The Northern Plains Biculturalism Inventory to Assess Cultural Affiliation

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Background:

Many psychological assessments are used with American Indian behavioral health clients, however; very few have been examined to see if they are valid, reliable, and culturally appropriate for AI populations. Some of the mediating factors that could contribute to inaccuracy or inappropriate use of these assessments with American Indians are: historical trauma, culture identification issues, quality of life, socioeconomic status, and health status. Of special importance among these factors is cultural affiliation. It is suggested, that during administration of psychological assessments to American Indian peoples it is advisable to include some measure of acculturation (McDonald, Morton, Stewart, 1993).

Many measures of acculturation focus on a linear relationship between identification with culture of origin and the majority culture. The Northern Plains Biculturalism Inventory (NPBI) was designed to measure four levels of cultural orientation based upon three factors. The NPBI includes four levels of cultural affiliation: traditional, assimilated, bicultural, and marginalized. Individuals who identify as culturally traditional have a high identification with American Indian culture and low identification with European American culture. Individuals who identify as assimilated have low identification with American Indian culture and high identification with European American culture. Bicultural individuals have high identification with both cultures and marginalized individuals have low identification with both cultures (Baker, 2005).

Research in the field of American Indian psychology has shown the importance of examining the cultural context of psychological assessment (Pace, 2006; Hamill, Scott, Dearing, & Pepper, 2009; McDonald, Morton, & Stewart, 1993). By examining four levels of cultural identification more specific conclusions can be drawn regarding the relationship between culture and other aspects of psychological assessment and diagnosis.

Methods:

Participants were 458 self-identified American Indian adults (283 women and 175 men) residing in North and South Dakota, Minnesota, Montana and Wyoming, who were attending 10 powwows and health fairs in North Dakota and western Minnesota during 2002 and 2003. Participants were solicited by signs posted on a mobile nutrition research laboratory located at the Native events noted above, and by word of mouth at these events. Native researchers provided interested attendees with a general verbal description of the research and, to those who expressed interest in participating, a packet containing a written description, the informed consent, and the questionnaires. If an attendee agreed to participate, he or she signed the consent and completed the questionnaires while sitting at a table located in front of the mobile laboratory. Each participant then received a bag of hand-harvested wild rice, a bottle of ice water, and health education materials in appreciation. Because of difficulties with reading or writing, some elderly participants had family members read questionnaire items aloud and they recorded their own responses; this was done beyond hearing distance of other participants. This project was approved by the responsible tribal councils, powwow committees and college presidents, and by the University of North Dakota Institutional Review Board. Data was then entered using SPSS for all returned measures.

The *Northern Plains Biculturalism Inventory (NPBI)* (Allen & French, 1994) is a 30-item measure of relative identification with American Indian and European-American cultures. The NPBI yields 3 scales: American Indian Cultural Identification (AICI), European American Cultural Identification (EACI), and Native Language Usage (Language). The AICI and EACI scales have an orthogonal relationship, allowing the assignment of respondents to one of four possible categories: Bicultural Identification, American Indian Identification, European American Identification, and Marginalized (endorsement of few items reflecting identification with either culture). The Language scale is a measure of preference for and use of AI or European American language.

Results:

A total of 458 participants from ten approved sites/events completed the assessments. Data from 176 male and 282 female participants participated. Participants ranged in age from 18 to 78 years (38.1 ± 14.1; Mean $\pm$ SD). Seventy-nine percent of participants had at least a high school education and 33% had household incomes below \$12,000/year and 11% reported household incomes over \$50,000/year. Sixty percent of participants reported at least some college education. Sixty-nine percent were single, separated, divorced or widowed.

In the normative sample, mean scores on the AICI, EACI and Language scales were 39.5 ± 10.3 (Mean $\pm$ SD), 35.8 ± 8.3 and 9.8 ± 4.7, respectively; coefficient alphas were 0.89, 0.84 and 0.88, respectively. In our study, the mean AICI was 38.3 ± 6.9 (alpha=0.82), EACI was 29.16 ± 4.7 (alpha=0.68), and Language was 11.5 ± 3.8 (alpha=0.82). As recommended by the author, we used a median split procedure to develop local cutoffs for assignment to categories. Cultural identity of the sample included: 1) Bicultural identity (Hi AI & Hi EA), 32.5%; 2) American Indian (AI) Identity (Hi AI & Lo EA), 24.3%; 3) European American (EA) Identity (Lo AI & Hi EA), 24.3%; and 4) Marginalized (Lo AI & Lo EA), 18.9%.

One-way ANOVA analyses reveal significant relationships between NPBI and expressed symptoms of depression, anxiety, rumination, and Quality of Life. Level of acculturation and symptoms of depression, anxiety, and rumination are positively related. Level of acculturation and Quality of life are negatively related. Descriptive statistics and post hoc analyses are provided.

Conclusions:

1) Reliability and validity of the measures are reported.
2) There is a high correlation between the depression and anxiety measures and an inverse correlation with Quality of Life.

References:

Allen, J. &French, C. (1994). *Northern plains biculturalism inventory: A preliminary manual.* Unpublished manual available from the authors. University of South Dakota, Vermillion.

Hamill, S., Scott, W., Dearing, E., & Pepper, C. (2009). Affective style and depressive symptoms in youth of a North American plains tribe: The moderating roles of cultural identity, grade

level, and behavioral inhibition. *Personality and Individual Differences*, *47*(2), 110-115. doi:10.1016/j.paid.2009.02.011.

McDonald, J., Morton, R., & Stewart, C. (1993). Clinical concerns with American Indian patients. Innovations in clinical practice: A source book, Vol. 12 (pp. 437-454). Sarasota, FL US: Professional Resource Press/Professional Resource Exchange.