DEVELOPMENT OF THE AMERICAN INDIAN ENCULTURATION SCALE TO ASSIST COUNSELING PRACTICE

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Abstract: Understanding the extent of commitment to and identification with traditional cultural experiences is essential for working with American Indian (AI) people (Whitbeck, 2006). The purpose of this study was to determine the usefulness of a practical measure of enculturation for AI people by examining its reliability and validity within the context of three previous studies.

Enculturation is an important construct in understanding the traditional cultural experiences of American Indian/Alaska Native (AI/AN) people. Whereas acculturation has been defined as “the degree to which the individual … accepts and adheres to both majority (White/Euro-American) and tribal cultural values” (Choney, Berryhill-Paapke, & Robbins, 1995, p. 76), enculturation is the process by which an individual learns about and identifies with his or her own cultural roots (Little Soldier, 1985; Whitbeck, Chen, Hoyt, & Adams, 2004; Zimmerman, Ramirez, Washienko, Walter, & Dyer, 1994). Traditionality (Solomon, Arugula, & Gottlieb, 1999) is another term used in the literature to denote enculturation and is similarly thought to be an adherence to cultural values and behaviors that define an AI/AN perspective or way of life (Sanders, 1987).

Although we recognize that AI/AN people are widely diverse with many different beliefs, in our work with AI people both personally and professionally, it has come to our awareness that traditional ways are essential to the collectivist identity often expressed in AI/AN culture (Portman & Garrett, 2005). Trust, connection, and well-being come from an integrated experience that involves knowing, sensing, experiencing, being, and giving (Rybak, Eastin, & Robbins, 2004); this experience
includes connection with nature (McAvoy, 2002) and spirituality (see, for example, Lee, 2000). This holism is related to harmony, balance, connectedness, and wellness. Therefore, enculturation is the process essential to the harmony and spirit of tribal people. Identification with AI/AN culture and ways is represented by participation in deeply cultural experiences, including engaging in the worldview of spirituality and a sense of holism. Enculturation is the connection to tribal culture in terms of identity, participation, and experience. The degree to which an AI person adheres to tribal cultural values and ways has the potential to play an important role in his or her physical health and emotional well-being.

Researchers have shown that strong cultural ties, known as traditional ways (Edwards, 2002), increase resilience to harsh life circumstances. LaFromboise, Hoyt, Oliver and Whitbeck (2006) investigated resilience with AI adolescents. Although a majority of AI adolescents lived in middle- to high-adversity households on or near reservations, the greater the levels of cultural involvement (enculturation), the greater the levels of resiliency with increased pro-social behaviors. Belcourt-Dittloff (2006) found relationships that support the ways in which cultural elements buffer against adversity and enhance resilience in both AI college students and AI people living within rural and urban communities. Prominent among the resiliency factors were traditional cultural and spiritual practices; ethnic pride/enculturation; and communal mastery leading to higher life satisfaction, more adversarial growth, and lower levels of psychological distress. Walters and Simoni (2002) proposed a health model for AI women demonstrating how culture buffers historical and contemporary stress. The cultural buffers were identity attitudes, enculturation, spiritual coping, and traditional health practices.

It appears that engaging in AI culture may promote psychological well-being, whereas more mainstream acculturation levels have been related to physical and mental health risks for AI people. For example, participation in traditional AI culture has been associated with lower levels of substance abuse and substance abuse risk (Herman-Stahl, Spencer, & Duncan, 2002; Lysne, 2003; Walls, Johnson, Whitbeck, & Hoyt, 2006; Winterowd, Montgomery & Burris, 2005). Researchers found a strong negative relationship between cultural/spiritual practices and suicide attempts (Garrouette, Goldberg, Beals, Herrell, & Manson, 2003; Lester, 1999). Therefore, traditional ways appear to be related to protective factors of resiliency.
Given these findings, it is important to know the extent to which AI people identify with and participate in traditional ways and how these experiences impact their lives. While acculturation measures have been developed to assess identification with the majority culture or more assimilated ways of experience, such comparisons may not be of interest to many AI people and may set up unnecessary tensions between Indian and White ways of existence. However, by focusing on traditional ways of knowing and being, measures of enculturation appear to be useful to understanding the AI experience and how these ways may promote resilience.

Enculturation assessment can be helpful not only in further research, but in many healing aspects of AI life. For example, enculturation assessment of AI people may serve as a guide to conceptualize counseling approaches and treatment interventions with this population. How much do AI clients identify with and practice the traditional ways of their culture? The answer to this question may guide the way counselors, psychologists, and other healers think about clients’ presenting issues and how they may proceed to help them. Knowing the cultural framework in understanding human experiences is essential for effective healing interventions.

Different ways of healing may be recommended based on the extent to which an AI person identifies with culture. For example, traditional Indian people may prefer traditional or cultural interventions to address relevant physical, emotional, and spiritual issues (Whitbeck, 2006). Some may be hesitant or distrustful of health care providers, including counselors and psychologists who are from the mainstream culture. Integrating culture and traditional ways into prevention programs is an important ethical priority for AI people.

Enculturation was the implied opposite of acculturation theory and its measurement in the historical understanding of traditional ways of AI people. Little Soldier (1985) presented an understanding of cultural identification as a continuum, with gains in identification with one culture related to loss of identification with another culture. Oetting, Swaim, and Chiarella (1998) further developed an orthogonal cultural identification model, wherein identification with one culture can be fully independent of identification with another culture. Phinney (1992) viewed acculturation as having many components, each having various levels of adherence to traditional ways. Garrett and Pichette (2000) developed an acculturation model that had multiple dimensions. Choney, Berryhill-Paapke, and Robbins (1995) proposed an acculturation
model representing different levels of acculturation across four aspects of experience, comparable to the medicine wheel, which includes cognitive, behavioral, affective/spiritual, and social/environmental domains.

**Measures of Enculturation and Acculturation**

Measures have been designed to better understand acculturation, enculturation, or traditionality within specific tribes. Each tribe has its own unique characteristics and ways of life, which must be respected in any generalized measurement result. While various measures of acculturation or enculturation have been developed based on common theoretical models (i.e., *Life Perspectives Scale*, Choney, Berryhill, & Robbins, 1995; *Native American Acculturation Scale*, Garrett & Pichette, 2000; *Orthogonal Cultural Identification Scale*, Oetting & Beauvais, 1991), few measures of enculturation have been developed to aid in practices of counseling and working directly with AI people.

The *Healthy Hopi Women Survey* (*HHWS*; Coe, Attakai, Papenfuss, & Giuliano, 2004) was designed in the early 1990s to determine how traditional behaviors related to health and health risk behaviors. The *HHWS* was adapted from an earlier measure of acculturation (Cuellar, Harris, & Jasso, 1980) to include specific dimensions appropriate to the Hopi people, specifically language usage, cultural participation, and percentage of time off-reservation. Without a formal written language serving as a reference, the Hopi instrument required substantial collaboration with the Hopi tribe. For the Hopi people, a traditional behavior score would differ depending on attendance or participation at cultural events. Having a reservation home provided the opportunity to use time away from the reservation as another indicator of acculturation.

Other AI people may experience enculturation differently because of their own history or living environment. In Oklahoma, for example, there are no reservations, yet strong tribal identities exist. Given concerns about using blood quantum to determine adherence to traditional ways, Solomon and Gottlieb (1999) devised a traditional behavior scale that included nine categories of cultural behaviors, such as home language, tribal ceremonies, crafts and games, and number of friends who are AI or non-AI. The researchers defined the range of very traditional ways to very nontraditional ways to assist in the ratings. Of interest in their findings, traditional behavior was significantly correlated with tribal blood quantum and self-identification of traditionality for the Indian women in the study.
Whitbeck, Adams, Hoyt, and Chen (2004) developed a measure of enculturation in their study exploring the relationship of enculturation to historical loss and substance use among AI people. The researchers gathered information from elders in the community in order to understand traditional activities as indicators of enculturation level. The hypothesis was that enculturation would be closely related to cultural behavioral activities (i.e. attending powwows). Whitbeck et al. found that enculturation (e.g., being active in AI traditional activities) was a protective factor for AIs in that it was associated with fewer substance use problems and less perceptions of historical loss.

An instrument of enculturation for use with AI youth was developed and validated by Zimmerman, Ramirez-Valles, Washienko, Walter, and Dyer (1996). The components of identity and involvement in cultural activities were interpreted to represent enculturation for the Odawa and Ojibway participants in this study. Convergent validity was developed by correlating the instrument to variables such as self-esteem, perception of mother and father enculturation, and number of friends within the tribe.

Researchers committed to AI issues have used acculturation measures in their research with AI people with varied psychometric success. In many cases, the numbers needed to demonstrate adequate psychometric properties may not be available. In other cases, the research questions directed the specificity of the instruments used. Enculturation measures appear to best reflect AI values, which places a high priority on community and collective contribution from tribal members (Whitbeck et al., 2004) and can be measured in terms of one's involvement in traditional ways. The enculturation questionnaires mentioned earlier were developed to measure enculturation among people from a specific tribe/nation or to measure aspects of enculturation for research purposes.

Measures of engagement in culture activities, accurately identifying enculturation, may be a more consistent way of assessing involvement in traditional ways. The American Indian Enculturation Scale (AIES) was developed to be used in counseling practice to assess the enculturation of AI people, with an emphasis on participation in one's tribal activities, including spiritual practices. The purpose of this study was to determine the usefulness of a practical measure of enculturation for AI people by examining its reliability and validity within the context of three previous studies. We believe its use in counseling practice with AI people is augmented by its ease of administration (e.g., it is shorter than most other scales) and its meaningfulness to those who complete
it (e.g., it relates directly to client behavior). It was hypothesized that the AIES would have adequate internal consistency as well as construct, convergent, and discriminant validity. It was expected that AIES scores would be reliable, demonstrate one content area, and significantly correlate with behavioral and spiritual/affective aspects of acculturation (construct validity), would correlate with more traditional acculturation composite scores (construct validity), and yet would not correlate with the less-related domains related to cognitive and social/environmental aspects of acculturation.

**Method**

**Instrumentation**

*American Indian Enculturation Scale.* All of the participants in this study completed the AIES. A group of researchers at our university, including AI team members, developed the AIES, which was originally used along with in-depth interviews in a qualitative study to better understand traditional ways of students who persist in college (Montgomery, Miville, Winterowd, Jeffries, & Baysden, 2000). Items were generated based on our personal and professional experiences and an extensive review of the literature on AI issues. The primary focus was on what AI people do that is reflective of their traditions. A large pool of items was given to traditional AI people from any of over 20 tribes in Oklahoma. These volunteers were students, researchers, friends, and study participants over a span of five years. Each tribal member identified him- or herself as deeply connected to tribal ways. The resulting 16 items were thought to reflect common experiences of traditional AI people across a variety of tribes. The AIES evolved to the current instrument of 17 items based on further experiences with AI samples. Using the AIES, participants are asked to rate each item in terms of how much they have participated in each activity, using a 7-point Likert scale (1 = *not at all*, 7 = *a great deal*).

*Life Perspectives Scale (LPS; Choney, Berryhill-Paapke, & Robbins, 1995).* The LPS is a 70-item measure of AI acculturation. It assesses four aspects of acculturation, including cognitive, affective/spiritual, behavioral, and social/environmental. The 70 items of the LPS were generated by review of tribal values identified in past Indian research, review of existing acculturation scales, and discussion among researchers about acculturation issues for AIs. Participants are asked to read each
of the 70 items and to rate how strongly they agree or disagree with each statement. The specific scoring protocol for the items of the instrument can be obtained from the primary author of the instrument. Point values are calculated for each of the subscales to determine participants’ acculturative status on each of the four domains—cognitive, affective/spiritual, behavioral, and social/environmental. Higher scores represent more traditional tribal ways and lower scores represent more nontraditional ways.

Native American Acculturation Scale (NAAS; Garrett & Pichette, 2000). The NAAS is a 20-item multiple-choice questionnaire used to assess an individual’s level of acculturation along a continuum ranging from traditional Native American to assimilated mainstream American. It covers areas such as language, identity, friendships, behaviors, generational/geographic background, and attitudes. Participants rate each item on a 5-point Likert scale. The responses to the 20 items are summed for a total score. Higher scores on the NAAS indicate greater acculturation to the dominant culture; therefore, we hypothesize that enculturation negatively correlates to high scores on the NAAS.

The NAAS was originally normed on 139 AI high school students. The NAAS has good internal consistency and reliability (Cronbach alpha = .91). The NAAS was modeled after the Acculturation Rating Scale for Mexican Americans (ARSMA; Cuellar, Harris, & Jasso, 1980) and the Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA; Suinn, Rickard-Figueroa, Lew, & Vigil, 1987).

Participants/Procedures

Participants included self-identified AI people from three different convenience samples from three different studies. These studies were not originally intended to be a progression of psychometric research on enculturation. Therefore, different measures were administered in each study to address the original research questions of that study, along with appropriate approval from an IRB and tribal agencies directly involved. This archival data across the three studies was used for the present study because the AIES was administered to participants in all three samples. Other measures were administered, including different measures of acculturation such as the NAAS and the LPS.

The first (clinical) sample of participants included 165 AI people (75 women and 90 men) from the state of Oklahoma who were clients of a tribal counseling center. They ranged in age from 16 to 57 years ($M = 30.75, SD = 9.58$). They were predominantly from northeastern Oklahoma
tribes. Most of them had secondary \((n = 106)\) or postsecondary \((n = 55)\) education. At the end of the intake interviews, clients were invited to participate in a research study. Those who agreed to participate completed an informed consent form, a demographic sheet and the AIES, in addition to other measures, including the LPS.

The second (non-clinical) sample included 167 AI university students and community members (115 women and 53 men) from a variety of tribes (primarily southwestern U.S. tribes). They ranged in age from 18 to 88 years \((M = 40.80, SD = 13.70)\). Most of them had secondary \((n = 43)\) or post-secondary \((n = 104)\) education. The participants were recruited from national, state, and regional Indian events (i.e., dances, pow-wows). Those who agreed to participate completed an informed consent form, a demographic sheet, and the AIES in addition to other measures, including the Life Perspective Scale.

The third (non-clinical) sample included 324 AI university students and community members (201 women and 123 men) from a variety of tribes (primarily southwestern U.S. tribes) They ranged in age from 17 to 78 years \((M = 39.45, SD = 13.84)\). All of them had secondary \((n = 75)\) or post-secondary \((n = 252)\) education. The participants were recruited from national, state, and regional Indian events (i.e., dances, pow-wows). Those who agreed to participate completed an informed consent form, a demographic sheet, and the AIES in addition to other measures, including the NAAS.

**Results**

The AIES yielded high internal consistency reliability estimates across the three samples, with a Cronbach alpha of .91 for the clinical sample and Cronbach alphas of .90 for each of the two non-clinical samples. To determine the construct validity of the AIES, a principal components analysis with oblimin rotation was conducted on the items of the AIES for each sample. For each analysis, eigenvalues over 1 and an examination of the scree plot were used to determine the significant component solution. Item loadings that were .40 or higher on a component were considered significant (see Table 1). For the clinical sample, a one-component solution emerged, accounting for 45% of the variance. All of the items loaded significantly except for the item “use Indian medicine.” For the first non-clinical sample, a one-component solution emerged accounting for 43.5% of the variance. All of the items loaded significantly except for the item “attend Indian church.” For
the second non-clinical sample, a one-component solution emerged accounting for 43% of the variance. All of the items loaded significantly on this component.

Table 1
American Indian Acculturation Scale
Factor Item Loadings across Three Samples

<table>
<thead>
<tr>
<th>Items</th>
<th>Sample 1</th>
<th>Sample 2</th>
<th>Sample 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Attend Indian church</td>
<td>.66</td>
<td>.34</td>
<td>.43</td>
</tr>
<tr>
<td>2. Attend Indian ceremony</td>
<td>.82</td>
<td>.81</td>
<td>.77</td>
</tr>
<tr>
<td>3. Choose Indian activity before others</td>
<td>.76</td>
<td>.81</td>
<td>.81</td>
</tr>
<tr>
<td>4. Socialize with Indians or have Indian friends</td>
<td>.57</td>
<td>.61</td>
<td>.61</td>
</tr>
<tr>
<td>5. Use Indian medicine</td>
<td>.32</td>
<td>.54</td>
<td>.60</td>
</tr>
<tr>
<td>6. Seek help from Elders</td>
<td>.63</td>
<td>.70</td>
<td>.73</td>
</tr>
<tr>
<td>7. Attend pow-wows</td>
<td>.72</td>
<td>.63</td>
<td>.70</td>
</tr>
<tr>
<td>8. Sing Indian songs</td>
<td>.78</td>
<td>.72</td>
<td>.72</td>
</tr>
<tr>
<td>9. Participate in Indian prayers</td>
<td>.83</td>
<td>.82</td>
<td>.79</td>
</tr>
<tr>
<td>10. Write Indian stories</td>
<td>.50</td>
<td>.43</td>
<td>.48</td>
</tr>
<tr>
<td>11. Eat or cook Indian food</td>
<td>.68</td>
<td>.55</td>
<td>.68</td>
</tr>
<tr>
<td>12. Do Indian art</td>
<td>.59</td>
<td>.41</td>
<td>.51</td>
</tr>
<tr>
<td>13. Use or know the Indian language</td>
<td>.67</td>
<td>.47</td>
<td>.67</td>
</tr>
<tr>
<td>14. Attend Indian dances</td>
<td>.80</td>
<td>.80</td>
<td>.79</td>
</tr>
<tr>
<td>15. Know or participate in tribal politics</td>
<td>.54</td>
<td>.51</td>
<td>.52</td>
</tr>
<tr>
<td>16. Know or share Indian history</td>
<td>.68</td>
<td>.67</td>
<td>.67</td>
</tr>
<tr>
<td>17. Work in Indian Communities/Populations</td>
<td>.64</td>
<td>.55</td>
<td></td>
</tr>
</tbody>
</table>

*Sample 1 = clinical sample
  *Sample 2 = non-clinical sample
  *Sample 3 = non-clinical sample

To assess the convergent and discriminant validity of the AIES, Pearson correlational analyses (one-tailed, significance level set at .01 level) were conducted to assess the relationship between the AIES and the other measures of acculturation, the LPS and the NAAS (see Table 2). The AIES was intended to be a short, user-friendly measure of enculturation that tapped into behavioral and spiritual aspects of traditionality for AI people. It was predicted that AIES scores would be significantly related to behavioral and spiritual aspects of acculturation. This prediction was confirmed in the studies using the AIES and the LPS (which measures behavioral, affective/spiritual, cognitive, and social/environmental acculturation). In the clinical and non-clinical studies using the AIES and the LPS, the AIES was significantly and positively correlated with the behavioral ($r = .55$, $p < .01$ in both studies) and affective/spiritual ($r = .54$, $p < .01$ in both studies) acculturation subscales of the LPS, indicating convergent validity. The AIES was not significantly correlated with cognitive ($r = .05$ and $.18$, $p > .01$ in two studies) and
social/environmental ($r = .28$ and $.22$, $p > .01$ in two studies) aspects of acculturation. Further, the AIES correlated negatively with the NAAS ($r = -.68$, $p < .01$), indicating discriminant validity from acculturation.

### Table 2

<table>
<thead>
<tr>
<th></th>
<th>Clinical Sample</th>
<th>Non-Clinical Sample 1</th>
<th>Non-Clinical Sample 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPS Cognitive</td>
<td>.18</td>
<td>.05</td>
<td>-</td>
</tr>
<tr>
<td>LPS Affectual</td>
<td>.54*</td>
<td>.45*</td>
<td>-</td>
</tr>
<tr>
<td>LPS Behavioral</td>
<td>.55*</td>
<td>.63*</td>
<td>-</td>
</tr>
<tr>
<td>LPS Social</td>
<td>.28</td>
<td>.22</td>
<td>-.68*</td>
</tr>
<tr>
<td>NAAS</td>
<td>-</td>
<td>-</td>
<td>-.68*</td>
</tr>
</tbody>
</table>

*AIES = AI Acculturation Scale
*LPS = Life Perspectives Scale
*NAAS = Native American Acculturation Scale
* $p < .01$

### Discussion

The AIES was developed to assess enculturation, particularly behavioral and spiritual aspects, for AI people. The AIES was administered to three different clinical and community samples of AI people, along with other measures of acculturation. For each sample, the AIES was shown to have high internal consistency reliability and construct validity, as well as convergent validity with behavioral and spiritual aspects of acculturation and discriminant validity with cognitive and social aspects of acculturation (as measured by the LPS) and overall conventional acculturation (as measured by the NAAS). Across all three samples, a one-factor solution emerged for the AIES accounting for a significant amount of the variance (43.5-45%) in acculturation scores. Therefore, the AIES appears to have psychometric properties that yield usefulness for Indian people who seek counseling services as well as for Indian people in the community (non-clinical samples).

The AIES is a relatively short instrument (17 items), which makes it easy to administer. The items, in general, resonate with the AI people who have completed it. Two items did not load significantly on a one-component solution of the AIES across the clinical and non-clinical samples. “Attend Indian church,” was an item that did load on the one-component solutions for the clinical sample and one of the community samples, but not for the other community sample. “Use Indian medicine” was an item that loaded significantly on the one-component solutions.
for the two community samples, but not for the clinical sample. In terms of the first item, “Attend Indian church,” there are some possible reasons why this item did not load significantly on one of the samples. Participating in Indian church activities may or may not be part of AI people’s identification with traditional ways. This item might have been confusing to some of the respondents in that “attend Indian church” can mean different things to different people. Each tribe/nation may have different churches reflective of their traditional spiritual practices. In terms of the second item, “Use Indian medicine,” it is possible that those AI people who seek counseling services (clinical sample) may not use Indian medicine often, and that might be the reason why it did not significantly load on the acculturation scale. The reasons for these two items not consistently loading on the overall scale across these two samples merits further investigation.

The AIES is a culturally relevant and practical measure of enculturation or traditionality and is reliable and valid with AI clients as well as AI people in the community. It appears to be a relevant measure for AI people from a variety of tribes across the nation. There may be some traditional ways not included in this measure that would be relevant for a particular tribe or nation, such as Alaska Natives. Therefore, we encourage practitioners and researchers to use this measure and adapt the items as needed to be congruent with the traditional ways of the people from particular tribes and nations.

The strengths of the AIES relative to the other enculturation and acculturation measures include the brevity of the instrument (and, therefore, its ease of use), as well as its relevance to clinical and non-clinical groups of AI people, given its ability to measure the extent to which a person is participating in the traditional ways of AI life in a global way with emphasis on behavioral and spiritual dimensions of enculturation. It is important to understand the extent to which AI people participate in their traditional ways and how these traditional behaviors impact one’s well-being, resilience, and connections with others and the world, and now we have a reliable and valid instrument with which to continue this research. We hope that health care professionals will consider using the AIES in their practices to best serve AI people.
References


