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ABSTRACT

This paper describes the development of a measure of ethnic identity among American Indian adolescents. Data were collected in nine high schools in four American Indian communities (N=1,592). The self-report survey included eight ethnic identity questions, seven items about social competencies, eight items on personal mastery and locus of control, six items concerning self-esteem, and six items about perceived social support. Factor analysis identified two major factors resulting in an eight-item Indian scale and a six-item White scale. Analysis found that respondents who identified with both White and Indian cultures tended to have the highest scores on the psychological measures of well-being. Results suggest that the use of this bicultural scale by mental health providers might allow examination of the connections between patterns of ethnic identity and emotional/behavioral problems. (Contains 24 references.) (DB)

Measuring Ethnic Identity Among American Indian Adolescents: A Factor Analytic Study

Introduction

When addressing issues of race or ethnicity, researchers often ask respondents to choose one alternative from a list that includes categories such as White, African American, Hispanic, Asian American, or American Indian. Trimble (1991) referred to this as an *ethnic gloss* approach and argued that it fails to capture significant differences that exist within most ethnic groups. The work described here is based on the premise that due to great intragroup diversity, e.g., more than 500 separate tribes (Hirschfelder & Montano, 1993), many distinct cultural areas (Manson, Shore, Barron, Ackerson & Neligh, 1992) and more than 200 currently spoken Indian languages (Fleming, 1992), employing ethnic glosses with the American Indian population is especially problematic. An alternative to the *checklist* approach is to focus on ethnic identity rather than, or in addition to, race and or ethnicity. However, little empirical work has been carried out regarding the measurement of ethnic identity in general, or specifically among American Indians. Reported here is the development of a valid and reliable measure of ethnic identity among American Indian adolescents.

Since most Indian people live in two worlds, their own ethnic community and the mainstream or White community, it is likely that they identify to some extent with both groups. The process of developing more than one identification was referred to as dual socialization by de Anda (1984) and was conceptualized as primary enculturation experiences within their own cultural group, along with less comprehensive, but significant

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exposure to agents and forces within the majority culture. Berry and his colleagues (Berry, Kim, Minde, & Mok, 1987; Berry, Kim, Power, Young, & Bujaki, 1989) indicated that among ethnic group members possible patterns of identification are *separation, assimilation, marginalization,* and *biculturalism.* These distinctions are important since several researchers have found that ethnic group members who are bicultural versus marginal in their ethnic identity tend to score higher on positive psychological indicators such as self esteem (Oetting & Beauvais, 1991; Phinney, Lochner, & Murphy, 1990; Szapocznik & Kurtines, 1980), personal mastery (Phinney, 1989), and positive peer and family relations (Phinney, 1989; Phinney & Alipuria, 1990).

Methods

Sample

Data were collected in nine high schools located in four broadly dispersed American Indian communities west of the Mississippi (Voices of Indian Teens, 1992). In November, 1992, a total of 1592 high school students completed the self-report survey; 53% were female; 25% were 9th graders, 29% 10th graders, 24% 11th graders, and 22% 12th graders. The median age was 16.0 years with the minimum age of 14 and the maximum age of 19. A total of 31 different tribes were represented. Although 1990 Census data by tribal group are not yet available, a sense of the representativeness of the sample can be gained by noting that these tribes accounted for 55.4 per cent of the total Indian population enumerated in the 1980 Census and that seven of the tribes are among the top 15 most populous tribes in the United States (Snipp, 1989).

Measures

Ethnic Identity Scale. To accommodate the diversity of the American Indian population and to account for the reality that Indian people often live in two worlds, the approach used here builds directly on Oetting and Beauvais' (1991) four-item scale that has been used in studies of minority youth, including American Indians. To avoid a separate set of questions for each of the more than 500 tribal groups, they developed measures of how strongly individuals are linked to their own perception of what it means to be an Indian. Rather than asking questions about specific tribes, they asked questions that incorporate the term "the Indian way of life." In answering such questions, each respondent was free to interpret the specific meaning of this term for themselves and thus, Indian people from different cultural backgrounds could be asked the same set of questions. To account for the possibility of identification with both Indian and dominant culture groups, parallel questions were included about "the White way of life." Respondents were asked to indicate their degree of affinity with both Indian and White questions.

In the interest of expanding the Oetting and Beauvais four question scale, separate focus groups consisting of professionals (e.g., dorm aids, teachers, school administrators) and adolescents addressed the question of the meaning of being Indian (King, 1992; Mitchell, Dick, & Beals, 1993). Consistent results from this qualitative work centered on the importance of family, cultural traditions, language use by family, and spiritual beliefs. As a result, questions were added to address current family cultural activities, future personal involvement in cultural traditions, language use in childhood home, and importance of religious or spiritual beliefs.

Table 1 presents the eight ethnic identity questions that comprised the items administered to this sample. Questions 1 through 4 are the Oetting and Beauvais scale; questions 5 through 8 were added. As with the original scale, questions 5 and 6 used the insert of American Indian or White. Question 7, the language question, used Tribal

Language and English; question 8, which focused on religion, used the options of Traditional Indian Beliefs and Christian Beliefs. The response categories for all eight questions were (1) *Not at All*, (2) *Not Much*, (3) *Some*, and (4) *A Lot*. Each of the questions was coded so that higher values indicated more of the property of interest.

The central purpose of this work was the development of a valid ethnic identity measure for use with American Indian adolescents. To test the validity of this new measure, scales measuring social competencies, personal mastery, self-esteem, and perceived social support as indicators of positive psychological well-being were used. These measures underwent extensive pilot-testing and the reliability coefficients reported come from this pilot testing of the measures.

Competencies Scale. The competencies scale was adapted from the Adolescent Pathways Project (Seidman, 1991). It consists of seven items which tap positive social competencies such as making friends, being good at creative things and doing school work carefully (alpha= .81).

Table 1
Ethnic Identity Questions

(1) Do you live by or follow the [...] way of life?
(2) When you are an adult, will you be a success in the [...] way of life?
(3) Does your family live by or follow the [...] way of life?
(4) Is your family a success in the [...] way of life?
(5) How many of your family's activities or traditions are based on [...] culture?
(6) When you are an adult, how involved do you think you will be in [...] traditions and beliefs?
(7) What languages were spoken in your home when you were growing up?
(8) How important is it for you to follow religious or spiritual beliefs which are based on [...] ?

Personal Mastery. This measure was a composite of eight items drawn from Pearlin & Schooler's (1978) mastery scale and Levenson's (1981) internal locus of control scale (alpha=.69).

Self-Esteem Scale. Our measure of self-esteem was adapted from the Rosenberg Self- Esteem Scale (Rosenberg, 1965). Six items of the original ten-item scale were used (alpha=.79).

Social Support Scale. For this construct, we used the Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, & Farley, 1988). This six-item scale addresses the presence of perceived social support from a special person, family, and friends (alpha=.85).

Results

Analysis

To examine the underlying structure of the items, a cross-validation factor analysis was carried out using two independent sub-samples of the 1592 respondents. Exploratory factor analysis was conducted with a 25% (n=382) random sample of the respondents. The resulting factor structure was then tested, using confirmatory factor analysis, with the remaining 75% (n=1210) of the cases.

Exploratory Factor Analysis. All but one of the 16 proposed items loaded at or above a level of .3. Only two factors had eigenvalues greater than 1.0 and an examination of the specific loadings indicated that the Indian items tended to load on Factor One, and the White items loaded on Factor Two. The only exception to this pattern was that "English spoken in childhood home" loaded with a negative sign on the Indian factor. The one item that did not meet the .3 loading criterion was the question concerning the importance of Christian spiritual beliefs.

Confirmatory Factor Analysis. Using a cross-validation approach, the structure obtained employing exploratory factor analysis with 25% of the cases was tested using confirmatory factor analysis with the remaining 75% of the respondents. The result was a CFI of .890. In other words, while coming close to a significant fit, the structure was not confirmed. An examination of the factor loadings for this model showed that the absolute value for the English language item was substantially lower than the other loadings on the Indian factor and the Language test indicated that the statistical fit of the model would be improved if the English language item also was considered as part of the White factor. The combination of these two findings led to the elimination the English language item and testing the model again. This trimmed model had a CFI of .913 and the improvement in the Chi Square over the initial model was 244 (13 *df*; $p < .001$). These confirmatory factor analysis results are presented in Table 2.

Constructing the Scales. Based on the results of the confirmatory factor analysis, the ethnic identity measure embodied two scales: an eight-item Indian scale consisting of the questions loading on Factor One, and a six-item White scale consisting of the questions loading on Factor Two. Average-item scale scores were obtained by summing over the variables and dividing by the number of variables with valid responses. The mean Indian scale score was 3.04 (*sd*=.72) and the mean White scale score was 2.55 (*sd*=.90), with Cronbach's alpha coefficients for the Indian scale of .91 and for the White scale of .92.

Validity Assessment was based on the assumption that a strong ethnic identity is related to positive measures of psychological well-being (Phinney, 1990). Oetting and Beauvais (1991) found that respondents who do not identify strongly with any ethnic identity (marginalization) tend to score low on psychological measures of well-being; those who identify with either their minority group (separation) or the mainstream (assimilation) score higher; and those who strongly identify with more than one

Table 2
Confirmatory Factor Analysis - Trimmed Model
(*n*= 879 / CFI = .913)

Item Description	Factor 1	Factor 2	Error
Will be Involved in Indian Traditions as an Adult	.827		.562
Lives by Indian Way of Life	.843		.538
Family is a Success in Indian Way of Life	.806		.592
Family Lives by Indian Way of Life	.825		.565
Will be Successful in Indian Way of Life as an Adult	.806		.592
Important to Follow Traditional Indian Spiritual Beliefs	.801		.599
Family Activities Based on Indian Culture	.738		.675
Tribal Language Spoken in Childhood Home	.437		.899
Lives by White Way of Life		.883	.469
Family is a Success in White Way of Life		.814	.581
Will be Successful in White Way of Life as an Adult		.819	.574
Family Lives by White Way of Life		.859	.512
Will be Involved in White Traditions as an Adult		.783	.622
Family Activities Based on White Culture		.627	.779

ethnic identity (bicultural) tend to have the highest scores. Following this line of reasoning, this analysis was limited to the 808 respondents who scored in the bottom and top thirds on each ethnic identity scale.

To examine the relationship of ethnic identity to psychological well-being, the respondents who identified strongly with either Indian or White, were combined into (a) *High on None*, (b) *High on One*, and (c) *High on Both*. Based on Oetting and Beauvais (1991), it was expected that the first group would have the lowest psychological well-being scores, there would be higher scores for the middle group, and the highest scores would be for the group identifying strongly with both Indian and White. ANOVA results for the 808 respondents are presented in Table 3. These results show that for all four measures of positive psychological well-being, this expected pattern was obtained at statistically significant levels. MANOVA was used to test for the impact of level of ethnic identity on these four dependent variables as a set. The multivariate Wilks Lamda was statistically significant ($p<.0001$) and the univariate results were the same as the individual ANOVA results.

Discussion

Lewin (1948) indicated that individuals require a strong sense of group identification in order to maintain a state of well-being. For American Indians, ethnic identify is a critical component of group identification and is considered by many as crucial to self-concept and psychological functioning (Gurin & Epps, 1975; Maldonado, 1975). In past generations, it was believed that one could not be true to Indian traditions and embrace certain aspects of the mainstream culture such as education. Others believed that Indian people needed to leave behind all aspects of Indian culture if they were to be successful in the mainstream society. However, in today's society, most American Indians "live in two worlds" and the issue of ethnic identity is complicated. The analyses reported here provide empirical support for a bicultural model of ethnic identity that measures investment in both Indian and While identities. The resulting identity scales, used together, provide an opportunity for a rich exploration of the role of ethnic identity in understanding the experience of Indian adolescents. In most Indian communities there is an unwavering belief that for Indian persons of all ages, a strong identification with one or more Indian cultural groups serves as a protective factor for a host of undesirable outcomes such as substance abuse and serious mental health problems. Efforts to enhance the Indian youths' identity with Indian culture are often a major part of prevention programs aimed at youth. Mental health providers working in prevention programs may be able to use the bicultural ethnic identity scale to assess the impact of such efforts. In a more general sense, use of the bicultural scale by mental health providers might allow the examination of the connections between patterns of ethnic identity (separation/assimilation/marginalization/biculturalism) and problems such as alcohol, tobacco, and drug use, depressive symptoms, anxiety, and antisocial behavior.

Table 3
Mean Psychological Well-Being Scores by Level of Ethnic Identity

Identity	Competencies* ($p < .0001$)	Personal Mastery** ($p < .0001$)	Self-Esteem*** ($p < .002$)	Social Support**** ($p < .0001$)
High on None	2.51	3.40	3.38	3.73
High on One	2.81	3.71	3.45	3.99
High on Both	3.06	3.84	3.54	4.17

* $F = 28.63$; $df = 2,733$
** $F = 15.58$; $df = 2,733$
*** $F = 6.18$; $df = 2,733$
**** $F = 8.56$; $df = 2,733$

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