“Serious Drinking,” “White Man’s Drinking” and “Teetotaling”: Drinking Levels and Styles in an Urban American Indian Population*

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ABSTRACT. The differences between abstainers, moderate drinkers and heavy drinkers were examined in American Indians living in Los Angeles, California. Equal numbers of these three groups (total N = 155) were selected from four tribal groups: Siouan-speaking, Navajo, Five Civilized Tribes (of eastern Oklahoma origin) and indigenous California tribes. The relative predictive powers of sociostructural, cultural and psychological variables in accounting for current drinking levels were then assessed. The results indicated that, much as for non-Indian populations, heavy drinkers were more likely to have had heavy-drinking models in the family of origin, to be men and to score high on psychophysiological stress indices. Socioeconomic status and traditionalism were found to be weaker predictors of drinking level. Differences in drinking styles over individuals’ lifetimes and between tribes were also studied. Ethnographic observations, case vignettes and statistical summaries of the sample by tribe and by drinking level showed that tribal origins, age and socioeconomic status influenced drinking style and attitudes toward alcohol, even if they did not predict the current drinking level of the subjects. (J. Stud. Alcohol 40: 237–250, 1984)

American Indians have a higher alcohol consumption than other ethnic groups or subgroups in the United States. Arrest statistics, random-sample surveys, national task force reports, professional and social-service-agency epidemiological studies, ethnographic monographs and Indians’ own identification of drinking as their leading health problem all support this observation (Burns et al., 1974; Federal Bureau of Investigation, 1971; Ferguson, 1968; Graves, 1971; Indian Health Service, 1970; Kunitz et al., 1971; Reasons, 1972; Shore, 1974; Slater and Albrecht, 1972; Stewart, 1964; Suarez, 1971).

Indians have also suffered more cultural and economic upheaval than any other ethnic minority in this country. Indians who lost their traditional subsistence base because of successive waves of European immigration suffered prolonged, profound and systematic exploitation (Cook, 1976; Deloria, 1969; Fritz, 1963; Hamer, 1965; Harmon, 1941; Jorgenson, 1971; Kinney, 1937; Officer, 1971; Spicer, 1969). Several authors have tried to account for differences in drinking levels between Indians and other ethnic groups (Bacon et al., 1965; Ewing et al., 1974; Farris and Jones, 1978; Fenna et al., 1971; Horton, 1943; Wolff, 1972; Zeiner et al., 1977) or differences in drinking levels among Indian tribal communities (Kunitz and Levy, 1974; Leland, 1981; Levy and Kunitz, 1974; Price, 1975; Stratton et al., 1978; Westermeyer, 1974) by referring to these profound social changes.

Given the high rates of alcohol consumption and related sequelae in Indians as a group, it is often overlooked that substantial numbers of them do not drink at all or drink in moderation. How do these Indians differ from the heavier drinkers? We are not asking why one tribe drinks more than another or why Indians as a group drink more than non-Indians but rather what characterizes intratribal differences in drinking levels. Are there common social or demographic characteristics, for example, among abstainers from Sioux, Navaho, California and Eastern Oklahoma regions? Do the antecedents of moderate drinking among the Sioux or Navaho differ from those among the Eastern Oklahoma and California groups? One goal of the present study is to compare several antecedent variables, in addition to tribal affiliation, for their ability to predict drinking levels within these four tribal groups.

We also explore the antecedent factors that differentiate Indians who had drunk heavily in the past but
were abstinent at the time of interview from those who had never drunk at all or had drunk only briefly and experimentally long before. Our results indicate that predictors for classification into one of these groups are somewhat different from predictors for classification as either a current moderate or heavy drinker. Differences in the drinking pattern of the family of origin and tribal affiliation play a larger role in predicting classification for these currently abstaining subsets.

The second section of this article considers the drinking styles and life histories of the participants. Although tribal affiliation, socioeconomic status and degree of traditionalism were unrelated to current drinking levels, each of these variables did influence the ways, places and stages of life in which Indians chose to drink.

**Method**

**Sample design**

Our research design differed somewhat from most drinking-pattern studies in that we did not do a single-culture ethnography or generate a random sample to examine prevalence rates. Instead, we systematically and nonrandomly selected approximately equal numbers of heavy and moderate drinkers, and nondrinkers from each of the four most heavily represented tribal groups in Los Angeles: Sioux (including 11 individuals from other Siouan-speaking tribes—Winnebago and Omaha); Navaho; indigenous California tribal groups; and the “Five Civilized Tribes” of Eastern Oklahoma—Cherokee, Creek, Chickasaw, Choctaw and Seminole. All participants lived in urban areas of Los Angeles and Riverside counties, California, at the time of the interview. The sampling design and number of subjects in each cell are shown in Table 1.

The abstainer category included both lifetime abstainers and subjects who had consumed alcoholic beverages at moderate to heavy levels in the past but who, when interviewed, reported total abstinence for at least the previous 6 months. There was considerable variation across tribal groups in the ratio of lifetime abstainers to former drinkers. Slightly more than one-half of the Navaho \((N = 7)\) and Eastern Oklahoma \((N = 8)\) abstainers were former drinkers vs all of the Sioux \((N = 16)\) and indigenous California \((N = 7)\) abstainers. Of the 50 abstainers, 38 were former heavy drinkers. The sex of the subjects differed by drinking category: 52% of the abstainers, 23% of the moderate drinkers and 71% of the heavy drinkers were men. Men comprised 60% of the Navaho and California subsamples and about 40% of the Siouan and Eastern Oklahoma tribal groups.

The sample was selected by means of network and snowball recruitment strategies. We contacted Indians who were known to Weibel from her previous work in the community (1978, 1981) or to members of our Indian field staff as exemplars of certain drinking levels. We initiated a wide range of social network nodal points and never interviewed more than three people in one network. This sampling strategy minimized the error of oversampling a few highly accessible but nonrepresentative “cliques.” As indicated above, we were unable to locate the desired number of participants in some categories (for example, lifetime abstainers among the Siouan-speaking and California groups).


**Measures of drinking level**

The participants' self-reports of their quantity and frequency of alcohol consumption were used to classify their drinking in two ways: (1) a three-level categorization of abstainers, light to moderate drinkers and heavy drinkers; and (2) a six-point scale combining quantity and frequency. Both classification systems were based on quantity and frequency scales developed by Cahalan et al. (1969). The quantity scale was scored 0-4, the lowest score indicating no consumption of alcoholic beverages and the highest designating five or more drinks per occasion. The frequency scale was a 10-point measure ranging from abstinence at the lowest score to drinking an average of three or more times daily.

We used a three-level classification of current and former drinking levels for cross-tabulations with other characteristics of the sample. The descriptive profiles in this article are drawn principally from such cross-tabulations. Participants who were not currently drinking were included in the abstainer category. Those who drank no more than twice weekly and consumed no more than four drinks on each occasion were classified as moderate drinkers. The

<table>
<thead>
<tr>
<th>Tribal group</th>
<th>Heavy drinkers</th>
<th>Moderate drinkers</th>
<th>Abstainers</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navaho</td>
<td>10 (17%)</td>
<td>14 (30%)</td>
<td>13 (26%)</td>
<td>37 (24%)</td>
</tr>
<tr>
<td>Sioux</td>
<td>21 (36%)</td>
<td>6 (13%)</td>
<td>16 (32%)</td>
<td>43 (28%)</td>
</tr>
<tr>
<td>E. Oklahoma</td>
<td>12 (21%)</td>
<td>13 (28%)</td>
<td>14 (28%)</td>
<td>39 (25%)</td>
</tr>
<tr>
<td>California</td>
<td>15 (26%)</td>
<td>14 (30%)</td>
<td>7 (14%)</td>
<td>36 (23%)</td>
</tr>
<tr>
<td>Total</td>
<td>58 (100%)</td>
<td>47 (100%)</td>
<td>50 (100%)</td>
<td>155 (100%)</td>
</tr>
</tbody>
</table>
category, heavy drinkers, consisted of participants who had three or four drinks more than twice per week or five or more drinks per occasion.

The second, six-point measure of present and past drinking was constructed for use in the correlations and multiple regressions. To obtain this score we recorded the Cahalan et al. (1969) measures of drinking frequency and amount consumed per drinking occasion and summed the recorded scores. Each scale was recoded to a 4-point measure (0–3), with a score of 0 representing no drinking, 1 indicating up to two drinks per occasion and 3 designating five drinks or more per occasion. The recoded frequency measure ranged from once or twice per week (a score of 1) to daily or more often (a score of 3). When the two measures were combined into one, the range of scores was from 2 (up to two drinks, as often as twice weekly) to 6 (daily consumption of five or more drinks). Abstainers’ scores of 0 were recoded to 1 to produce a 6-point measure. This procedure was employed for current drinking and, among the current abstainers, for previous drinking also.

The reliability of participants’ self-reports on drinking was verified in several ways. First, we examined the internal consistency of subjects’ comments about their drinking behavior in the interviews. When discrepancies with their initial self-reported drinking levels occurred, we elected to use the higher frequency and amount reported on both scales.

Second, we examined the external validity of these reports through ethnographic observations of interviewees in public drinking and nondrinking settings throughout Los Angeles. Of the 155 Indian participants interviewed in Los Angeles, Weibel (1982) observed 90 at one or more public events that Indians attend regularly. Of those 90 participants, 60% were observed drinking at a level that they had identified as their modal drinking level; 30% reported drinking heavily or moderately but when observed drank either moderately or not at all. Only 10% appeared to be drinking more heavily in public than they had self-reported. This subgroup consisted of nine subjects: two chronically heavy drinkers who were abstaining and in treatment at the time of the interview but had reverted to heavy alcohol use by the end of the fieldwork period and seven subjects who had described their drinking as “periodic” or “moderate” but who, when observed, appeared to be intoxicated and unable to maintain socially appropriate comportment. From these observations, we believe that our classification of the participants’ current drinking levels at the time of the interview was broadly accurate and may have even slightly overestimated drinking levels in public places.

The theoretical model: Predictors of drinking level differences

Research on the origins of drinking patterns among Indians (as well as other ethnic groups) can be divided into four broad theoretical categories: sociocultural, cultural, psychological and genetic–physiological. Our selection of antecedent or predictor variables includes sociocultural, cultural, and psychological ones. We did not collect data that could be used to test genetic–physiological hypotheses. The small number of studies focusing on genetic–physiological issues among Indians (Bacon et al., 1965; Ewing et al., 1974; Farris and Jones, 1978; Fenna et al., 1971; Wolff, 1972; Zeiner et al., 1977) mandates future expert, well-designed and procedurally sound analysis of the association between genetic predisposition, drinking level, and the behavioral and physical sequelae of drinking.

Sociostructural predictors of drinking level. Sociostructural theories of problem drinking have focused on the history of economic and political oppression among Indians on reservations and among those who have migrated to urban areas (Fenna et al., 1971; Graves, 1970; Hamer, 1965; Heath, 1981; Jorgenson, 1971; Officer, 1971). It is presumed that, like all other members of the lower classes and working poor in the U.S., Indians are exploited and suffer all the indignities of lowered esteem, insecurity and economic powerlessness. Unemployed men and women are more likely to drink and to get into trouble when they do drink (Cahalan and Cisin, 1976). Thus, Indians are thought to drink more than other ethnic groups because they are the quintessential victims of “externally induced cultural stress,” as one Indian author phrased it (Deloria, 1969).

To assess whether Indians of a lower socioeconomic status drink more or with a different style than Indians who are economically better off, we analyzed the relationship between the respondents’ occupational status, income, years of formal education, and drinking level. Age and sex were also included as sociostructural factors.

Cultural and historical predictors of drinking level. Among contemporary Indian societies, cultural differences persist in languages, ceremonial traditions, folk medicines, world view and, there is some evidence to suggest, drinking styles (Burns et al., 1974; Foreman, 1934; Grobsmith, 1981; Heizer and Whipple, 1967; Kluckhohn and Leighton, 1962; Kroeger, 1953; Kunitz and Levy, 1974; Kunitz et al., 1971; Leland, 1981; Price, 1975; Stratton and Zeiner, 1977; Stratton et al., 1978; Wax, 1971; Westermeyer, 1974).

Levy and Kunitz (1974) have suggested that loosely organized Indian societies, in which vision quests and the use of hallucinogenic drugs are integral to spiritual belief and ceremonial systems, will have institutionalized mechanisms for drinking. In these societies, patterned behavior, such as public intoxication, will not be negatively sanctioned. Drinking until psychic release is achieved will be the goal of drinking bouts (Mohatt, 1972). The Navaho and Sioux are the tribal groups in our study that closely fit this cultural model. The very public and “ecstatic” character of Navaho and Sioux drinking, however, is considered to be deviant behavior in non-Indian urban settings and often results in negative social sanctioning (Ferguson, 1968; Graves, 1970; Hurt and Brown, 1965; Maynard, 1969; Mohatt, 1972; Whittaker, 1963).

Levy and Kunitz (1974) also suggest that highly structured societies place more negative sanctions on drinking. In these societies, drinking is less public and more covert, involves more feelings of guilt and shame about excessive drinking
and is accompanied by adverse medical sequelae. The Five Civilized Tribes from Eastern Oklahoma are examples of more highly structured tribal groups (Foreman, 1934; Kunitz et al., 1971; Kunitz and Levy, 1974; Stratton and Zeiner, 1977; Weibel, 1978).

Whittaker (1963) hypothesized that high rates of drunkenness on the Standing Rock Sioux Reservation were attributable to poor living conditions, the breakup of Sioux culture, repressed aggression and the lack of social sanctions against drinking. Maynard (1969) saw problem drinking among Oglala Sioux as a means of dealing with acculturative stress. Kuttner and Lorincz (1967) found that feelings of group inferiority, anxiety over substance, acculturative stress, hostility or submissiveness to White authority, and frustration of ambition were neither characteristic of Sioux drinkers nor primary motivations for drinking. Rather, weakened family structures and familial predispositions to support and sustain drinking have been suggested (Hurt and Brown, 1965) as antecedent factors of Sioux drinking patterns.

Stratton et al. (1978), in their studies of alcohol-related problems within the diverse Oklahoma Indian populations, also noted the predominance of alcohol-related problems among Indians of the Great Plains. The Cheyenne and Arapaho of Western Oklahoma suffer a significantly higher mortality from alcohol-related causes than do eastern Oklahoman Indians (predominantly Cherokee, Creek, Choctaw, Chickasaw and Seminole). Stratton et al. suggested that profound social and historical differences between the two groups accounted for the differences in sequelae of excessive alcohol consumption. The eastern tribes were primarily horticulturalists whereas the western tribes were nomadic hunters. The eastern tribes were introduced to alcoholic beverages at least 100 yr before the western tribes. Also, the eastern tribes had used fermented drinks for ceremonial purposes before European contact. They, therefore, may have had a cultural disposition to use alcohol in more restricted and ritualized ways and may have had longer to assimilate the more secular use of alcoholic beverages into their own traditional use of ceremonial intoxicants. The influence of fundamentalist Protestant churches and their heavily negative sanctions on drinking may also account for the relatively rare incidence of alcohol-related problems among “Bible Belt” eastern Oklahoman Indians.


Burns et al.’s (1974) random sample of Los Angeles Indian drinking suggests some correlation between type of tribal organization and drinking level. Sioux respondents drank more and were less likely to be abstainers than other tribal groups. The Navahos drank less than other tribal groups; Navaho women, in particular, had a very high rate of abstinence (56%) and were least likely to be current or past heavy drinkers. The eastern Oklahoma Indians also reported less heavy drinking than other tribal groups.

Our measures of cultural antecedents of drinking behavior included tribal affiliation, percentage of Indian ancestry, marriage endogamy, and the degree of adherence to traditional Indian customs such as participation in religious ceremonies and powwows, use of American Indian medicines and healing practices, and use or knowledge of the tribal language.


Results

Demographic profile

Participants had to be at least one-quarter Indian to be included in the study; 64.5% of the sample claimed full Indian ancestry. The subjects had a median age of 35.5 and were evenly divided by sex (78 men and 77 women). The median length of residence of immigrants in the city was 12.5 yr at the time of the interview; 10% of the participants had been born in Los Angeles. A total of 37% were currently married. Of those who were married or living with an unmarried mate, three out of four had an Indian mate. Over one-half of the sample had at least some postsecondary education but one-fourth had not completed high school. Of the
sample 37% were unemployed, and another 47% were unskilled laborers or semi-skilled and skilled technicians; 16% were employed in a professional, administrative or managerial capacity.

On variables such as length of time in Los Angeles, sex ratio, degree of Indian ancestry and drinking-level distribution, our sample closely paralleled the demographic profile of the Los Angeles Indians in Burns et al.’s (1974) random sample (N = 512). However, our sample was slightly older, had more education and included fewer unemployed. There was also evidence of less family stability in our sample (fewer marriages, and more divorces and separations). Since our sample was interviewed in 1978 and 1979, the demographic differences may reflect socioeconomic trends (inflation, a stable but aging urban Indian population and selective migration) in the Los Angeles Indian population between 1973 when Burns et al. collected their data and the time of our field work.

Because of our sampling strategy we reached fewer “invisible” Indians—those who live and work in Los Angeles without any regular participation in Indian activities. Therefore, the tendency to maintain and exhibit one’s Indian identity was probably higher in our sample than it would have been in a random sample of the Los Angeles Indian population.

Demographic characteristics differed widely across the tribal groups in this study. Large majorities of Navahos and eastern Oklahoma Indians, for example, claimed full Indian ancestry but slightly less than one-half of the Sioux and less than one-fifth of the California Indians did. Mean ages across the tribal groups ranged from 30.5 for the Navahos to 41.6 for the Five Civilized Tribes. In two groups (the Navaho and California), women outnumbered men by a ratio of 3:2; the ratio was reversed in the other two groups. Most of the participants from the Five Civilized Tribes had migrated to Los Angeles before 1956, whereas most Navahos and Sioux came there in the mid-1960s. All but three of the California Indians had been born in the Los Angeles area. Marital patterns in the tribal groups were associated with age. One-half of the participants from the Five Civilized Tribes were married; the largest concentration of never-married participants (41.7%) was among the Navahos. In contrast, there was little tribal variability in education, job and income level.

Predictors of drinking level differences

Tribal differences as interaction effects. Before we could assess the relative impact of each variable and each class of variables on drinking level in our sample, we needed to account for the possible interaction effects of tribal background with our set of selected antecedent factors. By design, our sample included fairly equal numbers of men and women at the three drinking levels in each of the four tribal groups. Tribal affiliation thus acted as a covariate for the other antecedent factors, not as an antecedent factor. Given this condition, we first performed an analysis of covariance to search for interactions between tribal group and our other independent variables.

The results indicated no consistent interaction effects between our set of antecedent variables and tribal status in their prediction of drinking level. There were also no significant correlations among the antecedent variables used in the regression analysis of the entire sample. This finding does not mean that tribal and cultural factors do not affect drinking level among Indians. On the contrary, tribal affiliation caused a major difference in prevalence rates, drinking styles and drinking levels among subsets of our population. The covariance analysis indicated no statistically significant interaction effects between tribal affiliation and other antecedent variables (degree of Indian ancestry, age, income, sex, stress level, etc.) that we used to predict current drinking levels in this sample. Thus, it was not necessary to control for tribal group in our subsequent analysis.

The entire sample. To determine the primary predictors of drinking level in our sample, we performed a series of stepwise multiple-regression analyses using the antecedent variables discussed above as independent predictor variables and the measure of current drinking frequency and amount as the dependent variable. One useful feature of multiple-regression analysis is that it yields an indication of the proportion of variance accounted for in the relationships tested. In our series of analyses, several variables did not increase the explained variance in drinking levels more than 1% and were thus successively eliminated from the analysis. These variables included: socioeconomic status (a compound measure of education, earned income and occupational status), degree of traditional Indian behavior (fluency in the tribal language, attendance at Indian rites and ceremonies and the use of traditional medical practices), exposure to tribal culture (years on a reservation and proportion of Indian childhood peers), years of residence in Los Angeles and drinking level in the household of origin. All failed to add even 1% to the amount of variance accounted for by the regression. Again, as with tribe as a covariate, these results do not indicate that these variables are not important influences on drinking behavior. In fact, some of them will reemerge in our analyses of drinking styles and in the studies of subsets of our population. The variables that remained as predictors of drinking level are shown in Table 2.
Table 2. Stepwise multiple regression of drinking level with selected predictor variables (N = 142)\textsuperscript{a}

<table>
<thead>
<tr>
<th></th>
<th>Multiple $r$</th>
<th>$r^2$</th>
<th>Simple $r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year of birth</td>
<td>.271</td>
<td>.073</td>
<td>.271</td>
</tr>
<tr>
<td>Cornell Medical Index score</td>
<td>.340</td>
<td>.116</td>
<td>.218</td>
</tr>
<tr>
<td>Sex (1 = male, 2 = female)</td>
<td>.382</td>
<td>.146</td>
<td>-.182</td>
</tr>
<tr>
<td>Proportion of Indian ancestry\textsuperscript{b}</td>
<td>.407</td>
<td>.166</td>
<td>.203</td>
</tr>
</tbody>
</table>

\textsuperscript{a} Thirteen cases were eliminated from this analysis because of missing data on the Cornell Medical Index.

\textsuperscript{b} In Tables 2 and 3, the proportion of Indian ancestry was recoded so that full-blooded Indians (among whom drinking level is lowest) would have the lowest score on this measure. This recoding was done to illustrate more clearly the curvilinear relationship between this variable and drinking level.

Four variables accounted for 17% of the variance in this linear model: younger and middle-aged participants drank more than older ones; those with higher self-reported psychophysiological stress scores drank more than those with lower stress scores; men drank more heavily than women; and those who reported 50% Indian ancestry drank more than either those with 25% Indian ancestry (the minimum level for inclusion in our study) or more than 75% Indian ancestry.

Our findings are similar to those of a 1979 national survey of drinking patterns (Clark et al., 1981) with regard to the association of sex and age with drinking level. Our findings also correspond to the averaged results of six earlier national surveys as reported by Johnson et al. (1977). None of these surveys employed the Cornell Medical Index and, of course, our measure of Indian ancestry was not relevant. However, the indices of ethnicity and psychology that we found to be associated with drinking level were similarly identified in the 1979 national survey. We concur with Cahalan and Cisin (1976) that “ethnic background still plays an important part in determining patterns of American life, including drinking habits” (p. 87). Binge drinking is an expected feature of young male recreational behavior in many contemporary Indian communities, whereas heavy negative sanctions are placed on community elders who continue to drink “like young men.” In this respect, too, more drinking by young Indian men appears to intensify existing American patterns.

Current drinking levels, excluding Indians “on the wagon.” The terms “serious drinking,” “White man’s drinking,” “teetotaling” and “on the wagon” are used indigenously to denote differences in both drinking style and level. Indians with a history of heavy drinking who were abstinent at the time of the interview were clearly a different subset from those who had never drunk or those who reported current drinking. Indians on the wagon (abstinent at least 6 months at the time of the interview) were largely older men (between 45 and 60). Their drinking careers shared these features: they started drinking experimentally in their mid-teens; acceleration of consumption at 18 to 20 yr of age was often associated with an armed services drinking milieu; and drinking often accelerated to family-, job- and life-threatening proportions until middle age. Their conversions to lives of abstinence were often supported by renewed belief in traditional Indian or Christian spiritual dogma, membership in Alcoholics Anonymous, or involvement in an organized recovery home or treatment program.

In Table 3, we repeat the stepwise multiple-regression analysis illustrated in Table 2 but exclude these Indians “on the wagon” from the abstainer category. Both the rank order of entry and the relative power of the predictor measures now change. Self-reports of family drinking during childhood are now more strongly related to current drinking levels, and psychophysiological stress increases in predictive power. Age and percentage of Indian ancestry decrease to minor predictive importance. The results are interpreted as follows: Men drink more than women, those who report psychophysiological stress drink more than those who do not and those who report frequent heavy drinking in their families of origin drink more than those who report little or no drinking in their childhood homes. Older men and women drink less than younger ones and subjects reporting 50% Indian ancestry drink more than those with higher or lower percentages, but these predictors are less potent than when applied to the entire sample. Notwithstanding the smaller size of this subsample (N = 116), this analysis considerably improves the predictive power of the equation. The overall multiple correlation reaches .593, with over one-third of the variance in reported drinking level accounted for. Once again, factors

Table 3. Stepwise multiple regression of drinking level with selected predictor variables, excluding current abstainers who previously drank (N = 106)

<table>
<thead>
<tr>
<th></th>
<th>Multiple $r$</th>
<th>$r^2$</th>
<th>Simple $r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex (1 = male, 2 = female)</td>
<td>.466</td>
<td>.218</td>
<td>-.466</td>
</tr>
<tr>
<td>Cornell Medical Index score</td>
<td>.528</td>
<td>.279</td>
<td>.331</td>
</tr>
<tr>
<td>Drinking in the household of origin</td>
<td>.570</td>
<td>.325</td>
<td>.277</td>
</tr>
<tr>
<td>Year of birth</td>
<td>.583</td>
<td>.340</td>
<td>.119</td>
</tr>
<tr>
<td>Proportion of Indian ancestry</td>
<td>.593</td>
<td>.352</td>
<td>.218</td>
</tr>
</tbody>
</table>
related to socioeconomic status are not important predictors of drinking level in this population.

The older men on the wagon appear to have produced most of the age effect for the entire sample. Indeed, when we subsequently regrouped these men with current heavy drinkers and reconstituted our analyses, there was an interesting result: Neither age nor proportion of Indian ancestry appreciably affected drinking level once the effects of sex, stress level and drinking in the family of origin were accounted for.

Comparison of lifetime abstainers (teetotalers) and those currently on the wagon. Finally, we compared the two subpopulations exhibiting the most dramatic differences in lifetime drinking levels and styles. These two subgroups are especially interesting for both statistical and qualitative analyses, since they may provide clues to the similarities and differences in two major pathways to Indian sobriety: teetotaling and middle-age abstinence. We used the same multiple-regression techniques and variables employed in the previous analyses to find the major quantifiable features that differentiate the two kinds of abstinence. The multiple $r$ is now .75 (Table 4). More than 54% of the variance in drinking levels was accounted for by these three variables (in descending order of influence): Indians who, as children, experienced heavy drinking in their own families are more likely to drink heavily as adults, after controlling for other circumstances, men drink more than women; and highly stressed individuals drink more than those reporting less stress. After the effects of these three variables were accounted for, age and proportion of Indian ancestry added only 1% each to the equation. Socioeconomic status, traditionalism and even age dropped out in favor of family experience, gender and stress effects.

**Discussion**

We have used drinking level as a dependent measure to be explained by quantitative analyses. However, this does not imply that the predictor variables that we selected are causally antecedent or statistically independent. The relationships between drinking level and many of the antecedent variables are not unidirectional. For example, moderate and heavy drinkers may be under more actual environmental stress, and so report more psychic stress, than abstainers or light drinkers. Similarly, the physiological stress may be the result rather than the precipitating cause of chronic drinking. The stress measure, thus, is not necessarily an independent cause of drinking level; the two variables are likely confounded.

We do not believe that there is a confounding effect in the correlation between adult drinking levels and drinking in the family of origin. For example, we do not believe that heavy drinkers systematically report more drinking in the family of origin than in fact occurred or that abstainers cover up childhood remembrances of drinking in their families. We resort to the candidness of life history narratives for supportive evidence (pseudonyms are used):

Mary Smith, lifetime abstainer—"The only person I knew who drank at all was my grandfather and he only drank occasionally. I was always taught not to use it. And I taught that to my children. You see, my family was Christian."

(Mary stopped at this point and gave the interviewer a knowing look as though identifying herself and her family as Christian were sufficient explanation for her lifetime abstinence from intoxicants.)

Dwayne Rochambeau, recovering alcoholic—"My family drank periodically. When they had enough money to buy it, they bought it—every 6 weeks or so. It took away the boredom of life, the frustrated feelings of not having a job. They thought of it as medicine. All of them would drink to excess when they could afford to buy it. They lost jobs, cars, husbands and wives because of it. They drank all the time in the house—sometimes for 3 or 4 days at a time. Lots of times we kids were fearful, but what could we do? They were the bosses; we had to go along with whatever they did."

We interpret drinking behavior modeled by the family of origin as socialization and role modeling that produce an adult drinker. It is also possible, however, that family drinking indicates an Indian genetic propensity for heavy drinking (Schuckit, 1980; Schuckitt et al., 1972). Our data do not suggest this. If men and women with higher proportions of Indian ancestry also reported more drinking in the family of origin, then it might be plausible that some Indian genetic or physiological propensity to consume more alcohol or to react differently to alcohol consumption is confounded with reports of a family drinking model. However, our data indicate that participants with 50% Indian ancestry (a foot in each world, so to speak) drink more than those with either less or more Indian ancestry. The curviline-

<table>
<thead>
<tr>
<th>Table 4. Stepwise multiple regression of former drinking level with selected predictor variables, for current abstainers only (N = 46)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable</strong></td>
</tr>
<tr>
<td>Drinking in the household of origin</td>
</tr>
<tr>
<td>Sex (1 = male, 2 = female)</td>
</tr>
<tr>
<td>Cornell Medical Index score</td>
</tr>
<tr>
<td>Year of birth</td>
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<tr>
<td>Proportion of Indian ancestry</td>
</tr>
</tbody>
</table>
ear relationship between proportion of Indian ancestry and drinking level is more suggestive of an acculturation stress than a direct genetic effect. Of course individual family differences in genetic predisposition cannot be ruled out by our findings.

Furthermore, the proportion of Indian ancestry was confounded with age and sex. A majority of the heavy drinkers were not only of mixed parentage but also young and male. These men may exhibit normative drinking behavior for their age and social group, and they also deal with the stresses of obtaining an education in a novel urban environment, providing for their young families in a competitive employment market, and being separated from family and community norms. The decision to go to the city to "better oneself" is not without its ambivalences. "Getting a White man's education," and equipping oneself to "deal with the White man on his own terms" or even "to beat him at his own game" are encouraged by some as a survival strategy for contemporary Indians, but are also feared by both family and friends as "selling out" or the loss of one's "Indianness." Many Indian youths eventually reject this coping strategy and either return home or remain in the city and turn to heavy drinking and lives of marginality. The weekend drinking party with other urban Indians in the same circumstances can mitigate psychic stresses temporarily, as well as reestablish connectedness to Indian society and values (Burns et al., 1974; Lurie, 1979; Waddell, 1973; Weibel, J. C. and Weisner, T. S. An Ethnography of Urban Indian Drinking Patterns in California. Unpublished ms., UCLA Alc. Res. Center, 1980).

Although we have included both drinking models in the family of origin and level of stress under the heading of psychological factors, we do not mean to imply that stress (as measured by the Cornell Medical Index) is purely an intrapsychic phenomenon or that family drinking models represent only individualized socialization factors. On the contrary, as Stratton et al. (1978) and Levy and Kunitz (1974) have suggested, stress and family modeling effects are embedded in an environmental, social and cultural context that includes characteristics of reservation life, Christian influences and the degree of community influence.

It is also evident that the Indian sample parallels findings (Clark et al., 1981) on drinking in the general American population: Drinking is heavier among younger than among older people; men in every ethnic group drink more at each stage of life than women; and the drinking pattern modeled in the family of origin is reproduced, to some degree, in the next generation. Drinking level and style may be unique in some respects among Indians and influenced by cultural heritage but the overall differences in drinking levels and the life-time drinking patterns parallel the general drinking patterns in our society as a whole.

Profiles of drinking styles

Hitherto, we have discussed antecedents or predictors of drinking level. Drinking level is not synonymous with drinking style nor is it to be confused with prevalence levels. Unlike our findings on drinking levels, drinking styles and prevalence levels have been shown (Bacon et al., 1965; Burns et al., 1974; Kunitz et al., 1971; Stratton et al., 1978) to be affected by socioeconomic status, degree of Indian identity and tribal affiliation. By drinking style we mean not only quantifiable frequency, amount and variability of beverages consumed, but also the entire sociobehavioral matrix in which the drinking takes place. Drinking style takes into account where, with whom, and what occasions one drinks, drinking patterns over time, the reasons for drinking and the types of behavior associated with drinking.

To elaborate on these features of drinking behavior, we turn to our ethnographic data elicited in life history interviews and observations of participants. Choosing participants who exemplify specific drinking styles or regional modalities, we reconstructed descriptive vignettes of their lives to illustrate characteristics of theirs that are representative of either their drinking style or cultural modality.

These data deal with the questions: Which Indians have successfully remained nondrinkers, or lifelong moderate drinkers? Are there similarities in their social histories? What are their present circumstances? And how might others do the same, given their personal and drinking history profiles? This ethnographic perspective complements the quantitative results derived from the analysis of current drinking levels. Age, sex, family drinking models during childhood and percentage of Indian ancestry (but not socioeconomic status or tribe) influence current drinking levels, but the same features may not be associated with longer-term histories of abstinence or heavy drinking, or with the quality of life and social supports that sustain different drinking patterns.

The following vignettes combine (1) qualitative data or portraits of characteristic drinking styles and (2) statistical and demographic summary profiles of informants who tended to cluster within each drinking style.

Teetotalers. There are two dramatically different kinds of urban Indian nondrinkers: lifetime teetotalers and former drinkers who are now on the wagon. The first group is composed primarily of older women of middle-level socioeconomic status who have never drunk or
who have drunk only briefly and experimentally during childhood. Lifetime abstainers tend to come from eastern Oklahoma and to have long-standing Indian Christian church affiliations. Mary Smith, a full-blooded Choctaw, exemplifies the lifetime non-drinking profile:

Mary Smith is 67 and speaks fluent Choctaw. She “never drank an alcoholic beverage” in her life. Her early socialization included strong prohibitions against alcohol consumption. Recently retired from her long-time employment as a commercial seamstress, her social life is centered on her family and church. Three of her four children live within a 5-mile radius of her comfortable home, which she owns. She attends church services, conferences and social affairs two or three times a week. Her involvement in urban Indian activities includes visits to other all-Indian Christian churches. Out of curiosity she attended a few Plains-type powwows. Her antipathy toward drinking is so complete that she refused to attend future powwows because of the drinking that she observed in those settings (minimal though it was). Her recommended solution to problem drinking among urban Indians is that they surrender to Christ as their personal savior.

The second group of current nondrinkers is more likely to be composed of older men from lower and lower-middle socioeconomic backgrounds who have had periods of heavy and problem drinking throughout their lives. These men are more likely to come from California and Siouan-speaking tribes, and are less likely to be married or to have had any formal church affiliations:

Dwayne Rochambeau is a 40-yr-old Sioux and Chippewa man whose alcoholism (he asserts) destroyed his family life—his wife died and his child was made a ward of the state. A product of an unstable home, he lived with his parents on a reservation until he was 12, when he moved to a midwestern city to live with an older sister. Dwayne began drinking at age 15. At the encouragement of an older sister (aged 19), already an alcoholic, he drank whiskey until he passed out in the bathroom. After a short period of revulsion and abstinence he began to drink with the rest of his family in secret. He drank moderately until he entered the Navy at age 20. During 3 yr in the Navy he drank excessively. After a dishonorable discharge due to infractions of Navy rules caused by his drinking, he abstained for approximately 1 yr. This was followed by approximately 15 yr of steadily increasing alcohol consumption, during which he quickly gravitated to the Skid Row street-drinking lifestyle. He finally entered an all-Indian alcoholism treatment program at the insistence of a physician who diagnosed liver cirrhosis. At that time the doctor estimated that Dwayne would survive only another year if he did not stop drinking. Through counseling received in the alcoholism program and deep involvement in A.A., Dwayne had maintained his sobriety for 4 yr at the time of the interview. His social life consists of regular attendance at A.A. meetings and participation in Plains and pan-Indian activities in urban Indian centers. He is enrolled in an alcoholism counseling training program and interacts regularly with a circle of abstaining friends. His conversion to an abstinent lifestyle is perpetuated by his decision to present himself as a role model for his recovering Indian brothers.

Dwayne epitomizes successful recovery. He has been able to sustain his abstinence for an extended period of time. He is deeply committed to his chosen new lifestyle gained through a personally wrenching process not unlike spiritual conversion. He supports his belief in abstinence through involvement in A.A. and volunteer work in alcoholism treatment programs.

Other men and women in our sample who have had success in maintaining abstinence have employed similar support structures. Involvement in Indian alcoholism treatment programs as both patients and counselors, membership in an Indian Christian church, or A.A., and a reintensification of one’s traditional belief system are among the most commonly mentioned vehicles for recovery and maintenance of abstinence.

Unfortunately, the majority of heavy drinkers who had attempted to curb their drinking through similar means had returned, at the time of the interview—or eventually returned, subsequent to the interview—to heavy drinking. The most familiar heavy-drinking pattern includes periods of heavy drinking interrupted forcibly by incarceration or commitment to an alcohol or drug treatment program, an ambivalent “dry out” period, which is quickly aborted through abandonment of the treatment regimen, and a return to heavy drinking.

White man’s drinking. Subjects who drank “like White men” tended to be middle-aged or older and from higher socioeconomic levels (more white-collar jobs, higher and more stable incomes and more formal education). Slightly more women than men were in this group, and the men tended to be older than the sample average; however these were not strong differences. They tended to be either full-blooded or one-quarter Indian rather than 50%. In other respects, however, they were not statistically different from the rest of the sample.

The following vignettes illustrate characteristic patterns of Indians who drink in moderation or, in Gusfield et al.’s (1981) terms, “manage competence” while drinking. From an Indian perspective, they drink “like White men”:

1This so-called revolving door phenomenon, which both frustrates and discourages alcoholism treatment personnel, is discussed elsewhere (Weibel-Orlando, in press).
Anna Sawyer, one-quarter Mono Indian from central California and a graduate student, was 29 and single at the time of the interview. When she was growing up she lived with her grandparents about half of the time and with her parents the other half. She never attended an Indian boarding school. She consciously maintains her Indian cultural heritage by acquiring tribal skills in food and clothing preparation, basketry and hunting. She still uses traditional medicines regularly, attends traditional ceremonies, speaks the language fluently and lives by the spiritual tenets of her ancestors. Her father, mother, brothers and sisters, grandparents, and aunts and uncles all drank moderately. There was only one uncle who drank heavily. “My parents greatly influenced how I live my life. I remember my uncle would call when he had been drinking. He’d be feeling so sorry for himself. We all were annoyed with him.” Anna was 17 when she had her first drink. She currently drinks only on festive occasions. On rare occasions she drinks half a can of beer. “I’ll have a glass of wine with dinner on occasion and a rare mixed drink at a disco or family gathering, but that’s about it. I’ve experimented with marihuana, used uppers during exam time in college, peyote and a rare mind-altering drug, but only once or twice, mainly as an experiment. The drinking I do is mostly for social acceptance and correct social behavior—it’s what’s accepted in our society, to have a drink with a meal.” She never drinks alone and has never “gotten high.” “I limit myself to three drinks, as I want to be aware of myself and my environment at all times. I think my philosophical beliefs—those which stem from my people—have a lot to do with my level of drinking. We don’t believe in overindulging in anything.”

Sally Franklin is a 44-yr-old full-blooded Choctaw married to a 42-yr-old full-blooded Creek. She came to Los Angeles in 1955 and has a stable work record. They live in a comfortable two-bedroom house that they own in a solidly working-class Los Angeles suburb. Sally spent most of her childhood (14 yr) away from her family in Indian boarding schools. She had lived in a predominantly White area in eastern Oklahoma, had never learned any traditional skills or used traditional medicines. She speaks only a few words of her tribal language. She remembers that none of her relatives drank alcoholic beverages. She was 30 yr old and living in Los Angeles when she had her first drink during a celebration luncheon with co-workers, most of whom were non-Indian. She found a mixed drink at lunch relaxing. It made conversation flow more easily. She reports having a cocktail with a meal three or four times a year at most. Her present social circle consists mostly of Indians from the same area in southeastern Oklahoma. Her social activities include seasonal Indian church meetings, Choctaw classes, attendance at professional baseball games and an occasional movie or show. Her husband drinks as moderately as she does. They have never tried mind-altering drugs. Drinking is always associated with special celebrations and has never been a social or health problem for either of them. Sally has never been intoxicated: “I know how to control myself.”

**Serious drinking.** Serious drinkers are younger, more often unmarried and from lower socioeconomic back-

grounds. The majority of subjects with 50% Indian ancestry fell into this category. Heavy drinkers were not likely to be active participants in Indian cultural activities such as powwow dancing, ceremonies, use of traditional medicines or use of tribal languages. Other demographic factors did not strongly differentiate heavy drinkers from the overall sample.

Wes Eagleman is half-Sioux, 22 yr old and single. He grew up in South Dakota exclusively among other Siouan-speaking people. He attended Indian boarding school for 8 yr and has tried his hand at radio communications and college for short periods of time. His Siouan experience includes learning the powwow dances and songs. He speaks Lakota and has practiced traditional Siouan spiritual ways. Although he does not involve himself in these activities in the city, he considers Fort Thompson his home and visits there three or four times a year. He reports that his father does not drink at all. Since his mother no longer lives with them, he does not recall her drinking pattern. Although his father does not drink, he appears to tolerate his son’s use of alcohol beverages: “You can drink beer as long as it doesn’t become a problem.” Wes had his first drinking experience at age 13 among a group of Mexican American friends in Los Angeles. He became intoxicated from one can of beer and was grounded by his father when discovered. Between the ages of 13 and 18 he drank sporadically at parties and never more than two cans of beer. Between 19 and 21, however, the frequency, amount and variability of his use of mind-altering substances increased: “I sometimes drank as much as two six-packs of beer a night or until I had passed out. I also drink a bottle of wine a night when it’s available and I’ve gotten into weed in the last few years—everybody in my crowd is.” When asked why his consumption has increased in the last few years, he mentioned no feelings of depression, anxiety or frustration. He matter-of-factly states: “I like to drink and am of age, so there’s no reason not to. We’re all partying and having a good time, so it doesn’t matter if you get high—that’s all part of the fun.” Drinking constitutes his preferred recreational activity. Although he has already experienced three blackouts, has on occasion been embroiled in street-fights and arrested, has fought with his family frequently, has lost money while drinking and, he claims, has experienced delirium tremens at least once, he refuses to consider asking for assistance. “I don’t need help. I have my drinking pretty well controlled.”

Dixon Begay was a 30-yr-old full-blooded Navaho enrolled in an Indian studies program at a Los Angeles area college at the time of the interview. He grew up in an isolated area on the Navaho reservation and knew only Navahos and a few white traders during most of his childhood. He lived with his maternal grandmother most of his early years. He was sent to a variety of government and church-run Indian boarding schools before running away in tenth grade. In the ensuing years he managed to acquire a general education diploma and complete 2 yr of college. He had never lived in any city before his arrival in Los Angeles. He has acquired traditional Navaho skills such as silversmithing and shepherd-
ing, uses traditional Navaho medicines, attends traditional ceremonies and speaks Navaho fluently. He describes his parents as "straight people." His father is a minister and neither parent drinks at all; nor, says Dixon, did his grandparents. His brother, aunts and uncles, however, drank "quite a bit," to the point of losing some of their sheep for the price of a bottle of wine. His older brother returned from Vietnam when Dixon was 15 and introduced alcoholic beverages to him for the first time. He drank moderately until he entered the army at age 17. During 3 yr of service, "I drank almost every day if I had the money, until I felt comfortable or blacked out. Sometimes I'd have 20 cans of beer in a night. My performance began to fail so my commanding officer finally ordered me to attend A.A. meetings." Dixon still drinks beer, mixed drinks and wine. He has experimented with marihuana only in the last 2 yr and only with his college friends. Dixon migrated to Los Angeles to go to school and to live with his older brother. Within a month after his arrival he was drinking regularly in the Los Angeles Indian bars with Indian friends. During his heaviest drinking period, Dixon drank every day and whatever was available. "I'd drink three or four jugs of wine, two cases of beer a week. Sometimes I'd spend $20 to $50 a night on the weekends. I think I drank more than any of the other people with whom I drank but I'm trying to slow down on my drinking." He reports currently drinking only two or three cans of beer almost every day.

Drinking styles and tribal affiliation

As is clear from our selection of vignettes, there is an association between life-long drinking styles and tribal origin. Findings of differences in drinking level by tribe are common in the literature (Burns et al., 1974; Kunitz et al., 1971; Leland, 1976, 1981; Levy and Kunitz, 1974; Stratton and Zeiner, 1977; Stratton et al., 1978; Zeiner et al., 1977; Weibel, J. C. AND Weisner, T. S. An Ethnography of Urban Indian Drinking Patterns in California. Unpublished ms., UCLA Alc. Res. Center, 1980) and are clearly reflected in our own sample, even though we preselected our informants to cover a full range of drinking levels. Levy and Kunitz (1974) have pointed out that "Indian societies appear to react [to the contact situation] in ways that are determined by their own culture and values. There is a remarkable persistence of some cultural constellations over time.... [which] are of more value in explaining certain kinds of behavior commonly labeled deviant than has been usually thought" (p. 195).

Our ethnographic observations and life-history data also indicate a range of tolerable drunken comportment across tribal and regional groups. Obviously not every Indian from eastern Oklahoma is a teetotaler nor is every Sioux a serious drinker or on the wagon. However, certain demographic trends are apparent from our sample, as well as certain proscriptive attitudes about alcohol consumption among some groups.

The eastern Oklahoma participants, for example, were older, with longer and more stable endogamous marriages. They were also more likely to be three-quarter to full-blooded Indian. Their socioeconomic levels were higher and were maintained through stable careers. The eastern Oklahoma participants were more often affiliated with fundamentalist Christian churches known for their long histories of prohibitionist stands on alcohol consumption. This factor strongly influences familial attitudes toward drinking. Binge drinking is not the recreational norm for eastern Oklahoma young men that it is in other tribal groups in rural and reservation settings. The man who goes into town and "drinks up the seed money" is clearly deviant, suspected of "backsliding" and "flirting with the devil," and in need of community prayers and reeducation to a "life in Christ." These beliefs, coupled with strong family commitments and the aforementioned cluster of cultural, familial and social characteristics, insulate the eastern Oklahoma youth, to some extent, from participating as heavily as other tribal youth populations in the drinking and drug culture.

Navaho participants were more often of full Indian ancestry, young, single, from low socioeconomic backgrounds and married endogamously. Both Navaho men and women had well-grounded personal experience in traditional tribal folkways and participated in reservation activities more often than the other tribal groups. They drank more heavily and more often than California or Oklahoma groups. Their drinking patterns were similar to those of the Plains groups.

The Siouan-speaking participants were more likely to be of mixed parentage, in tribally and ethnically exogamous marriages, and acculturated. Their reservation experience included extensive drinking during their youth. Heavy alcohol consumption among the Plains Indians generally and the Siouan-speaking people specifically has most commonly been related (Clark et al., 1981; Kutner and Lorinz, 1967; Maynard, 1969; Mohatt, 1972; Stratton and Zeiner, 1977; Stratton et al., 1978; Whittaker, 1963; Zeiner et al., 1977) to their cultural, historical and psychological characteristics. Their high drinking level has been seen as a reaction to stress that has taken on epidemic proportions. Our ethnographic data (Weibel, J. C. AND Weisner, T. S. An Ethnography of Urban Indian Drinking Patterns in California. Unpublished ms., UCLA Alc. Res. Center, 1980) support these findings. The Siouan-speaking participants tended to cluster at the extreme ends of the drinking continuum. The Skid Row and habitually heavy-drinking populations were composed of disproportionately large numbers of
Siouan-speaking Indians. A large majority of the Siouan-speaking participants who were abstinent at the time of the interview had formerly been heavy drinkers. Plains deculturation was rapid, profound and traumatic. With few remaining traditional avenues for validation of adulthood and particularly of manhood, alcohol consumption was and continues to be the salve of wounded warriors as well as the vehicle of protest (Lurie, 1971; Maynard, 1969; Mohatt, 1972).

The California Indians in Los Angeles come from a geographically dispersed collection of tribes and bands. They were more acculturated and reported a lower percentage of Indian ancestry than the other three tribal groups. A high proportion of their marriages were exogamous. Their drinking patterns were intermediate in many ways between those of the Sioux and Navaho on the one hand, and those of the Eastern Oklahoma participants on the other.

Conclusions

Even though the variety of Indian lifestyles and drinking patterns is too great to categorize any group, it is clear from our quantitative analyses and ethnographic reconstructions that sex, age, the models of drinking behavior provided by the family of origin and psychological stress best predict drinking level. However, it is important to note that which types of Indian drinkers (teetotalers vs those on the wagon, for instance) are compared makes a difference in the patterning of the antecedent factors predictive of drinking level. Only the sex difference (men consistently drinking more than women) retains its statistical and substantive importance throughout all the subset analyses.

Family drinking models and psychological stress appear to be the most powerful predictors of drinking level when comparing the extreme drinking patterns (lifetime abstainers vs those on the wagon vs heavy drinkers, for instance). Age and sex had stable effects on drinking levels across the entire sample, regardless of prior family experience or tribal affiliation. Family of origin and perceived stress played important roles in discriminating between heavy-drinking and teetotaling Indians, given the fact that men and youth drink more.

Indians in the teetotaling and moderate-drinking groups were more likely to have reservation experiences such as Christian religious training, to suffer from less economic marginality (especially in the Oklahoma groups) and to have a stake in an urban job. Paradoxically, traditionalism and concern for Indian ancestry and culture usually are associated with reduced drinking levels in conjunction with, not opposed to, upward mobility and Christian religious beliefs.

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