Cultural Strategies for Teaching HIV/AIDS Prevention to American Indians

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Abstract

The purpose of this study was to describe what tools and strategies Native Americans who live in Oklahoma believe are important in learning about HIV/AIDS, to determine if culturally specific information is important in developing prevention programs, and to ascertain learning strategies. Data collection was a two-part process. First, the Cultural Strategies Survey was distributed throughout Oklahoma by community gatekeepers. The survey consisted of demographic information, an 18-question Likert Scale, the questions for Assessing The Learning Strategies of AdultS (ATLAS), and an acculturation scale. Then, a “talking circle” was held after the data from the surveys were analyzed with the community gatekeepers. This process revealed that HIV prevention for American Indians is about traditional ways, personal beliefs, science-based beliefs, and tribal context, and it uncovered three distinct groups of learners. For some American Indians, using culture in prevention is not important at all; for others, certain strategies are somewhat important; and for another group, strategies that facilitate communication are important. ATLAS findings showed there were more Problem Solvers and Engagers than Navigators. This reflects a more traditional way of learning.

Introduction

With the increases in infection in communities of color, the need for HIV education is paramount. There is a standard and a possible bias in HIV education and training to incorporate culture in prevention strategies. Yet, culture and race are not synonymous. The purpose of this study was to ascertain the importance of utilizing culture in HIV education for American Indians in Oklahoma. The findings of this study suggest there was not a consensus on the importance or support of using culture in HIV prevention for American Indians in Oklahoma.

Role of Culture

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. 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. 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 culture, their experiences, and the road they have traveled. The African American, Latino, and Native American communities have commonality in many of the cultural values including the importance of spirituality, family and community, storytelling, humor, concepts of time, historical legacy, and sexual orientation. All of these may be considerations in developing HIV prevention programs and may 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).

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. 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 moral and social attitudes (Regional Population Study, 2002, p. 7).

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 & Wildcat, 2001, p. 14). A dimension of spirituality is the Circle of Life, which is sometimes called the Medicine Wheel. It represents the many relationships in life: 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 may also include ceremonies of name giving and of spiritual cleansing of individuals, homes, or businesses (Duran, 2002, p. 12).
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, 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). Within the family structure, elders are highly respected and often make decisions for the family. 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 for family members (Griggs & Dunn, 1996).

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). 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.

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). Elders are often the ones to pass information from one generation to the next through storytelling.

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 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 Culture and Tradition, 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).

Latino folktales are considered some of the best in the world (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 is a mythological character that is common to many Native American cultures. 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, by 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).

Humor also has implications as a political tool (Andrews, 2000, 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.” (p. 161)

Humor helps life be redefined and accepted (Deloria, 1988, p. 146). Humor between African American and Native American stemmed from discussion about civil rights. 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, re-location, 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.” (p. 166)

**Concepts 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.

**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 distrust (Herek, Gillis, Glunt, Lewis, Welton, & Capitanio, 1998).

In 1848, 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). 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).

**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 this community because men who are on the down low do not consider themselves gay (King, 2004). 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 person who penetrates (Carrier, 1995).

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). European arrival brought
Christianity which influenced and changed the social systems and the beliefs about Native gender roles and sexualities (Williams, 1992). The most common term used today is Two Spirit. 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).

**Methodology**

A study was conducted to describe utilizing cultural strategy preferences of American Indians who live in Oklahoma for HIV education. 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. Therefore, surveys were distributed throughout the state of Oklahoma by 10 American Indian community leaders, who were identified as gatekeepers.

**Cultural Strategies Survey**

Data were gathered with The Cultural Strategies Survey. This instrument was created because no survey existed that fit the needs of this study. 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.

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. The sexual orientation question had three possible 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. A 10-point scale with statements at each end was used to identify a self-assessment of acculturation level.

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.

To establish 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. 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. 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. Nine statements were written based on existing research on traditional cultural values within American Indian communities and those projects considered successful American Indian programs.

Content validity for the instrument was established by the testimony of a panel of seven experts in the field of HIV prevention. Five of the experts were American Indians who 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 has been in this field for 15 years, and 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. 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.

After the data were collected, a factor analysis was performed to confirm the constructs in the survey. 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). Based upon the results of the principal components extraction method, the 4-factor analysis was selected as the best explanation of the data. This solution accounted for 41.8% of the variance, and all 18 items loaded at .4 or above. 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. The Traditional Ways factor contained seven items that addressed cultural activities that relate to traditional ways of doing things or of thinking. The Personal Beliefs factor contained six items that represent personal beliefs and attitudes that a person might hold related to HIV/AIDS, the culture, and internal feelings. The Science-Based Beliefs factor contained three items that relate to attitudes and beliefs that are based on established knowledge. The Tribal Context factor contained two items that relate to conditions that are influenced by the tribal setting and can only be understood by having familiarity with the tribal context.

Although reliability is often not addressed in one-shot questionnaires, it was examined in this study in order to provide insights into the consistency with which the participants responded to the items in the questionnaire. Since Cronbach’s alpha is an often used form of reliability and is commonly used for Likert scales (Gay & Airasian, 2000, pp. 173-174), it 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 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)” (Norusis, 1988, p. B-206). 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. 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.
Gatekeepers

Data collection was conducted in a two-stage process. The first stage was to obtain data from the Cultural Strategies Survey. 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 choose 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.

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 could be many people who may be from another tribe. Each gatekeeper was asked to distribute and return 75 to 100 surveys. Various Institutional Review Board approvals were secured in order to distribute the surveys.

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.

The second stage of the data collection process provided the opportunity for the gatekeepers to have input to the data analysis. After the data were 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. 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 the 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.

Learning Strategy Preference

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. For this research, ATLAS was modified from its original booklet form to fit a one-page format with a maximum of three check responses (Conti, 2009, p. 889).

ATLAS is a valid and reliable user-friendly instrument that can be completed rapidly (Conti, 2009). Its validity has been established by powerful multivariate statistical techniques, and both its validity and reliability have been established by using a large and diverse group of adult learners (pp. 889-893).
places respondents in one of three learning strategy preference groups: Navigators, Problem Solvers, or Engagers.

Demographics

The gatekeepers solicited the participation of 471 American Indians in this study. Two-thirds of the participants were females; the gatekeepers believe that it was more comfortable for females to fill out the survey than it was for males. The responses were as follows for sexual orientation: heterosexual--372 (79.0%), homosexual (gay)--30 (6.4%), Two-Spirit--26 (5.5%), and no response--43 (9.1%). The age of the respondents ranged from 18 to 89 years of age with a mean age was 38 with a standard deviation of 14. There were 8 respondents over the age of 70. Survey participants represented 28 of the 39 tribes in Oklahoma.

For the 408 participants who responded to the acculturation item, 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.

Learning Strategy Results

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).

Table 1 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 ($\chi^2=10.06$, $df=2$, $p=.007$). 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, 2009, p. 891). However, this study had a disproportionately small number of Navigators (29%) and an increased number of Problem Solvers (35%) and Engagers (34%).

<table>
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<th>Groups</th>
<th>Observed</th>
<th>Expected</th>
<th>Difference</th>
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<tr>
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<td>-32.1</td>
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<tr>
<td>Problem Solver</td>
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<td>140.7</td>
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<tr>
<td>Engager</td>
<td>155</td>
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Table 1: Distribution of Observed and Expected Learning Strategy Groups


Groups of Participants

The multivariate statistical techniques of cluster and discriminant analysis were used to uncover and describe groups among the Native American participants based upon their responses to the Cultural Strategies Survey. Cluster analysis provides a way to identify groups in a data set, and discriminant analysis can help determine the differences between the groups. These multivariate techniques give more meaning to the interactions of variables in the analysis (Conti, 1996, p. 70) and provide an opportunity to “view the learner more holistically” (p. 67).

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 to 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 was then used to explain the difference between the groups (Conti, 1993, p. 91). Two separate discriminant analyses 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.

The structure matrix for the analysis was used to name the groups. The items in the matrix with the highest correlations related 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 (a) 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 and (b) related to knowledge and personal beliefs about HIV/AIDS.

Thus, there were three distinct groups among the participants. At the 2-cluster level, culture is not important in teaching about HIV/AIDS for the group of 100. 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.

Discussion

Use of Culture in Teaching

The data revealed that 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 con-
continued loss of culture. The gatekeepers agreed that the variance in acculturation reflects the lack of knowledge of traditions and culture in Oklahoma.

According to one 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. They turn to alcohol and drugs because of lack of identity.” The variance in acculturation reflect the lack of knowledge of traditions and culture in Oklahoma.

**Traditional Ways**

Using cultural strategies for teaching HIV/AIDS to American Indians in Oklahoma is stereotypical and does not apply to all. There was not a consensus that supported using cultural strategies in HIV prevention. 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.

From a health education perspective, educators working with American Indian people should not make assumptions about their cultural beliefs. A person may look like or be a full-blood American Indian; however, this person may not have an understanding of American Indian traditions.

**Culture and Learning**

The discovery of the three distinct groups revealed that culture can be used in various ways for different groups of Native American learners. For people who have a high knowledge of HIV, culture can provide the mechanism to talk about HIV. For others, culture can be integrated into HIV prevention programs in order to increase the knowledge level for some. However, for some American Indians, culture is not the key to learning.

One group is very knowledgeable about the facts related to HIV; yet they are not comfortable talking about it with their family. This group needs a method to help them in gaining a comfort level in understanding their concerns and issues about HIV. In basic adult HIV education, these opportunities are lost because educators often use the lecture method. Native communities often use talking circles for many topics of discussion.

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 an indigenous response to learning (p. 217). 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.

Another group has a lower knowledge of HIV/AIDS and is supportive of the use of culture. 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. Adults need to be respected and allowed to participate at their comfort level.

However, for the third group, culture is not an important vehicle for training about HIV/AIDS. For this group, any general HIV curriculum will work. However, for these learners as with all adult learners, educators should be trained in adult learning principles. Trainers and educators should consider culture as 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 they 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.

**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, 2009, pp. 893-894). 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, 2009, p. 894; McNeil, 2012, pp. 236-237). 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, 2009, p. 894). 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.

**Connecting Indian Education and Adult Learning**

There is an expectation that American Indians should know their culture and/or should support their culture. Yet, culture and race are not synonymous. In HIV prevention, as in other health issues, there may be a bias toward using cultural strategies in prevention. However, using culture is not an important tool for many American Indians in Oklahoma and knowing who needs or wants cultural tools in education is important in order to provide the most valuable learning environment for people.

The process of training 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. Education is not neutral (Freire, 1970). Neither is HIV. This disease is one that needs a focus on empowerment and transformation. For HIV education, it 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 experience and dialogue can happen. Lifelong learning was always inherent in traditional education. It was communal and participatory. Education should be provided that helps people apply the information in the context and the lens in which they view their lives.

**References**


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