

NIH Public Access

Author Manuscript

Soc Work Res. Author manuscript; available in PMC 2011 March 9.

Published in final edited form as: Soc Work Res. 2001 June 1; 26(2): 101–112.

Ethnic pride, biculturalism, and drug use norms of urban American Indian adolescents

Stephen Kulis, PhD[Professor of sociology],

Department of Sociology, Arizona State University, Box 872101, Tempe, AZ 85287-2101

Maria Napoli, PhD, ACSW[Assistant professor], and School of Social Work, Arizona State University

Flavio Francisco Marsiglia, PhD[Associate professor]

School of Social Work, Arizona State University

Stephen Kulis: kulis@asu.edu

Abstract

This study examines how strength of ethnic identity, multiethnic identity, and other indicators of biculturalism relate to the drug use norms of urban American Indian middle school students. The article distinguishes categories of norms that may affect drug use. Regression analysis of self-reports by 434 American Indian seventh graders attending middle schools in a large southwestern U.S. city indicated that students who had a more intense sense of ethnic pride adhered more strongly to certain antidrug norms than those who did not. Whereas American Indian students with better grades in school held consistently stronger antidrug norms, there were few differences by gender, socioeconomic status, or age. These results have implications in social work practice for better understanding and strengthening the protective aspects of American Indian culture in drug prevention efforts.

Keywords

adolescents; American Indians; biculturalism; drug use

Use of alcohol and other drugs is a serious problem among American Indian youths. As an undifferentiated group, American Indian youths appear to begin drug use U relatively early, have a high prevalence of lifetime use, and use certain substances, such as marijuana, more regularly than other youths. Nearly one-third of all American Indian children try alcohol by age 11 (Mail, 1995). About 20 percent of American Indian adolescents are reported to be heavily involved in some type of drug use-indicated by using several times per week or using multiple drugs-and this proportion has remained largely unchanged since 1980 (Beauvais, 1996). One intertribal study found that 40 percent of American Indian adolescents used marijuana at least once per month (Novins & Mitchell, 1998).

For certain substances, American Indian youths' rate of use appears to be comparatively high. Herring's (1994) review of studies of substance use among American Indian youths found that they had a higher rate of lifetime alcohol use, as well as higher rates of alcohol and marijuana abuse, than the white population or any other ethnic minority group. This pattern also appears in more recent large-scale national studies. Using data from the

An earlier version of this article was presented at the annual meeting of the American Sociological Association, August 2001, Anaheim, CA.

Monitoring the Future survey, American Indian youths reported significantly higher lifetime substance use than non-American Indian youths for marijuana and cocaine, whereas non-American Indian youths reported significantly higher use rates of inhalants and tobacco (Plunkett & Mitchell, 2000). American Indian youths, also reported higher past-30-day use of five of seven substances (that is, marijuana, cocaine, stimulants, alcohol, and barbiturates) than reported by non-American Indian youths (Plunkett & Mitchell).

In comparing American Indian youths with others, it appears to be important to consider regional variations in drug use patterns (Plunkett & Mitchell, 2000). Analysis by geographic regions reveals that American Indian youths have significantly higher lifetime use of some substances in certain regions, and non-American Indian youths have significantly higher use in other regions. When region is controlled American Indian youths use rates are significantly higher than that of other groups on only three of seven substances-alcohol, marijuana, and cocaine (Plunkett & Mitchell). Other use patterns appear to be national, for example, inhalants use is less prevalent among urban than reservation Indian adolescents (Howard, Walker, Walker, Cottler, & Compton, 1999).

Although American Indian adolescents' relatively high use rates of alcohol and some other drugs have been recognized for decades (French & Hornbuckle, 1980), prevention and intervention resources available to Indian communities are negligible (Inouye, 1993). Considerable effort has been made to delineate the scope of the problem (Brady, 1995; Wright & Watts, 1989) and develop strategies for prevention and intervention (Locklear, 1977; Schinke et al., 1988). American Indian and non-American Indian professionals and tribal community leaders agree that community drug problems threaten the social welfare of all Indian adults, children, and families, and they view the challenge of developing successful drug use prevention programs as formidable (Potthoff et al., 1998). Much remains to be learned from the experiences of large numbers of American Indian adolescents who do not use drugs. Of four patterns of drug use found to characterize most American youths-abstaining, using predominantly alcohol, using predominantly alcohol and marijuana, and using multiple substances-abstinence represents the largest group (Mitchell & Plunkett, 2000).

The study presented in this article aims to understand whether and in what way differences in ethnic and cultural identities among American Indian youths relate to their normative resistance to drug use. Our guiding assumption is that urban American Indian youths who have a sense of American Indian pride adhere more strongly to antidrug norms than other American Indian youths. Implications of these findings are presented in relation to the development of prevention programs that might reinforce the drug-resisting norms of American Indian youths that constitute protective processes against drug use.

ETHNIC PRIDE AND BICULTURALISM AS PROTECTIVE FACTORS AGAINST DRUG USE

Stresses related to the legacy of colonialism and acculturation pressures leading to the loss of traditional cultural values and norms are often cited as causal factors in American Indian youths' drug use (Brady, 1995; Locklear, 1977; O'Nell & Mitchell, 1996; Sellers, Wirifree, & Griffiths, 1993; Watts & Gutierres, 1997). Cultural and physical distance from non; American Indian society and its privileges has contributed to the widespread prevalence of American Indian poverty, unemployment, and health-related problems. Although drug use among American Indians cannot be explained as a cultural phenomenon, prevention efforts need to be grounded in cultural identity. American Indian people from different tribes identify a set of common cultural themes pervading their perceptions of and experiences with drug use (Watts & Gutierres). Similarly, a unique American Indian cosmology may

explain, in part, why American Indian adolescents often do not respond well to non-American Indian antidrug programs (Herring, 1994). Attitudes toward the legal system of the majority society have been linked to American Indian permissiveness toward drug use, whereas norms of peers and personal permissiveness appear to influence actual drug use (Sellers et al.). There is a need to understand better the antidrug norms of American Indian youths and how they influence behavior in different environments and at different stages of development.

A positive view of American Indian ethnicity and a strong identification with one or more Indian cultural groups have been identified as protective factors against drug use, (Moran, Fleming, Somervell, & Manson, 1999). Although drug resistance among youths from ethnic minority groups in general and American Indian youths in particular are underexplored areas, some evidence suggests that being embedded in traditional values and practice's provides protection against social, psychological, and health problems by offering opportunities to integrate core traditional values and teachings about contemporary life (Weaver, 1996). Cultural embeddedness also may protect American Indian youths by enhancing pride, self-esteem, interpersonal skills, and positive ethnic identity (Broderick, 1991; Marsiglia, Cross, & Mitchell-Enos, 1998). In turn, drug prevention efforts may be more effective if American Indian beliefs and approaches are incorporated (Beauvais, 1998).

Ethnic identity can be understood to include cultural, affiliative, and subjective dimensions (Phinney, 1992). The cultural aspect encompasses distinctive norms, values, and behaviors transmitted across generations from a common culture of origin. The affiliative dimension involves the selection of friends and acquaintances from the same ethnic group and the modeling of behavior and dress after the group (Phinney). Ethnic pride provides a subjective sense of attachment or belonging to a specific ethnic group (McCreary, Slavin, & Berry, 1996). It is linked to an attitude of self-empowerment as opposed to a feeling of victimization or self-denigration and is associated with higher self-esteem among American Indian adolescents (Getting & Beauvais, 1991).

The way that culture can mediate problems of drug use is shown vividly in the use of peyote and herbs in American Indian cultures. Although their use has long been a spiritual tradition, they have not generally presented widespread problems of abuse. Since drug use emerged as an American Indian problem following colonization (Abbott, 1998; Beauvais, 1998), it is possible that traditional culture may not offer adolescents sufficiently powerful norms to deal with drug abuse. American Indian youths navigate through two different and often contradictory sets of norms and messages. Exposure to non-American Indian norms comes through the mass media, school, peer interaction, and often through family composition. American Indians historically have had high rates of intermarriage with other racial groups (Snipp, 1997), with more than 19 of 20 American Indians closely related to someone from a different racial group (Goldstein, 1999). The multi-racial backgrounds of many current American Indians presents measurement and methodological challenges (Hirschman, Alba, & Farley, 2000). In the present study American Indian students were able to claim their other racial or ethnic roots, and we explicitly modeled the effect of multiracial identities on drug use norms.

Biculturalism may be seen as one response to the pressures of acculturation, or the process of change in an individual's attitudes and behaviors as a result of exposure to a different culture. Acculturation can be conceived in several ways: value acculturation, or knowledge of the culture's language, customs, and history; behavioral acculturation, or participation in the language and customs; and cultural identity or ethnic loyalty, a subjective identification or preference for one culture (Padilla 1980; Szapacznik, Scopetta, Kurtines, & Arnalde, 1978). With greater acceptance of the idea of living in both native and nonnative worlds,

various forms of biculturalism are possible. One is an attitude of taking the best from both cultures. In this sense biculturalism may strengthen protective factors against drug use by affording American Indian youths the opportunity to reap the benefits of both cultural groups. Some research suggests that American Indian youths who have the lowest incidence of drug use are those who are bicultural, having integrated their own tribal culture with adopted non-American Indian values (Herring, 1994; Moran et al., 1999; Getting & Beauvais, 1991).

Biculturalism varies depending on tribal histories and proximity to majority settlements. Compared with those on reservations, urban Indians have a more intense acculturation process. Reservation youths on the fringes of large urban settings-a substantial part of this study's sample-are exposed to majority norms every day because they are commonly bused to attend school in urban school districts where they are a very small percentage of the student enrollment, even in relatively small schools (Marsiglia et al., 1998). Many American Indian communities already have effectively integrated traditional and Western approaches to treatment (Abbott, 1998). The same integration has been less evident in youth drug prevention programs.

THE FOCUS THEORY OF NORMS AND DRUG USE

Several types of norms have been identified as factors in drug use and prevention (Hansen, 1991). Peer norms-adolescents' perceptions of the prevalence of drug use among peers and friends-appear very influential in early drug experimentation, whereas parental norms are influential in decisions to try other or more dangerous drugs (Hansen; Kandel, 1980). The focus theory of norms refers to "descriptive norms" (that is, what people do in the same or similar situations) and distinguishes them from "injunctive norms" (that is, what ought to be done) and "personal norms" (that is, how an individual believes that she or he should act) (Cialdini, Kallgren, & Reno, 1991). Research using the focus theory of norms has demonstrated that the effect of descriptive norms on behavior tends to be situationally specific, whereas the influence of personal and injunctive norms tends to be more generally motivational and transsituational (Cialdini et al.; Reno, Cialdini, & Kallgren, 1993).

The prevailing concept of norms in the drug prevention literature stresses descriptive rather than personal or injunctive norms. Personal norms involve disapproval or approval of drug use, and injunctive norms relate to how an individual envisions the reactions of peers, parents, and other significant others to his or her drug use. The focus theory of norms is useful in understanding normative influences, clarifying conceptual and motivational issues, and eventually in designing effective prevention programs for urban American Indian youths. Drug use habits of American Indian youths have been found to change on the basis of the social norms of the situation (O'Nell & Mitchell, 1996).

STUDY

This study attempts to understand American Indian adolescent drug use through an analysis of differentiated norms rather than through a narrow explanation of individual characteristics. While controlling for an array of other risk factors in adolescent drug use, the study attempts to clarify the role of ethnic affiliations and strength of ethnic identity in the drug use norms of urban American Indian youths. The study examines different categories of antidrug use norms: the drug use of school peers and friends, perceived injunctions against drug use by parents and friends, and personal norms regarding the desirability and consequences of drug use.

Method

Respondents—This article analyzes self-reports from 434 seventh-grade students who identified themselves in a survey as American Indian. They are a subsample of a larger sample of 4,630 students who were enrolled in middle schools in a large southwestern U.S. city in fall 1998. All 45 middle schools in the city were recruited for the study, and 35 schools spread over nine school districts agreed to participate. Based on the state's Department of Education school aggregate statistical profiles, there were no significant differences between the participating and nonparticipating schools on average student enrollment, attendance, retention, standardized test performance, socioeconomic status, ethnicity, gender, and language use (ESL). Every seventh grader in the participating schools was selected as a participant in the study. The participating schools are ethnically diverse: 79 percent of their student population self-identify as non-European American, including 70 percent who identify as Hispanic and 9 percent as African American.

Although all respondents attended schools located in a metropolitan area, some of the schools serve American Indian reservations adjacent to city boundaries. The subsample for our analysis thus includes urban American Indian students as well as some from reservations attending predominately non-Indian schools.

Surveys—University-trained survey proctors administered a 45-minute written questionnaire, available on one form in English and Spanish. In all but two schools the surveys were administered during regular school hours in a seventh grade science, health, or homeroom class, depending on the scheduling and administrative needs of individual schools. In two schools, all seventh graders were assembled together for the survey administration. Students were informed that this was a university research project and were guaranteed confidentiality. All students present when the survey was administered agreed to complete the questionnaire. No contact was initiated with 32 American Indian students who were absent from class during the survey administration, a number estimated from a comparison of the number of respondents and school counts of total American Indian enrollment.

Demographic Profile of Participants

A total of 434 respondents self-identified as American Indian. These students ranged from 11 to 15 years of age, but 88 percent were either 12 or 13 years old. There were nearly equal numbers of boys (48 percent) and girls (52 percent). Most of the students were from lower-income families and received either a free (67 percent) or reduced price school lunch (10 percent). A substantial minority (45 percent) indicated that a language other than English was spoken at home, at least occasionally, but only 6 percent said that the language used with family members was mostly or exclusively other than English.

The ethnic and racial identities of the respondents were often multiethnic. Only 28 percent identified themselves solely as American Indian. The remaining 72 percent also self-identified with one of more other ethnic or racial groups. The most common mixed identity was American Indian and Mexican (39 percent), half of which claimed a third, fourth, or fifth additional identity In the remaining group 21 percent self-identified as American Indian and white, 9 percent as American Indian and African American; 2 percent claimed American Indian and Asian or non-Mexican Latino ancestry.

Variables

The questionnaire consisted of a core demographic section and a series of Likert-type items to capture students' norms in use of alcohol, tobacco, marijuana, and other drugs as well as the strength of their ethnic self-identities. Individual questionnaire items were combined,

using mean values, to construct several indexes. The scales to assess drug use norms were based on 26 questionnaire items that were factor analyzed (results not presented) to confirm that they mapped distinct conceptual domains, and thereby separated into nine scales or single items. The scales with three or more components had acceptable to excellent internal consistency as indicated by Cronbach's alpha coefficients (Table 1).

Two types of antidrug personal norms emerged for subsequent analysis: students' opinion on whether use of alcohol, cigarettes, and marijuana is OK for someone their age; and whether it is OK for anyone to use hard drugs (that is, LSD, crack, or cocaine) or inhalants. The five items for these two scales were scored from 1 = definitely OK to 4 = definitely not OK. Antidrug personal intentions were captured with three items indicating the likelihood that the student would refuse drug offers (of alcohol, cigarettes, and marijuana), each scored from 1 = definitely yes to 4 = definitely no. Antidrug injunctive norms were measured separately for two important reference groups for these students, their parents and friends. The respondents reported how angry their parents would be (ranging from 1 = not at all to 4 =very angry) and how their best friends would react (ranging from 1 = very friendly to 4 =very unfriendly) if they discovered the respondent was using each of three substances. Descriptive drug use norms also were measured for two groups: the proportion of school peers who had tried any drugs, as well as the proportion who used drugs regularly (scores of 1 = hardly any, 2 = some, 3 = half, 4 = most); and the number of their friends who use alcohol, cigarettes, or marijuana at least once a month, scored from 0 to 4 or more.

Another drug norm scale was based on six items indicating how often the respondent thought that alcohol or marijuana use could have positive consequences for users, such as improving group acceptance, enlivening parties, having more fun, decreasing nervousness, sharpening concentration, and making food taste better, each scored 1 = never, 2 = almost never, 3 = sometimes, 4 = often, 5 = most of the time. The final drug norm scale captured the respondents' confidence in their ability to resist an offer of alcohol, cigarettes, or marijuana from a family member, from friends, and from a stranger, with three component items scored from 1 = not at all sure to 5 = very sure.

The major independent variables in the analysis were based on six items that captured the strength of the respondents' attachment to their ethnic or racial identity. A confirmatory factor analysis (not presented) indicated that these items (all scored from 1 = strongly disagree to 4 = strongly agree) mapped three different aspects of identity. We then created three scales with two components each. One scale captured a sense that respondent's behavior and speech were consistent with others from the same ethnic or racial group, which we labeled "ethnic behavior" (for example, "I like to do things that people of my race/ culture do"; "I usually talk like other people from my race/culture"). The second was a sense of "ethnic pride" (for example, "If I could choose, I would still be of my race/culture"; "I feel good about being from my race/culture"). The third tapped feelings of "ethnic negativity" toward one's own group (for example, "Sometimes I am embarrassed by the way people from myrace/culture talk"; "People from my race/culture do not know how to act.")

In multivariate analysis we also modeled the effect of self-identifying with various ethnic or racial labels by distinguishing respondents with various multiethnic identities from those with only an American Indian identity. Based on the distributions of all combinations of multiethnic identity claimed by the respondents, we created dummy variables to contrast the three largest ethnic/racial groupings: (1) American Indian only, (2) American Indian and Mexican, and (3) American Indian and white. That leaves as the reference group those with a non-Mexican and nonwhite identity (usually African American) in addition to that of American Indian. Another indicator of bi-cultural experience and acculturation was the

Kulis et al.

extent to which the student spoke English rather than other languages with family and friends (rated never, seldom, half and half, mostly, or exclusively).

Other predictor variables analyse included gender, which was coded as a dummy variable with females as the reference group. Students' responses to the question "What grades do you usually get in school?" produced a self-reported global assessment of academic achievement, measured on a Likert scale: 0 = mostly Fs, 1 = Ds and Fs, 2 mostly Ds, 3 = Cs and Ds, 4 = mostly Cs, 5 = Bs and Cs, 6 = mostly Bs, 7 = As and Bs, 8 = mostly As. Socioeconomic status was distinguished with a dummy variable contrasting those who did and did not receive a free or reduced-price school lunch. Finally, age was measured in years.

Missing Data

For the antidrug and ethnic identity scales, an individual case was missing no more than one third of the items on the scale, it was included in the analysis by calculating the mean of the nonmissing items. Cases missing more than one third of the components of the scale were excluded from all analyses. One of the dependent variables (norms describing friends' drug use) was based on a single item that was answered by only two-thirds of the respondents, producing a larger number of missing cases than other outcomes examined in the study. In regression analyses, cases were made missing listwise if they were missing any of the variables in the particular model.

Analysis Strategy

We present ordinary least squares regression results that predict the degree to which students adhere to a range of antidrug norms, using several indicators of biculturalism as predictors: strength of ethnic identity, multiethnic affiliations, and English versus other language use with family and friends. All the presented regression analyses were examined for multicollinearity, and variance inflation factors were well below problematic levels (the highest VIF value was 2.5, and most were below 1.2). Bivariate inspection through scatterplots and crosstabulations did not reveal serious departures from nonlinear relationships between the dependent and independent variables, and residuals revealed no evidence of heteroscedasticity.

To meet the requirement that regression analyses be based on a valid model with all the important predictors, we introduced controls for several factors that have been found repeatedly to influence drug use norms and drug use behaviors among youths in the general population: age, gender, academic achievement, and socioeconomic status. Research suggests that these factors may play a particularly critical or unusual role in drug-related outcomes for American Indian youths. For example, alcohol use typically begins at an earlier age among American Indian than non-American Indian adolescents (Roski, Perry, McGovern, Veblen-Mortenson, & Farbakhsh, 1997), and the gender differences in drug use that are found across all ethnic groups (Moon, Hecht, & Jackson, 1999) appear to be even greater between American Indian boys and girls (Wallace, Bachman, O'Malley, & Johnston, 1995). Academic achievement is also a particularly salient factor in American Indian youths drug use. American Indian, experience a positive social adjustment and have lower drug use rates than their peers (Oetting & Beauvais, 1991; Raph et al., 2000). In contrast, American Indian school dropouts are at much greater risk of drug use (Beauvais, 1996).

RESULTS

Students overall tended to adhere rather strongly to antidrug personal norms, antidrug personal intentions, and injunctive parental norms (Table 1). The modal student response

was that it was "definitely not OK" (4 5 percent) for someone their age to use alcohol, cigarettes, or marijuana, with most of the remainder agreeing it was "not OK" (33 percent). An even higher percentage felt that the use of both inhalants and hard drugs by anyone was "definitely not OK" (58 percent), with 28 percent indicating such use as "not OK" Most of the students reported that they would either say "no" (43 percent) or "definitely no" (34 percent) to offers of alcohol, cigarettes, and marijuana and that their parents would be "very angry" (59 percent) or "pretty angry" (25 percent) if they used any of these drugs. They felt that they would encounter less risk of disapproval from friends for using drugs, responding typically that their best friends would be "a little unfriendly" (46 percent), but few expected their best friends to be "very unfriendly" (16 percent). They described fairly prevalent drug use among school peers and friends, estimating on average that between one-half and some of the other students at their school used or had used drugs and that between one and two of their friends used drugs regularly.

The students were not completely confident in their ability to resist drug offers. Although a majority felt "very sure" (38 percent) or "pretty sure" (18 percent) of their ability to do so, the remainder were only "somewhat" (15 percent), "a little" (12 percent), or "not at all sure" (18 percent). Of all the items, the students appeared least likely to have an antidrug orientation on the issue of whether drug use had positive consequences, responding typically that there is "sometimes" (27 percent) or "often" (18 percent) a positive side to using certain drugs.

The multivariate regression models in Table 2 include as predictors strength of ethnic identity (behavior, pride, and negativity) as well as dummy variables modeling the multiple versus single ethnic/racial group self-identifications of the respondents, and English language use. They also introduce controls for gender, academic achievement, socioeconomic status, and age when predicting respondents' adherence to seven drug use norms, their perception of positive drug use consequences, and confidence in their ability to refuse drugs. As demonstrated for seven of nine outcome variables, the most consistent predictor is that American Indian students with higher grades embraced significantly stronger antidrug norms and perceptions. The only exception was that school achievement was not significantly related to descriptive antidrug norms-that is, their perceptions of drug use by school peers and friends.

For two of the outcomes, students with a stronger sense of ethnic pride adhered more strongly to antidrug norms for alcohol, cigarettes, and marijuana. Ethnically proud students were more likely to report that it was not OK for someone their age to use alcohol, cigarettes, or marijuana, and they reported greater confidence in their ability to refuse drug offers from family members, friends, or strangers. Although the "ethnic behavior" index is unrelated to all drug norms and outcomes, there were several instances in which students with negative feelings toward their ethnic identity reported weaker adherence to antidrug norms. That is the case with respect to their weaker disapproval of inhalant and hard drug use by others, their perception of a lesser likelihood of encountering parental anger if they were to use drugs, and their perceptions of more widespread drug use among their school peers.

The respondents' ethnic identification or chosen ethnic label, independent of the strength of their ethnic identity, also related to certain anti-drug norms. Students who identified solely as American Indian were less sure that they would refuse drug offers. The drug use norms reported by students with a combined American Indian and Mexican or American Indian and white identity were not significantly different from those with other identities. In a separate examination of the interactions between measures of strength of ethnic identity and ethnic identity labels (not presented), no significant effects were found, indicating that

strength of ethnic pride, ethnic behavior, and ethnic negativity did not have a different effect on the antidrug norms of multiethnic American Indian respondents from that of their counterparts with solely an American Indian identity. Another indicator of acculturation, however, was related to descriptive norms. Students who spoke exclusively English with family and friends reported more widespread drug use among their friends than those who spoke some language other than English at least some of the time.

Other control variables such as gender and age provided further insights into normative differences among the students. Boys were more certain than girls of their ability to refuse drug offers and reported that fewer of their friends used drugs at least once a month, but gender was unrelated to other norms. A separate investigation of interaction effects between gender and ethnic identity (not presented) also found no significant gender differences in how ethnic pride, ethnic behavior, ethnic negativity, and various types of multiethnic identities predict each of the antidrug norm outcomes. Older students were significantly different from younger students only in that they reported that they were less likely to refuse potential drug offers. Socioeconomic status, as measured by receipt of free or reduced-price school lunches, was unrelated to these antidrug norms, perhaps because this was an overwhelmingly lower-income sample.

Although some interpretable patterns of effects appear in the regression results, the amount of variance in antidrug norms explained by the measures of ethnic identity and biculturalism and the core demographic characteristics of gender, age, and socioeconomic status is modest, 14 percent or less. It is possible that variables describing each student's family, school, and neighborhood context would account for additional variance-for example, measures of parental permissiveness, drug use by family members, and the ethnic and socioeconomic composition of the school and neighborhood.

The large amount of unexplained variance also can be attributed to limitations in the study's design. The causal assumptions implicit in the regression analysis cannot be substantiated with the cross-sectional data used in analysis, and the causal processes are likely to be far more complex than represented here. Middle school is a very dynamic period developmentally, a time when crucial gender and ethnic identities are being established in concert with the development of new social awareness and attitudes. A further limitation is that, although the scales used in analysis appear reliable, the accuracy of student reports about sensitive subjects in a classroom survey is almost surely not perfect, notwithstanding guarantees of confidentiality.

DISCUSSION

The results of the present study are in line with the main themes of the existing literature on American Indian youth drug use prevention (Beauvais, 1998; Mitchell, Novins, & Holmes, 1999; Raph et al., 2000; Roski et al., 1997). Academic achievement, American Indian pride, and certain facets of biculturalism can enhance the development of norms that protect American Indian students against drug use. Academic achievement, as measured by "usual grades" was the strongest predictor. The better students performed in school, the stronger their antidrug norms. American Indian youths in this sample were able to effectively negotiate their school environment and maintain a sense of ethnic pride. Results suggest that this is a sophisticated exercise in biculturalism, with ethnic pride increasing adherence to antidrug personal norms and confidence in ability to refuse drugs, but with no effect on descriptive norms, injunctive norms, or perceptions of positive consequences to drug use. The opposite of ethnic pride-a sense of ethnic shame or embarrassment-looms as a risk factor in the results. Ethnic negativity dampens the strength of antidrug personal norms disapproving the use of hard drugs and inhalants and weakens students' perceptions of the strength of their parents' injunctions against drug use.

Many of the respondents can be identified as bicultural because of their multiethnic selfidentification. This sample followed national trends, as American Indians have one of the highest intermarriage rates in the nation (Goldstein, 1999). Intragroup ethnic diversity was not found to be a pervasive factor explaining differences in the anti-drug norms, however. Although no general pattern appears in the multivariate analysis, students with only an American Indian identity reported less-certain intentions to refuse potential drug offers.

Greater acculturation into mainstream culture, as measured by speaking only English at home and with friends, also was generally unrelated to drug norms when other predictors were controlled. But where it did have a significant effect, it was in the direction of weaker antidrug norms: English only speakers reported more widespread drug use among their friends. This weakening of the protections provided by traditional culture mirrors results found in research on Mexican American students (Marsiglia & Waller, in press). Students may experience some cultural confusion as they attempt to navigate multiple worlds with often contradictory norms.

Another possible effect of acculturation is the narrowing of gender differences in drug norms and the unexpected direction of the gender differences. American Indian girls reported feeling less certain than boys that they would refuse drug offers and described more of their friends as drug users, although all other antidrug norm outcomes were unrelated to gender. Given the much larger gender gap in actual drug use reported in the literature, especially among American Indian adolescent boys-who are considerably more likely to be users than are girls-these findings raise important questions for future research about how antidrug norms may be connected to drug use prevention in ways that differ for American Indian girls and boys.

IMPLICATIONS FOR PRACTICE

Our findings suggest that to develop and strengthen antidrug norms, a good school experience is needed, a sense of American Indian pride should be nurtured, and biculturalism needs to be recognized and addressed. A positive school experience, as measured here by attaining good grades, needs to be integrated into prevention programs. School-based prevention programs cannot be parallel to the basic academics of the school.

What can social workers do in partnership with teachers to guarantee school achievement as a means to maintain and strengthen antidrug norms? Earlier research (Mitchell et al., 1999; Roski et al., 1997) and these findings indicate that prevention for American Indian youths must begin in early childhood, preferably in the primary grades. This is the prime time not only to lay academic foundations, but also to initiate prevention measures against drug use and reinforce antidrug norms.

As educators, community leaders, and social workers design prevention programs they need to consider the Intragroup diversity existing in many American Indian communities and its implications for norm development. To help American Indian youths, alliances must be created among community and family mentors who have recovered from drug use, along with community leaders and extended family, to protect the future generation from drug use. American Indian community mentors and social workers need to become involved in the schools as cultural mediators and interpreters for youths, parents, and extended family members and to empower members of the community to become involved in the educational experiences of American Indian youths (Dubois & Neville, 1997).

The high dropout rate for American Indian youths reflects an educational system that needs to be challenged and modified. Because the findings indicate that strong academic achievement and feeling pride in one's tribal identity are key ingredients in drug use prevention, the schools might partner with local tribal leadership to teach American Indian history from an American Indian's perspective. American Indian youths then can be perceived by their classmates as possible exemplars of ethnic pride, further reinforcing their sense of American Indian pride. However, because of multiethnic identities, blanket prevention messages may not work. Perhaps we cannot speak of an American Indian prevention program. We need to assess the diversity within the community, identify the existing antidrug norms and support them, while we also identify the norms that may place students at risk and attempt to change them.

CONCLUSION

This study shows that ethnic pride in general, regardless of the ethnic milieu of the community, has a positive prevention effect. To strengthen the ethnic pride of American Indian students, we may have to integrate elements of other cultures in their midst. Core American Indian values and traditions can be maintained but probably cannot be approached in isolation, because most American Indian youths are part of a bicultural or multicultural world.

References

- Abbott PJ. Traditional and western healing practices for alcoholism in American Indian and Alaska Natives. Substance Abuse & Misuse 1998;33:2605–2646.
- Beauvais F. Trends in drug use among American Indian students and dropouts, 1975 to 1994. American Journal of Public Health 1996;86:1594–1598. [PubMed: 8916526]
- Beauvais F. American Indians and alcohol. Alcohol Health and Research World 1998;22:253–259. [PubMed: 15706751]
- Brady M. Culture in treatment, culture as treatment. A critical appraisal of developments in addictions programs for indigenous North Americans and Australians. Social Sciences and Medicine 1995;41:1487–1498.
- Broderick, R. The red road to recovery. Minneapolis: St. Paul Magazine; 1991 Jan. p. 52-55.
- Cialdini RB, Kallgren CA, Reno RB. A focus theory of normative conduct-A theoretical refinement and reevaluation of the role of norms in human behavior. Advances in Experimental Social Psychology 1991;24:201–234.
- Dubois DL, Neville HA. Youth mentoring: Investigation of relationship characteristics and perceived benefits. Journal of Community Psychology 1997;25:227–234.
- French L, Hornbuckle J. Alcoholism among Native Americans: An analysis. Social Work 1980;25:275–280.
- Goldstein JR. Kinship networks that cross racial lines: The expectation or the rule? Demography 1999;36:399–407. [PubMed: 10472503]
- Hansen WB. School-based substance abuse prevention: A review of the state of the art in curriculum, 1980–1990. Health Education Research 1991;7:403–430. [PubMed: 10171672]
- Herring RD. Substance use among Native American Indian youth: A selected review of causality. Journal of Counseling and Development 1994;72:578–584.
- Hirschman C, Alba R, Farley R. The meaning and measurement of race in the US census: Glimpses into the future. Demography 2000;37:381–393. [PubMed: 10953811]
- Howard MO, Walker RD, Walker PS, Cottler LB, Compton WM. Inhalant use among urban American Indian youth. Addiction 1999;94:83–95. [PubMed: 10665100]
- Inouye DK. Our future is in jeopardy: The mental health of Native American adolescents. Journal of Health Care for the Poor and Underserved 1993;4:6–8. [PubMed: 8448279]
- Kandel DB. Drug and drinking behavior among youth. Annual Review of Sociology 1980;6:235-285.

Locklear H. American Indian alcoholism: Program for treatment. Social Work 1977;22:202-207.

- Mail PD. Early modeling of drinking behavior by Native American elementary school children playing drunk. International Journal of the Addictions 1995;30:1187–1197. [PubMed: 7591357]
- Marsiglia FF, Cross S, Mitchell-Enos V. Culturally grounded group work with adolescent American Indian students. Social Work with Groups 1998;2:69–82.
- Marsiglia FF, Wakrer MA. Language preference and drug use among southwestern Mexican American middle school students. Children & Schools. (in press).
- McCreary ML, Slavin LA, Berry EJ. Predicting problem behavior and self-esteem among African American adolescents. Journal of Adolescent Research 1996;11:216–234.
- Mitchell CM, Novins DK, Holmes T. Marijuana use among American Indian adolescents: A growth curve analysis from ages 14 through 20 years. Journal of the American Academy of Child and Adolescent Psychiatry 1999;38:72–78. [PubMed: 9893419]
- Mitchell CM, Plunkett M. The latent structure of substance use among American Indian adolescents: An example using categorical variables. American Journal of Community Psychology 2000;28:105–125. [PubMed: 10824276]
- Moon DG, Hecht ML, Jackson KM. Ethnic and gender differences and similarities in adolescent drug use and refusals of drug offers. Substance Use & Misuse 1999;43:1059–1083. [PubMed: 10359222]
- Moran JR, Fleming CM, Somervell P, Manson SM. Measuring bicultural ethnic identity among American Indian adolescents: A factor analysis study. Journal of Adolescent Research 1999;14:405–426.
- Novins DK, Mitchell CM. Factors associated with marijuana use among American Indian adolescents. Addiction 1998;93:1693–1702. [PubMed: 9926532]
- Oetting GR, Beauvais F. Orthogonal cultural identification theory: The cultural identification of minority adolescents. International Journal of the Addictions 1991;25:655–685. [PubMed: 2101397]
- O'Nell TD, Mitchell CM. Alcohol use among American Indian adolescents: The role of culture in pathological drinking. Social Sciences and Medicine 1996;42:565–578.
- Padilla, AM. The role of cultural awareness and ethnic loyalty in acculturation. In: Padilla, AM., editor. Acculturation: Theory, models, and some new findings. Boulder, CO: Westview Press; 1980. p. 47-84.
- Phinney J. The multigroup ethnic identity measure: A new scale for use with adolescents and young adults from diverse groups. Journal of Adolescent Research 1992;7:156–176.
- Plunkett M, Mitchell CM. Substance use rates among American Indian adolescents: Regional comparisons with monitoring the future high school seniors. Journal of Drug Issues 2000;30:575– 591.
- Potthoff SJ, Bearinger LH, Skay CL, Cassutto N, Blum RW, Resnick MD. Dimensions of risk behaviors among American Indian youth. Archives of Pediatrics and Adolescent Medicine 1998;152:157–163. [PubMed: 9491042]
- Raph P, Bearinger L, Erickson S, Skay C, Potthoff S, Stone S. Conduct disorder in American Indian youth: What protects in urban settings? Journal of Adolescent Health 2000;26:99.
- Reno RR, Cialdini RB, Kallgren CA. The transsituational influence of social norms. Journal of Personality and Social Psychology 1993;64:104–112.
- Roski J, Perry CL, McGovern PG, Veblen-Mortenson S, Farbakhsh K. Psychosocialfactors associated with alcohol use among young adolescent American Indians and whites. Journal of Child & Adolescent Substance Abuse 1997;7:1–18.
- Schinke S, Orlandi M, Botvin G, Gilchrist L, Trimble J, Locklear V. Preventing substance abuse among American Indian adolescents: A bicultural competence skills approach. Journal of Counseling Psychology 1988;35:87–90. [PubMed: 17392927]
- Sellers CS, Winfree LT, Griffiths CT. Legal attitudes, permissive norm qualities, and substance use-A comparison of American Indian and non-Indian youth. Journal of Drug Issues 1993;23:493–513.
- Snipp CM. Some observations about racial boundaries and the experience of American Indians. Ethnic and Racial Studies 1997;20:667–689.

- Szapacznik J, Scopetta MA, Kurtines W, Arnalde MD. Theory and measurement of acculturation. Revista Interamericana de Psicologia 1978;12:113–130.
- Wallace, JM.; Bachman, JG.; O'Malley, PM.; Johnston, LD. Racial/ethnic differences in adolescent drug use. In: Botvin, GJ.; Schinke, S.; Orlandi, MA., editors. Drug use prevention with multiethnic youth. Thousand Oaks, CA: Sage Publications; 1995. p. 59-80.
- Watts L, Gutierres S. A Native American-based cultural model of substance dependency and recovery. Human Organization 1997;56:9–18.
- Weaver H. Social work with American Indian youth using the orthogonal model of cultural identification. Families in Society 1996;76:98–107.
- Wright R, Watts T. Alcohol problems and minority youth [Special issue]. Journal of Drug Issues 1989:18.

Acknowledgments

The research reported in this article is part of the Drug Resistance Strategies Project, funded by the National Institute on Drug Abuse, grant no. 5 T01 DA05629-07.

TABLE I

Descriptive Statistics for Dependent and Independent Variables Measuring Antidrug Use Norms among American Indian Adolescents

Kulis et al.

Variable	N	Μ		SD	Cronbach's a
Personal norms and personal intentions					
Drug use (alcohol [A]/cigarette [C]/marijuana [M] use OK at your age	431	3.29		0.84	.84
Not OK for people to use inhalants and hard drugs	375	3.40		0.85	.86
Definitely would refuse drugs (A/C/M)	432	3.23		0.76	.85
Injunctive norms:					
Parents angry at respondent's A/C/M use	386	3.45		0.87	.75
Friends disapprove of respondent's drug use	402	3.01		0.75	.84
Descriptive norms:					
Drug users in respondent's school	430	2.68		0.90	.73
Number of friends using drugs (1 item)	260	1.63		1.33	
Agree there are positive consequences of drug use	396	2.21		1.10	.78
Confidence in ability to refuse drugs	404	3.57		1.48	.76
Ethnic behavior	432	2.78		0.68	.56
Ethnic pride	434	3.41		0.65	.70
Ethnic negativity	434	1.87		0.76	.57
Ethnic label:					
American Indian only (yes $=.1$; no $= 0$)	434		28.0	0.44	
American Indian and Mexican (yes $= 1$; no $= 0$)	434		39.0	0.48	
American Indian and white (yes $= 1$; no $= 0$)	434		21.0	0.40	
Gender (male = 1; female = 0)	434		48.0	0.50	
English exclusively used with family and friends	434	4.19		1.06	
Usual grades (0–9, mostly Fs to mostly As)	431	6.33	76.0	0.42	
Receives free or reduced-cost school lunch (ves $= 1$; no $= 0$)	434	13.04		0.67	

NIH-PA Author Manuscript

Kulis et al.

Regression Analysis of Variables Predicting Antidrug Use Norms among American Indian Adolescents

	Ч	ersonal N	orms					Injuncti Norms	ve		D	escriptiv	e Norms					
	Alcohol/Cig Mariju	arettes/ ina	Inhalar Hard Di	nts/ rugs	Persona Intentio	l IS	Parent	S	Friene	ls	School 1	eer,	Friend	°s	Positive D Consequen	rug, ices	Drug Ref Confide	usal nce
Predictor	q	SE	q	SE	q	SE	q	SE	q	SE	q	SE	q	SE	q	SE	q	SE
Ethnic behavior	-0.046	.065	-0.053	.070	-0.055	.057	0.016	690.	0.002	.061	-0.014	.071	0.026	. 132	-0.075	680.	0.117	.114
Ethnic pride	0.237^{**}	690.	0.145	.075	0.100	.060	0.126	.074	0.031	.065	0.075	.074	-0.031	. 141	0.137	.095	0.299^{*}	.123
Ethnic negativity	-0.017	.055	-0.13	.059	-0.042	.048	-0.177 **	-0.036	.050	.057	0.128^{*}	.060	-0.109	. 115	0.072	.075	-0.153	.095
American Indian only	-0.064	.141	0.026	.155	-0.260*	.125	0.198	.149	.0.056	133	0.292	.155	-0.154	.308	0.117	.195	-0.068	.245
American Indian and Mexican	-0.114	.136	-0.113	.150	-0.215	.119	-0.057	.143	-0.119	.129	0.239	.149	0.196	.296	0.028	.189	-0.408	.236
American Indian and white	0.155	.149	0.106	.164	-0.002	.131	0.297	.158	0.216	.140	0.092	.163	-0.171	.321	0.010	.206	0.168	.262
Male	-0.086	.082	-0.107	680.	0.238^{**}	.073	0.046	.087	-0.041	.077	-0.145	.091	-0.425	.170	0.101	.113	0.101	.146
English with family/friends	0.001	.040	0.034	.044	0.006	.035	-0.001	.043	-0.054	.039	0.060	.044	0.165^{*}	.084	060.0-	.056	0.071	.070
Usual grades	0.055^*	.022	0.087**	.024	0.090^{**}	.019	0.11	.023	0.062^{**}	.020	-0.037	.024	-0.078	.043	-0.129 **	.030	0.177^{**}	.038
Free/reduced lunch	0.057	860.	0.143	.105	0.162	.086	0.132	.102	0.002	.091	-0.031	. 107	0.057	.198	-0.115	.132	0.104169	
Age	-0.004	.061	0.003	.068	-0.146	.053	-0.075	.066	-0.050	.057	0.024	.067	0.029	.131	0.004	.087	-0.041	.110
Intercept	2.381		2.503		4.354		3.324		3.460		1.794		1.469		3.493		1.630	
Ν	425		372		426		382		399		425		257		392		399	
Adjusted R2	0.067		0.093		0.118		0.140		0.062		0.038		0.064		0.078		0.126	
These items are scored to indicate	strength of no	rms favori	ng rather th	ian oppos	ing drug use													
* p<.05.																		
** <i>p</i> <.01.																		