are supportive of traditional culture. Culturally-based adult education incorporates a variety of strategies. Experiential learning can provide a way to build skills through practice (Amstutz, 1999). In HIV education, participants are sometimes asked to perform tasks, such as a condom or a needle cleaning demonstration. However, for people who tend to learn through a more reflective process, that task may be uncomfortable if they have not had time to observe the task. Adults need to be respected and allowed to participate at their comfort level.

Activities such as creating stories or legends, role-playing, or case studies can provide a collaborative process. Cooperative learning is also beneficial because it can support “interdependence among learners, shared leadership skills, and provides tools to help groups process their progress” (Amstutz, 1999, p. 28). Providing groups of participants the opportunity to tell a story or create contemporary stories can also provide outlets for discussion and sharing of experiences. Traditional legends when appropriate is a way to increase knowledge about behavior and values. At the same time, the legends can increase the level of cultural understanding or support someone’s
culture. Through stories, “meaning is constructed, understood, and expressed in story form” (Rossiter, 1999, p. 78).

Incorporating the Circle of Life to discuss how HIV affects not only the physical but also the mental, emotional, and spiritual aspects of one’s life can be useful in teaching facts as well as supporting culture. Additionally, the Circle concept can be used to discuss and teach the time line of the disease, or the beginning of infection until an AIDS diagnosis, which is generally taught from a linear perspective. Talking circles can also be beneficial for groups with lower knowledge and culture because they provide a method to teach a cultural strategy and provide a place to increase knowledge from others through discussion.

For the third group in this study, culture is not an important vehicle for connecting with HIV prevention education. For this group, any general HIV curriculum will work. However, for these learners as with all adult learners, HIV/AIDS educators should be trained in adult learning principles. Often, trainers and/or educators allow the curriculum to be their central focus. A curriculum should be considered the hub of a circle. The participants should be the spokes that make the educational process work. It is the participant’s experiences, history, and life path which initiate the process where adults in the class gain
the knowledge and information they need. When participants share their life experiences, it makes possible a participatory and experiential learning experience. The experiences they bring to the table are full of potential learning opportunities. In basic adult HIV education, these opportunities are lost because educators often use the lecture method. The role of the educator should be to facilitate discussion and to honor each individual’s experience. This can encourage people to come to new insights about themselves, their situations, and their problems and to stimulate thinking.

Learning in Red

The tribal community has a large group that learns best with educational strategies that are interactive, experiential, relational, and fun.

Learning in red is used here as an analogy to using traditional ways of learning within the American Indian community. Many traditional ways of learning are similar to the learning strategies of Navigators, Problem Solvers, and Engagers, that can be identified by using ATLAS.

There were fewer Navigators in the American Indian population than in the general population. Navigators are generally very structured and plan their work schedules. They need to know the schedule and what is expected of them. Their planning is based on a schedule of deadlines or the end result (Conti & Kolody, 1999, p. 9). This is a very
linear perspective.

This linear approach is in direct contrast to the traditional way of learning for American Indians. However, it was the approach used in educational programs forced upon Indian people such as in the boarding schools and in the programs brought in by the churches. The “English-American process was an intense method of rote memorization and memorizing facts and doctrines” (Cajete, 1994, p.12). Processing from a linear perspective to an end result is vastly different from the traditional learning that views a more relational and holistic approach. American Indian learning has historically been experiential, informal, and participatory and used relationships and stories (Cajete, 1994). American Indians also have a “tendency toward (a) a more holistic and global style of organizing information, (b) a visual style of mentally representing information in thinking, (c) a preference for a more reflective style in processing information, and (d) a preference for a collaborative approach to task completion” (Hilberg & Tharp, 2002, ¶ 7).

Problem Solvers, in general, like to use human resources, and they are storytellers (Conti & Kolody, 2004, p. 186). Utilizing human resources has always been a part of learning by American Indian people. American Indian education has been learning while doing (Cajete, 1994, p. 12). The American Indian culture is a highly oral culture
whereby stories, songs, and listening are important aspects of culture. Learning often involves learners coming to their own conclusion through a process of dialogue, discussion, and reflection. Traditional storytelling provided a model for behavior. Programs that provide interaction and discussion are essential in the learning atmosphere for people who are Problem Solvers. Conducting discussions, utilizing personal experiences, identifying resources, and providing opportunity to generate alternatives are all beneficial strategies in HIV prevention.

Engagers love to learn, to have fun, and to be actively engaged in the learning process. The commonalities and the relationships between people are important to Engagers. In prevention education, cultivating relationships helps provide a foundation of trust. Social support has also been identified as beneficial in health and prevention (Hurdle, 2001). People who are Engagers or Problem Solvers may support an inherent way of doing and learning. Using stories, incorporating problem solving, and understanding that the story might be more important than the outcome are ways to incorporate adult learning principles. Group discussions, talking circles, and activities which are fun and interactive can be useful in creating a comfortable learning environment. This would apply regardless of acculturation level. Using legends or having groups create
their own stories which relate to prevention are ways to integrate learning within a cooperative setting. In the practice of adult education case studies, role playing and other story-based techniques can be utilized (Rossiter, 2002). They can create a sense of personal power to problem solving in a non-threatening and holistic way. AIDS education has the same goal of empowerment and problem solving as the use of legends and stories in the traditional culture.

American Indian educators, who are working with a group that is supportive of culture, can benefit by using appropriate traditional stories to teach about HIV/AIDS. Stories and legends are often funny and humorous and include tricksters. Because Engagers like to learn by having fun and by group interaction, stories can be role-played. Having fun, jokes, and humor are all integral in traditional ways of learning. Problem Solvers would also like the symbolic nature of the stories.

Utilizing adult learning principles provide a flexible model to incorporate strategies for all learners. Navigators like facts and HIV/AIDS education has many facts that participants need to learn. Many of the strategies applicable to Problem Solvers and Engagers will apply to Navigators. Navigators like to use human resources, dialogue, and discussion when with an expert (Conti & Kolody, 1999). Navigators also like to network with
professionals and experts (p. 10). HIV/AIDS educators could bring in a guest speaker who lives with HIV/AIDS or another professional with a specific expertise in HIV/AIDS. Providing resource information would also be important so they can locate more information.

In adult education, it is important for educators to utilize the strength of their participants. Cooperation allows individuals to learn in their own way. True learning occurs when people are respected and accepted for who they are (Garrett & Garrett, 1994). Using ATLAS in training sessions would help provide the educator a way of quickly identifying the learning strategies of the participants in the session.

**Future Research**

Since three distinct groups exist in relationship to HIV prevention training, trainers need a quick and efficient way to identify those in each group. To meet this need, an ATLAS-type instrument based on the cluster and discriminant analysis of this study could be developed to help educators identify the level of culture that would be important for effective facilitation for each participant. This research could consist of using the information from the discriminant analyses to develop the sentence stems and options for items similar to those in ATLAS. The wording of these items could be field-tested to develop their accuracy and reliability. Once developed, this instrument could be used to identify
people in 30-seconds and determine if they have a high knowledge/high culture, if they are a lower knowledge/lower culture, or if they have no cultural preference for learning. For training that is scheduled in advance, trainers could be scheduled based on the needs of the learner. For immediate application, it would be a quick way to identify the best strategies to use in education.

Further studies could be conducted to determine the applicability of the findings of this study with other cultural communities. Since Oklahoma does not have a reservation system, further studies could be conducted in states which have true reservations such as Arizona, the Dakotas, or Montana. Because the respondents in this study were knowledgeable on basic facts, future research could also be conducted to find out where American Indians in Oklahoma have gained their knowledge. There are also strong similarities between the African American, Hispanic, and American Indian communities. Future studies could include making the statements culturally specific to these communities to see which cultural components are important in each of these communities.

Connecting Indian Education and Adult Learning

According to Dr. Beatrice Medicine, Lakota, “We Native Americans are varied hues in a bronzed and battered Native world and present an uneven view of tribal traditions” (Mankiller, 2004, p. x). Oklahoma may be the land of the
red people, yet it is difficult to tell who is and who is not American Indian or who does or does not understand their culture. There is an expectation that all American Indians should know their culture and/or should support their culture. Yet, culture and race are not synonymous. In HIV prevention, there may be a bias toward using cultural strategies in prevention with American Indians. However, using culture is not an important tool for many American Indians in Oklahoma and knowing who needs or wants cultural tools in prevention education is important in order to provide the most valuable learning environment for people.

The process of training HIV/AIDS educators should include a core component on adult education principles. Learning how to work with adults is as important as behavior change theory and basic HIV knowledge. HIV educators need to know more than the technical facts about HIV. The missing connection in HIV prevention is adult learning principles. Education is not neutral (Freire, 1970). Neither is HIV. This disease is one that needs a focus on empowerment and transformation. Because of the many issues surrounding the disease, HIV education is also about social change, social justice, and lifelong learning.

Educators and trainers in the HIV/AIDS field need to become more learner-centered, utilize the experiences of adults, and provide an interactive setting so experiences and dialogue can happen. Lifelong learning was always
inherent in traditional education. Education was communal and participatory. Stories provided an opportunity for critical thinking, for reflection, as well as enjoyment. Above all, learning was a key to survival. HIV education is also about survival. The key to reducing the risk of HIV/AIDS for any group is through education that helps people apply the information in the context and the lens in which they view their lives.
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stages of change approach to helping patients change 
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### TRIBAL NATION ENROLLMENT

<table>
<thead>
<tr>
<th>BUREAU OF INDIAN AFFAIRS SOUTHERN PLAINS OFFICE ANADARKO, OK</th>
<th>TOTAL ENROLLMENT</th>
<th>IN-STATE ENROLLMENT</th>
<th>BUREAU OF INDIAN AFFAIRS EASTERN REGION OFFICE MUSKOGEE, OK</th>
<th>TOTAL ENROLLMENT</th>
<th>IN-STATE ENROLLMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Absentee Shawnee Tribe *</td>
<td>2,943</td>
<td>2,269</td>
<td>19. Alabama Quapaw Tribal Town</td>
<td>300</td>
<td>295</td>
</tr>
<tr>
<td>2. Apache Tribe</td>
<td>1,986</td>
<td>1,688</td>
<td>20. Cherokee Nation</td>
<td>232,928</td>
<td>145,367</td>
</tr>
<tr>
<td>3. Caddo Tribe</td>
<td>4,000</td>
<td>2,000</td>
<td>21. Chickasaw Nation</td>
<td>30,975</td>
<td>19,949</td>
</tr>
<tr>
<td>4. Cheyenne-Arapaho Tribes</td>
<td>11,507</td>
<td>7,893</td>
<td>22. Choctaw Nation</td>
<td>150,000</td>
<td>*</td>
</tr>
<tr>
<td>6. Comanche Nation</td>
<td>10,000</td>
<td>7,000</td>
<td>24. Eastern Shawnee Tribe</td>
<td>2,110</td>
<td>666</td>
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<tr>
<td>7. Delaware Nation</td>
<td>1,339</td>
<td>782</td>
<td>25. Kiowa Tribal Town</td>
<td>318</td>
<td>298</td>
</tr>
<tr>
<td>13. Osce-Osagea Tribe</td>
<td>1,500</td>
<td>800</td>
<td>31. Peoria Tribe of Indiana</td>
<td>2,677</td>
<td>743</td>
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<tr>
<td>14. Pawnee Nation of Oklahoma</td>
<td>2,584</td>
<td>1,765</td>
<td>32. Quapaw Tribe of Oklahoma</td>
<td>2,700</td>
<td>1,500</td>
</tr>
<tr>
<td>15. Ponca Nation</td>
<td>2,549</td>
<td>2,000</td>
<td>33. Seminole Nation</td>
<td>12,400</td>
<td>5,800</td>
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<td>17. Tonkawa Tribe</td>
<td>430</td>
<td>365</td>
<td>35. Shawnee Tribe</td>
<td>1,290</td>
<td>582</td>
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<tr>
<td>18. Wichita &amp; Affiliated Tribes</td>
<td>2,205</td>
<td>1,595</td>
<td>36. Thlopthlocco Tribal Town</td>
<td>662</td>
<td>502</td>
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<tr>
<td>19. United Keetoowah Band of Cherokees</td>
<td>8,513</td>
<td>8,493</td>
<td>37. Wyandotte Nation</td>
<td>4,410</td>
<td>1,043</td>
</tr>
<tr>
<td>20. Euchee (Yuchi) Tribe of Indians V</td>
<td>*</td>
<td>*</td>
<td></td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

**TOTAL WESTERN TRIBAL ENROLLMENT:** 85,620 **48,848**

**TOTAL EASTERN TRIBAL ENROLLMENT:** 537,539 **237,236**

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**Oklahoma Indian Affairs Commission**
CULTURAL STRATEGIES OF HIV PREVENTION SURVEY

Are you a tribal member?  □ Yes If so, what tribe? ________________________________________________________________________________
□ No If not, what is your tribal affiliation? ________________________________________________________________________________

Gender: □ Male □ Female Age: __________
I identify myself as: □ Heterosexual □ Homosexual (Gay) □ Two Spirit

Please mark how traditional you are on the scale below. Circle the number that best describes you. For example:
0 = Non-Traditional – I do not participate in Indian ceremonies, do not speak or think in my tribal language, and do not hold traditional values and beliefs.
10 = Traditional – I participate in Indian ceremonies, speak and think in my tribal language, and hold traditional values and beliefs.

<table>
<thead>
<tr>
<th>Non-Traditional</th>
<th>Traditional</th>
</tr>
</thead>
<tbody>
<tr>
<td>0......1......2......3......4......5......6......7......8......9......10</td>
<td></td>
</tr>
</tbody>
</table>

Please read each statement carefully and circle the number to the right that best shows your agreement or disagreement for each statement – Strongly Agree, Agree, Somewhat Agree, Somewhat Disagree, Disagree or Strongly Disagree. Then turn over and complete the Learning Strategies Assessment.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Somewhat Agree</th>
<th>Somewhat Disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I can tell by looking if my partner has AIDS.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2. I can get HIV from sharing a bathroom with someone who has HIV.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3. Snagging would put me at risk.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4. I believe latex condoms are an effective way to protect myself from HIV and other sexually transmitted diseases.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5. If I drink alcohol, I'm more likely to do something that would put me at risk for HIV.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6. I believe HIV/AIDS could wipe out as many Indians as smallpox once did.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7. I would feel comfortable going to my local Indian clinic for a HIV test.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>8. I believe the government isn't doing as much as they could to stop HIV/AIDS.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>9. I believe you shouldn't discuss HIV/AIDS in the Indian community without permission from the elders.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>10. I am uncomfortable talking about HIV/AIDS with my family.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>11. I believe HIV/AIDS is basically a gay disease.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>12. I would rather receive information about HIV/AIDS from another American Indian.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>13. I think the Circle of Life (Medicine Wheel) is a good tool to use in HIV prevention.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>14. An opening ceremony would not be appropriate at a HIV prevention program.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>15. I would feel comfortable discussing HIV/AIDS in a talking circle with other Native Americans.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>16. The Creator protects Native Americans from HIV during ceremonies that include blood (such as Sun Dance or scratching).</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>17. I would pay more attention to HIV prevention if legends or stories were used.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>18. I believe my health is related to the connection between the physical, emotional, mental and spiritual parts of me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

PLEASE TURN OVER TO COMPLETE THE LEARNING STRATEGIES ASSESSMENT. MYTO! Thank you! ♫
Directions: The following questions relate to learning in real-life situations in which you control the learning situation. These are situations that are not in a formal school. Start with Question 1, and check the response that best fits you. Then go to the question to which you are sent. Only answer Question 1 and the other questions to which you are sent. If you are not sent to a question, do not read it, and do not answer it. In order to get the correct results, it is critical that you only answer Question 1 and then either the one or two questions to which you are sent. Do not spend a lot of time on a question. Read it and answer it quickly without looking at the other questions. You should be able to complete this instrument in less than a minute.

1. When considering a new learning activity such as learning a new craft, hobby, or skill for use in my personal life:
   ___ a. I like to identify the best possible resources such as manuals, books, modern information sources, or experts for the learning project.
   ___ b. I usually will not begin the learning activity until I am convinced that I will enjoy it enough to successfully finish it.
   If you checked (a), go to Question 2. If you checked (b), go to Question 5.

2. It is important for me to:
   ___ a. Focus on the end result and then set up a plan with such things as schedules and deadlines for learning it.
   ___ b. Think of a variety of ways of learning the material.
   If you checked (a), go to Question 3. If you checked (b), go to Question 4.

3. I like to:
   ___ a. Involve other people who know about the topic in my learning activity.
   ___ b. Structure the information to be learned to help remind me that I can successfully complete the learning activity.
   You are done.

4. I like to:
   ___ a. Set up a plan for the best way to proceed with a specific learning task.
   ___ b. Check out the resources that I am going to use to make sure that they are the best ones for the learning task.
   You are done.

5. I like to:
   ___ a. Involve other people who know about the topic in my learning activity.
   ___ b. Determine the best way to proceed with a learning task by evaluating the results that I have already obtained during the learning task.
   You are done.
APPENDIX C

CONSENT TO PARTICIPATE IN RESEARCH STUDY
FOR PARTICIPANTS
January, 2004

Aho! I am a Muscogee (Creek) graduate student at Oklahoma State University and working on my dissertation for my doctorate in Adult Education. The title of my dissertation is the Circle of Learning: Cultural Aspects of HIV Prevention in the American Indian Community. The purpose of this study is to describe which culturally specific tools, and strategies are important in developing HIV/AIDS prevention programs for Native American adults living in Oklahoma. Another goal is to assess knowledge, attitudes and beliefs about HIV/AIDS. A third goal is to assess the learning strategies of Native Americans who live in Oklahoma.

I need your help in completing the attached survey. The survey is short and should take 20 minutes or less. The information you can provide will be valuable in looking at the implications of the data to help local organizations in their HIV/AIDS efforts. The research results will be included in a dissertation, articles, and presentations and may be provided to Oklahoma tribes or community organizations that work in HIV/AIDS prevention with Native Americans. Your name will not be associated with your responses for the study in any form. Your name will be excluded from the data used for the research study.

The Oklahoma State University Institutional Review Board (IRB) may review records for research or monitoring purposes. For information on participant rights about this research, please contact the IRB contact person: Dr. Carol Olson, 415 Whitehurst, Stillwater, OK, (405) 744-5700. The project is being conducted by Dannette McIntosh, who may be contacted at (918) 835-8541, as a research project for dissertation completion requirements in the doctoral program in Human Resources and Adult Education program at Oklahoma State University. The advisor for the project is Dr. Gary Conti, who may be contacted at (918) 246-0368.

It is important that you realize that: (1) Your name will not be associated with this research in any way; (2) Your participation is strictly voluntary and you will not be penalized in any way if you choose not to participate; (3) You are free to withdraw your consent to participate in the study at any time; (4) It is not anticipated that you will suffer any risks of discomfort or inconvenience from this participation; (5) The data from this interview will be destroyed within one year of the end of this study.

You will be given an envelope with the survey. Do not put your name on the survey. Please tear off this cover sheet for your information and place the survey in the envelope and seal. Return the envelope to the person who gave it to you.

Mvto! Thank you for your time and help.

Dannette McIntosh, Doctoral Candidate
Muscogee (Creek)
APPENDIX D

CONSENT TO PARTICIPATE IN RESEARCH STUDY
FOR GATEKEEPERS
Circle of Learning: Cultural Aspects of HIV Prevention in the American Indian Community.

Consent to Participate in Research Study

Dear Community Leaders,

Aho! I am a Muscogee (Creek) graduate student at Oklahoma State University and working on my dissertation for my doctorate in Adult Education. The title of my dissertation is the Circle of Learning: Cultural Aspects of HIV Prevention in the American Indian Community. The purpose of this study is to describe which culturally specific tools, and strategies are important in developing HIV/AIDS prevention programs for Native American adults living in Oklahoma. Another goal is to assess knowledge, attitudes and beliefs about HIV/AIDS. A third goal is to assess the learning strategies of Native Americans who live in Oklahoma.

Because you are a community leader, your role is important in the process. After the data is analyzed, I would like for each of you to attend a talking circle so you can review the results of the surveys. This will provide your insight about what the data means. The information you can provide will be valuable in looking at the implications of the data to help local organizations in their HIV/AIDS efforts. The research results will be included in a dissertation, articles, and presentations and may be provided to Oklahoma tribes or community organizations that work in HIV/AIDS prevention with Native Americans. Your name will not be associated with your responses for the study in any form. Your name will be excluded from the data used for the research study.

The Oklahoma State University Institutional Review Board (IRB) may review records for research or monitoring purposes. For information on participant rights about this research, please contact the IRB contact person: Dr. Carol Olson, 415 Whitehurst, Stillwater, OK, (405) 744-5700. The project is being conducted by Dannette McIntosh, who may be contacted at (918) 835-8541, as a research project for dissertation completion requirements in the doctoral program in Human Resources and Adult Education program at Oklahoma State University. The advisor for the project is Dr. Gary Conti, who may be contacted at (918) 246-0368.

It is important that you realize that: (1) Your name will not be associated with this research in any way; (2) Your participation is strictly voluntary and you will not be penalized in any way if you choose not to participate; (3) You are free to withdraw your consent to participate in the study at any time; (4) Your involvement in this project will involve distributing and returning surveys to the researcher and participating in a talking circle, after the data has been analyzed, with an anticipated time of 2 hours; (5) It is not anticipated that you will suffer any risks of discomfort or inconvenience from this participation; (6) The data from this interview will be destroyed within one year of the end of this study; (7) A gift of honor of $25.00 will be provided to you and it is not contingent upon your completion of the project.

I ______________________________ have had the opportunity to ask questions and they have been answered to my satisfaction. I am at least eighteen years of age and I am giving my informed consent to participate in this study. A copy has been given to me.

Date_______________________Signature___________________________________

January 2004
Dear Community Leader,

Because you are a community leader or an elder, your help is greatly needed. In order to distribute surveys to a large representation of Native Americans across the state, I’ve identified several community leaders to help distribute and return the surveys to me. A small gift of honor ($25.00) will be provided. After the data is analyzed, I would like for each of you to attend a talking circle so you can review the results of the surveys to gain your insight about what the data means. Lunch will be provided. The information you can provide will be valuable in looking at the implications of the data to help local organizations in their HIV/AIDS efforts.

I will provide surveys and regular size white envelopes for the participants to place the survey in and seal before returning to you, in order to protect their privacy. Each survey has a cover sheet which will provide information about the survey for the respondents and procedures for placing the survey in an envelope and sealing before returning to you. You will also receive large manila envelopes which are pre-addressed and pre-stamped so you can return the sealed envelopes with the surveys to me.

For my study, I need a minimum total of 800 surveys, so I’m hoping that each person can return at least 100 surveys by March 1, 2004. As you gather surveys, please return them periodically so data input can begin.

To help you in distributing the surveys to Native American adults who live in Oklahoma, below is some information which might be helpful if you don’t know the respondents. In order to reach as many American Indians from a variety of community settings, please consider a wide variety of places for survey distribution, including, tribal employees, churches, community centers, health clinics and/or casinos.

Below are some key questions to determine that the participants meet the requirements of the study, especially if you don’t know whether they are of age or live in Oklahoma.

Would you be willing to complete a short, anonymous survey? It should only take 20 minutes or less.
If so, please remind them to turn it over and complete the reverse side
Are you a Native American who lives in Oklahoma?
Are you 18 or older? (if you’re not sure of age)
The survey is anonymous - no identifying information is attached to it.
Thank you for participating in this survey.

Mvto! Thank you for your assistance in this study. When the data is analyzed, you will have the opportunity to review the results and provide your input about the implications and meaning during the talking circle.

Dannette McIntosh, Doctoral Candidate
APPENDIX E

INSTITUTIONAL REVIEW BOARD (IRB)
Oklahoma State University
Institutional Review Board

Protocol Expires: 1/7/2005

Date: Thursday, January 08, 2004
IRB Application No ED0474

Proposal Title: Circle of Learning: Cultural Aspects of American Indian HIV/AIDS Prevention

Principal Investigator(s):
Dannette McIntosh
5722 E. 22nd PL
Tulsa, OK 74114

Gary J Conti
206 Willard
Stillwater, OK 74078

Reviewed and Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

Dear PI:

Your IRB application referenced above has been approved for one calendar year. Please make note of the expiration date indicated above. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved projects are subject to monitoring by the IRB. If you have questions about the IRB procedures or need any assistance from the Board, please contact me in 415 Whitehurst (phone: 405-744-5700, colson@okstate.edu).

Sincerely,

Carol Olson, Chair
Institutional Review Board
VITA

Dannette Russell-McIntosh

Candidate for the Degree of Doctor of Education


Major Field: Occupational and Adult Education

Biographical

Personal Data: Have two grown children and three grandchildren. Member of the Muscogee (Creek) Nation, located in Okmulgee, Oklahoma.

Education: Received Bachelor of Arts degree from Langston University, Langston, Oklahoma in 1998; received Master of Human Relations degree from University of Oklahoma, Norman, Oklahoma in 2000. Completed the requirements for the Doctor of Education degree at Oklahoma State University, Stillwater, Oklahoma in May, 2005.

Experience: Education and Training Specialist for Planned Parenthood of Arkansas and Eastern Oklahoma; Adjunct professor for Northeastern State University and Bacone College in Oklahoma. Consultant for National Native American AIDS Prevention Center. Previously was Director of Diversity for American Red Cross from 1998 to 2003; Consultant Trainer for Responsible Choices from 1999 to 2004; Public Relations for the Muscogee (Creek) Nation.

Professional Memberships/Certifications: Certified Sex Educator through AASECT (American Association of Sex Educators, Counselors and Therapists); Certified HIV/AIDS Educator and Trainer; Graduate of Oklahoma Aging Advocacy Leadership Academy (2002); The Oklahoma Geriatric Education Center Aging and The Disabilities Scholars Program (June 2003); and Leadership Tulsa, Class XXIX (2002-2003).