

# **American Indian and Alaska Native Mental Health Research**

The Journal of the National Center

**Volume 7, Number 2, 1996**

Published by the University Press of Colorado, a cooperative publishing enterprise supported, in part, by Adams State College, Colorado State University, Fort Lewis College, Mesa State College, Metropolitan State College of Denver, University of Colorado, University of Northern Colorado, University of Southern Colorado, and Western State College of Colorado.

EDITOR-IN-CHIEF  
Spero M. Manson, Ph.D.

JOURNAL MANAGER  
Billie K. Cook

RESEARCH ASSOCIATES

ANNA BARÓN, Ph.D.  
University of Colorado H.S.C.

MONICA JONES, M.S.  
University of Colorado H.S.C.

JANETTE BEALS, Ph.D.  
University of Colorado H.S.C.

SANDRA K. JOOS, Ph.D.  
Portland VA Medical Center

DONALD W. BECHTOLD, M.D.  
University of Colorado H.S.C.

ELLEN KEANE, M.S.P.H.  
University of Colorado H.S.C.

MORTON BEISER, M.D.  
University of Toronto

JEFFREY KING, Ph.D.  
Denver, Colorado

JOSEPH D. BLOOM, M.D.  
Oregon Health Sciences University

J. DAVID KINZIE, M.D.  
Oregon Health Sciences University

JAMES BOEHNLEIN, M.D.  
Oregon Health Sciences University

JOYCE KRAMER, Ph.D.  
University of Minnesota

PAUL DAUPHINAIS, Ph.D.  
Turtle Mountain Community College

TERESA D. LaFROMBOISE, Ph.D.  
Stanford University

RHONDA DICK, B.S.  
University of Colorado H.S.C.

PAUL K. LEUNG, M.D.  
Oregon Health Sciences University

NORMAN G. DINGES, Ph.D.  
University of Alaska, Anchorage

JERROLD E. LEVY, Ph.D.  
University of Arizona

CHRISTINE W. DUCLOS, M.P.H.  
University of Colorado H.S.C.

CAROL LUJAN, Ph.D.  
Arizona State University

CANDACE M. FLEMING, Ph.D.  
University of Colorado H.S.C.

PHILIP A. MAY, Ph.D.  
University of New Mexico

GEORGE M. GUILMET, Ph.D.  
University of Puget Sound

BEATRICE MEDICINE, Ph.D.  
Wakpala, South Dakota

ROBERT HACKENBERG, Ph.D.  
University of Colorado, Boulder

GERALD V. MOHATT, Ed.D.  
University of Alaska, Fairbanks

**RESEARCH ASSOCIATES**  
(Continued)

JAMES MORAN, Ph.D.  
University of Denver

RICHARD SCHULZ, Ph.D.  
University of Pittsburgh

GORDON L. NELIGH, M.D.  
University of Colorado H.S.C.

JAMES H. SHORE, M.D.  
University of Colorado H.S.C.

THERESA O'NEILL, Ph.D.  
University of Colorado H.S.C.

PATRICIA SILK-WALKER, R.N., Ph. D.  
Seattle VA Medical Center

KEN PEPION, Ph.D.  
WICHE, Doctoral Scholars Program

PHILIP SOMERVELL, Ph.D.  
Dept. of Health, New Mexico

RON PETERS, B.A.  
Greater Vancouver Community  
Mental Health Services

JOSEPH E. TRIMBLE, Ph.D.  
Western Washington University

C. JOSEPH PINE, Ph.D.  
Bay Pines, Florida VA Medical Center

R. DALE WALKER, M.D.  
Seattle VA Medical Center

JOHN RED HORSE, Ph.D.  
University of Minnesota

JOSEPH WESTERMEYER, M.D.  
Minneapolis VA Medical Center

WILLIAM H. SACK, M.D.  
Oregon Health Sciences University

DIANE J. WILLIS, Ph.D.  
University of Oklahoma H.S.C.

GRACE POWLESS SAGE, Ph.D.  
Cornell University

ARON S. WOLF, M.D.  
Langdon Clinic, Anchorage, AK

Subscription rates are \$35 (U.S. currency) per volume, which includes three issues. Make checks payable to: University Press of Colorado, P.O. Box 849, Niwot, Colorado 80544.

ISSN 0893-5394  
©1996 The National Center for American Indian and  
Alaska Native Mental Health Research  
Denver, Colorado  
All Rights Reserved

# American Indian and Alaska Native Mental Health Research

The Journal of the National Center  
Volume 7, Number 2, 1996

---

American Indian and Alaska Native Aboriginal Use of Alcohol in the United States <i>Patrick J. Abbott, M.D.</i>	1
Comparative Study of Problematic Gambling Behaviors Between American Indian and Non-Indian Adolescents Within and Near a Northern Plains Reservation <i>Darryl Zitzow, Ph.D.</i>	14
Comparative Study of Problematic Gambling Behaviors Between American Indian and Non-Indian Adults in a Northern Plains Reservation <i>Darryl Zitzow, Ph.D.</i>	27
Special Commentary <i>Barbara J. Bowman, Ph.D.</i>	42

---

# AMERICAN INDIAN AND ALASKA NATIVE ABORIGINAL USE OF ALCOHOL IN THE UNITED STATES

Patrick J. Abbott, M.D.

*Abstract: Alcohol beverages prior to White contact originated with the Mayan and the Aztec Nations and spread to the American Indians of the Southwest. Surprisingly, there are a number of accounts of alcohol use among other American Indians and Alaska Natives. Beverages were limited to wine and beer, and included: balche, pulque, and "haren a pitahaya" wines, tulpi beer and other beverages. White contact brought dramatic shifts in the use and function of alcoholic beverages in American Indian and Alaska Native societies.*

Prior to White contact, the use of alcoholic beverages in the United States was primarily confined to American Indian groups in the Southwest. However, there was scattered use in other parts of the country (Driver, 1969; Heidenreich, 1976). The acceptance or rejection of alcohol varied among tribes. Some tribes readily accepted alcohol to extend their secular, social, religious, and supernatural experience. Others, initially rejected its use later to develop a taste for alcohol while others continuously turned away from use of alcohol (Heath, 1983; Heidenreich, 1976). Most American Indians and Alaska Natives knowledge and use of alcohol coincided with White contact (16th and 17th century). Initially, traders, explorers, and early settlers offered alcohol as a gesture of friendship and as an item of curiosity to American Indian groups they encountered. Alcohol soon became a valued trade commodity and was used in exchange for furs, land, and sexual favors. It was during this initial contact with Europeans that the "firewater myth" began, that is, the inability of Indians to tolerate alcohol's effect (Leland, 1976; MacAndrew & Edgerton, 1969). The origination of the use of the word firewater came from two sources: one started with the adulteration of alcohol with tobacco juice, hot peppers or opium, and the other began with the custom of testing the proof of alcohol by throwing it in the fire, if flammable alcohol would be acceptable for purchase (Williams, 1985; Anderson, 1988). By the time Lewis and Clark traveled across the United

States, most American Indians that they came in contact with had prior knowledge of the use of alcohol (Weibel-Orlando, 1986).

The primary aboriginal alcoholic drink was beer or wine since the art of even rudimentary distillation was known only to the Aztec prior to White contact (Bourke, 1894; LaBarre, 1938). The following brief history surveys aboriginal production and use of alcohol up to the period of White contact. We trace alcohol's use from Mesoamerican influences through the Southwest and into other regions of the United States.

### Influence From the South

Mesoamerica was key in the development of agriculture and later in the production and utilization of alcoholic drinks which were ritualized in religious ceremonial complexes. The most influential group in this area was the Mayan Indians. They produced a drink called "balche", a wine made from honey and balche bark (Loeb, 1943). The Mayan use of alcohol was thought to have influenced the drinking complexes of Mexico and South America and, importantly, for the future development of North American drinking, the Aztec and Northern Mexican tribes. Over forty different alcoholic beverages were made in Mexico utilizing a variety of plant substances, such as honey, palm sap, wild plum, and pineapple (Driver, 1961; Price, 1975).

The Aztec and their ancestors, the Nahua, developed intricate ceremonies and social rules governing the proper use of alcohol. Many of the ancient alcohol production techniques date back prior to 300 A.D. (Waddell & Everett, 1980). The Aztec used maguey (Agave Americana), also known as the century plant, to produce pulque, a mild wine product made from the sap of the agave (Waddell & Everett, 1980). A modern product of this plant is mescal brandy, Tequila, being one of its place names (LaBarre, 1938). According to an Aztec myth, the origins of pulque were supernatural and initially provided by the deities, chief of which was Mayahuel. Therefore, the use of this sacred wine was clearly prescribed for religious purposes and not used for secular or social purposes (Paredes, 1975).

"Ochtli" or pulque was useful as a diuretic, a remedy for intestinal afflictions, and often used for its nutrient benefits, possessing moderate amounts of vitamin B and C (Waddell & Everett, 1980). Ceremonial use of pulque was the norm and it was rigorously controlled. All Aztec ceremonies were carefully supervised and drunkenness was a serious crime except during prescribed ceremonies (Waddell & Everett, 1980; Paredes, 1975). Drunkenness was only permitted in the elderly and severely punished in others if outside ceremonial occasions.

The diffusion of the Mayan and Aztec "alcohol-intoxication-agricultural ritual complex" spread northward, reaching as far as the Pima/

Papago tribes (Waddell & Everett, 1980). There were numerous groups in between that carried this influence to the Pima/Papago and Apache tribes.

The Tarahamara occupied the mountainous southwestern part of the state of Chihuahua, Mexico. They were known for their production of beer ("tesvino", "tesguino"). Tesguino is the name for Mexican corn beer which was used by most northern Mexican tribes (Kennedy, 1963). It was produced by fermenting corn with the addition of local grass seed. The entire process took about three days. Clearly, tesguino had a central and sacred role in Tarahamara culture. It was included in most ceremonies, such as the "curing ceremonies" for health of crops, animals, and people, the rite of male passage, marriages, and funerals. The Tarahamara also used maguey, but it assumed secondary importance. Apache groups located on the northern edge of the Sierra Madres had contact with the Tarahamara along the "Apache Corridor" which influenced their eventual adoption of tesguino (Waddell & Everett, 1980).

### Southwestern United States and the Great Basin

#### Piman and Papago

Piman and Papago groups lived in southern Arizona and in northern Sonora. They were of the same language group as the Aztec and the Tarahamara, the Uto-Aztecan, and developed complex agricultural rituals with use of intoxicant beverages. They produced a wine from the saguaro cactus ("haren a pitahaya") (LaBarre, 1938). During late summer, the women of the tribe would gather the red fruit of the saguaro cactus which grew at the top of the cactus reaching heights of 15–30 feet. The women would use the fruit for jams and jellies and the last of the harvest for the production of wine. The wine would then be used in rain ceremonies that were held on their New Year's Day which occurred late in the summer (Price, 1975; Waddell & Everett, 1980). Today, many of the Papago villages continue to carry out these sacred ceremonials.

#### Apache

The Apache, along with the Navajo, are of Athapaskan origin and arrived late in the Southwest between 1000–1550 A.D. (Joseph, 1991). The Apache lived in New Mexico, Arizona, and ranged into northern Mexico. They consisted of the following four primary groups: Jicarilla, Mescalero, Chiricahua, and the Western Apache. They differed from the above native groups in that they were primarily hunters and gatherers, and only engaged in limited agricultural pursuits. However, the Apache did share the production of fermented beverages. "Tiswin", also called "tulapai" and "tulpi", was produced from fermented corn (Hrdlicka, 1904; LaBarre, 1938; Waddell & Everett, 1980). The process appears to have

been passed from the tribes in northern Mexico to the Chiricahua Apache and then to the Western Apache. Tiswin was used primarily to mediate social and secular relationships (Waddell & Everett, 1980). However, it was used occasionally for ceremonial purposes.

The Chiricahua Apache not only made tulpi but also produced a drink from various species of the yucca, and the San Carols Apache made pitahaya wine from the saguaro cactus (LaBarre, 1938). Lastly, the Mescalera tribe made an intoxicating drink from the bark of the pine tree or mixed it with tulpi (Hrdlicka, 1908).

The Western Apache had contact with the western pueblos of the Hopi and Zuni, but only limited contact with the pueblos of the Rio Grande. Diffusion of alcohol producing techniques could have been spread by these nomadic groups.

### **Coahuiltecan**

The Coahuiltecan of southern Texas and northeastern Mexico made an intoxicating beverage from the Agave plant (Waddell & Everett, 1980; Newcomb, 1969). This beverage was mixed with the red bean of the mountain laurel. The Coahuiltecan did not use this drink in their religious ceremonies but used peyote instead. Similar patterns of intoxicating beverage use were seen in surrounding tribes, such as the Karankawa, Jumano, and the Lipan Apache.

### **Yuman**

In western Arizona along the lower Colorado River, south of the Grand Canyon, lived the following Yuman-speaking tribes: Havasupai, Walapai, Yavapai, Mohave, Halchidhoma, Maricopa, Yuma, and the Cocopas. They lived in small scattered communities along river bottoms and engaged in agriculture, except for the Walapai and Yavapai who were non-agricultural. The Maricopa did not use the agave cactus for wine nor did they make beer from the sprouts of corn (Spier, 1933). However, they and other Yumans did produce a wine from the fruit of the saguaro in mid-June, a practice that they may have patterned after the Pima and Papago (Waddell & Everett, 1980; Spier, 1933). Once the saguaro wine was prepared, neighboring villages were invited to participate in the festivities and were encouraged to dance. The dance was called "xatca" after the name of the wine. During these dances, alliances were formed and preparations to raid enemy locations were planned (Spier, 1933).

The Mohave tribe of the Yuman did not possess aboriginal alcoholic beverages (Devereux, 1948). Apparently, the Gila River was the northwest boundary for the production of aboriginal alcoholic drinks (Kroeber, 1931). Initial contact with European alcoholic beverages occurred in the mid-sixteenth century, but significant influence did not take



place until the nineteenth century. It was at that time White Americans came into the region with the railroads, mining, and later with the construction of the Parker Dam. In spite of these outside influences, the sociocultural integrity of the Mohave Indians remained intact.

### **Pueblos**

There is some evidence that the Rio Grande River Pueblos had intoxicating beverages prior to contact with the Spanish in 1540. In one account of the San Juan Pueblo described by Ortiz (1969) in the "bringing-the-buds-to-life" ceremony, a sweet drink of fermented grain was served. This ceremony is the formal transfer of village rule from the winter moiety to the summer moiety and formally initiates the agricultural cycle (Ortiz, 1969). Additionally, early explorers to this region described the use of intoxicant beverages by the ancient pueblos involving a variety of plants: pitahaya, aloe, corn, maguey, prickly pear, and wild and cultivated grapes (Cherrington, 1925).

Further to the west of the Rio Grande Pueblos, the Zuni Pueblo is located and was one of the first pueblos to have contact with the Spanish. There is abundant documentation that they possessed intoxicating drinks prior to White contact. Waddell and Everett (1980) summarized their early drinking practices as follows:

(a) they had knowledge of and utilized native beverages such as mescal wine, learned from their neighbors but these wines were used only on social occasions and not integral to important agricultural and other increase ceremonies; (b) they adopted many patterns of social drinking with other tribes that came to their villages, and later accepted the White man's distilled liquors for similar usage at large public gatherings, with the incidence increasing in more recent years; and (c) they used nonintoxicating beverages of several types, including use at ceremonies, which were most used for purification (p. 24).

The Zuni Indians also made a beverage from corn that they used at ceremonial feasts, if this beverage contained any alcohol it was minimal (Cherrington, 1925).

### **Hopi**

Northwest of Zuni lived the Hopi Indians who had a very different pattern of use and adaptation of alcoholic drinks (Waddell & Everett, 1980). Due to their proximity to other groups that used alcoholic beverages, it is likely that the Hopi had known of alcoholic beverages in aboriginal times, but they never adopted its use in ceremonial or in social occasions. After contact with Whites, alcohol use continued to be forbidden and any drinking that did occur was secretive.

### Navajo

Surrounding the Hopi tribe is the Athapaskan relative of the Apache, the Navajo. They are currently the second largest American Indian tribe in the United States numbering 219,198 and occupying a reservation the size of West Virginia (Reddy, 1993). Formerly occupying the northern part of New Mexico, they were a hunting and gathering nation and only recently adopted an economy based on sheep herding. They, unlike the Apache, had no use of alcohol prior to White contact. Intoxicant drinks were first introduced by the pueblos and villages bordering the eastern part of the reservation (Heath, 1964). During the 1880's, the Santa Fe railroad was built and brought with it White influence, liquor, and a frontier drinking style. In contrast to the Hopi who drank in a more secretive style, the Navajo drank openly to intoxication (Kunitz & Levy, 1974).

### Great Basin

The Great Basin area included the large expanse of land north of the Southwestern tribes between the Sierra Nevada and Rocky Mountains including the states of Utah, Nevada, and areas of surrounding states. The Utahtecan language was the major language in the area and the Ute, Shoshoni, and Paiute were some of the diverse tribes. Agriculture did not exist in this area; food was scarce and procured by continual hunting and gathering in one of the driest and least suitable regions of the country. The production of alcohol in the Southwest did not extend to this area and Natives of this area did not have knowledge of alcohol until contact with Whites occurred in the 1700 and 1800s. There may have been one exception to this, Park reported that the Paiute (Paviotso) made a "fermented drink from a reed-like plant" (LaBarre, 1938). However, this practice was not wide-spread.

### Northeastern Tribes of the United States

In the woodlands of the northeastern United States lived a large number of Indian groups that spoke primarily three languages: Algonquian, Iroquoian, and Siouan (Joseph, 1991; Spenser, et al., 1977). Their livelihood varied from hunting and fishing to forming large agricultural complexes. They lived south of Maine and in the Ohio River Valley. One of the agricultural complexes, the Hopewellian culture, was one of the most sophisticated societies north of Middle America. Alcoholic beverage use in this region is sparsely documented. There is some evidence that the Huron made a mild beer made from corn (Cherrington, 1925). They, apparently, placed unripe corn into a stagnant pool of water, left it for several months and from this made a fermented gruel. This was drunk at tribal feasts. Reference has been made to "maple wine" and "sassafras

beer” but it appears that these beverages were used before fermentation (Heath, 1983). The French, Dutch, and English colonists quickly settled this land, lured by the land's abundant resources. In the trade that ensued, alcohol emerged as a vital and often destructive commodity.

The colonists that immigrated from Europe placed a great deal of importance on their alcoholic beverages. “The Puritans set sail for the New World with 14 tons of water, 42 tons of beer, and 10,000 gallons of wine” (Anderson, 1988, preface). Samoset, a member of the Wampanoag Indians, assisted the Pilgrims in the first winter and became an enthusiastic participant in the use of alcohol in their first Thanksgiving feast (Lender & Martin, 1982). This convivial setting changed rapidly as the new settlers became concerned that the Indians could not hold their liquor and was the genesis of the long-term stereotype the “firewater myth” (Leland, 1976). As a result of this myth, there ensued a number of attempts by the colonies and later the United States to halt the sale of alcoholic beverages to the American Indians. This eventually succeeded in 1832 with passage of the Indian Intercourse Act which remained in force until 1953.

### Southeastern Tribes of the United States

South of Tennessee to the Gulf of Mexico and east of the Mississippi River lived a large array of tribes, chiefly from the Muskogean branch of the Gulf language stock (Joseph, 1991). They lived in small farming communities cultivating a range of crops: corn, beans, melons, and tobacco, and harvesting nuts, berries, and sunflowers from the forests. First contact with Europeans occurred in 1513 when Juan Ponce de Leon discovered Florida. There is only limited evidence that alcoholic beverages existed prior to White contact, but there was no lack for ingredients; the southeastern tribes agricultural life style was an ideal setting for the production of alcohol. There is also conjecture that Indians from Mesoamerica may have made early contact with tribes along the Mississippi Valley; this could have occurred by sailing across the Gulf of Mexico (Joseph, 1991). If this had taken place, Mesoamerican Indians may have exchanged their knowledge of producing alcohol.

The Creek in Georgia were reported to have prepared a mildly intoxicating drink from berries, but there was little evidence of drunken behavior until White contact (Scomp, 1888). Likewise, persimmon wine was produced by tribes in the Southeast, but it was used prior to fermentation (Driver, 1969; MacAndrew & Edgerton, 1969). Finally, the Cherokee tribe located in the Carolinas made limited use of fermented juices of wild fruit (Cherrington, 1925).

“Black Drink” was made along the Atlantic Sea Coast. It was a non-alcoholic black liquid purgative made from the leaves of the cassina shrub and used for spiritual purification, mental power, and physical

strength. This drink did not contain any alcohol but was an emetic and stimulate containing small amounts of caffeine.

### Plains Indians

The Indians of the plains occupied the large expanse between the Mississippi River and the Rocky Mountains which extended north to Canada and south to north Texas (Joseph, 1991). They represent diverse cultural backgrounds. The Plains Indians varied from the semi-agricultural tribes in the east to the nomadic buffalo hunters of the west who have come to be stereotyped as the "American Indian". First contact with European influence came in 1541 when Coronado's expedition reached the Wichita in Kansas. In the 1600s the French, English, and Dutch began to move into this area. Many of the northern tribes had increased contact with the White population between 1804–1806 when Lewis and Clark explored this area, by that time most tribes had knowledge of alcoholic beverages (Weibel-Orlando, 1986). There is no evidence that alcohol was produced in this region prior to White contact or that any of their ceremonies contained any ritual drinking of nonalcoholic beverages as in the Southeastern Tribes.

It was in the 1800s that contact between Whites and Indians intensified, so too, the trade that often included alcohol. Fur trappers and traders led the way followed by the military, miners, and the early settlers (Winkler, 1968). Trading practices were often deceitful and White merchants enticed Indians to drink until intoxicated and then ruthlessly exploited them. It was not infrequent that this would end in violence eventually leading to a ban on traders access to Indian camps (Winkler, 1968).

### Alaska Natives

Alaska Natives can be divided into five major groups: Aleut, Northern Eskimo (Inupiat), Southern Eskimo (Yuit), Interior Indian (Athabaskan) and Southeast Coastal Indians (Tlingit and Haida) (Langdon, 1989). Presently, there are about 70,000 Alaska Natives who occupy 533,000 square miles. This is an immense land mass with vast distances between populations. As a result of this and other geographic and climatic barriers, the Native groups had contact with Whites later than most Indians. Approximate times of contact were: Aleut, 1750–1780; Southern Eskimo, 1780–1840; Northern Eskimo, 1850–1870; Interior Indians, 1840–1860; and Coastal Indians, 1775–1800.

Agriculture did not have any base in Alaska; hunting and fishing are the main means of subsistence. Prior to White contact, there were several isolated accounts of aboriginal production of alcohol. This account of an Aleut village was told by Berreman (1956):

This story concerns a village which once existed near Nikolski whose inhabitants found an empty barrel washing up on the beach. They filled it with berries and put it in a storage house. The following winter, two servant girls were sent to get the berries but found only liquid in the barrel. They tasted some themselves and brought some back to the villagers who consumed it. After several such trips, everyone was acting strangely, including the girls, and no one knew why. On the final trip, the giddy girls tipped over their seal oil lamp on the grass floor, set the storage house on fire, and burned up the winter's store of food as well. According to informants, such potent liquid was not encouraged again until the Russians came (p. 504).

The other account was by Davydov (1977) who claimed that the Koniag, who were Southern Eskimo (Yuit), made an alcoholic beverage from fermented raspberry and bilberry juice (Cherrington, 1925; Horton, 1943). These Alaska Natives lived on Kodiak Island and on the proximal part of the Alaska Peninsula, adjacent to the Aleut. A tribal group of southeastern Alaska, named the Kolosh by the Russians, may have had a form of intoxicant made from roots. They chewed pitch from roots that produced intoxication (Anderson, 1988). Soon, after contact with Whites, many Native groups learned to manufacture their own alcoholic drinks.

The Aleut had first White contact with Russian sailors who brought with them and later manufactured "kvass". This was an alcoholic beverage that was made from grain, apples, or roots and thought to prevent scurvy (Fortune, 1989). Initially, alcohol was only a problem for the Russian sailors but became a serious problem later for the Aleut. Natives of this region, too, learned to prepare kvass and had access to bootlegged whiskey.

Alcohol was next introduced to the Tlingit Indians in about 1790 and was brought to them by French traders and later by the Russians. During the early American occupation, the Tlingit learned to distill a liquor by the name of "hootch" which was named after the village of Hoochinoo of Kootznahoo on Admiralty Island.

In the 1850s Russian traders had contact with the Natives of Norton Sound and soon after this, the use of alcohol spread throughout the north (Fortune, 1989). The last region to be influenced by the use of alcohol was the interior of Alaska. The Athapaskan of the interior had contact with liquor in the 1870s after the arrival of American traders and prospectors (Fortune, 1989). As is the case in other parts of the United States, alcohol use, and later abuse, closely followed Native Alaskan contact with Europeans and Americans in the settlement of Alaska.

#### Tribes of the Northwest Coast and Plateau

On the thin strip of land along the northwest coast between Prince William Sound and northern California exists a diverse population of Native groups that includes the following groups: Tlingit on the Alaskan

panhandle; Haida on Queen Charlotte Island; Tsimshian, Bella Coola, and the Kwakiutl on the British Columbian coast; numerous Salish groups and other Native groups on the Washington and California coast (Josephy, 1991). None of these groups developed any agriculture, but lived off the abundance of the sea and surrounding forests. The Kwakiutl of Vancouver Island were reported to have produced an alcoholic beverage from elderberry juice, black chitons, and tobacco which produced a mild form of intoxication (Lemert, 1954). They were the only recorded group in this area to have made any alcohol prior to being introduced by European or American influence. White contact came in the 1700s when Russian fur traders came into the area; this was followed by Spanish, English, and American arrival later in the century. After White contact numerous cultural changes took place. One unique custom that unfortunately took on a new form was the potlatch (from the Nootka language "patshat" meaning giving) (Josephy, 1991). This was a feast held on important occasions during which the host would give away his wealth to invited guests. This was banned in many tribes in 1884 and, unfortunately, replaced by the "Whiskey Feast" where alcohol became the primary gift (Jilek-Aall, 1974).

To the east and adjacent to the Northwest Coast Indians lived a diverse group of tribes between the Cascades and the Rocky Mountains including numerous Salishan speaking tribes, Athabaskan speaking tribes, and Kutenai (Josephy, 1991). They lived primarily off the abundant fishing provided by the drainage of the Columbia and Fraser Rivers. No alcoholic drinks were made by this population prior to White contact which occurred later than most Indians in the continental United States.

#### Native People of California

California was a populous area with over 350,000 native people when first contacted by White men. Over one-hundred and five different groups lived in this area and six different languages were spoken with numerous dialects (Josephy, 1991). These Native people were primarily hunters, fishers, and gatherers and were not involved in agricultural pursuits due to the abundance and variety of foods. Many of the groups used acorns as a staple in their diet. Several tribes from California are reported to have made a cider from manzanita berries which was fermented (LaBarre, 1938). However, there is little documentation of this practice. American Indians in this area used other intoxicating substances in ritual ceremonies. For example, Jimpson Weed, a narcotic plant, was used. The Chingichnich Cult initiates drank this plant to produce hallucinations which purpose was to place them in contact with the supernatural (Josephy, 1991).

In 1769 the Spanish first colonized this region and in 1848 the United States acquired California. The Gold Rush that followed was disastrous for many American Indian groups and the population declined to



15,000 by the end of the nineteenth century. Many tribes were totally wiped out by disease or killed.

### Conclusion

The use of alcohol originated in Middle America but rapidly diffused to Northern Mexico and from there to the Southwestern United States. The majority of aboriginal production and use of alcoholic beverages was in this region. However, there was a surprising number of scattered accounts of intoxicating beverage use throughout the United States prior to White contact. For the most part, the use of alcoholic drinks required an agricultural base, but not in all instances. The reason for this is primarily that alcoholic beverages were made from domesticated plants, although, there are examples of liquor being derived from wild plants (Driver, 1969).

Aboriginal use generally did not involve excessive drunkenness, but controlled and supervised use often in highly ritualized occasions. Further, accounts of American Indians' initial encounters with alcoholic beverages did not describe reckless or disinhibited behavior. The first recorded account where alcohol was given to American Indians was in 1545 by Jacques Cartier, this occurred without incidence, and as MacAndrew and Edgerton (1969) so aptly described, "when the North American Indians initial experience with alcohol was untutored by expectations to the contrary, the result was neither the development of an all-consuming craving nor an epic of drunken mayhem and debauchery" (p. 114).

It was with ongoing White contact that the use of alcohol assumed more destructive characteristics. The reasons for this are beyond the scope of this review to enumerate in detail and are reviewed elsewhere (MacAndrew & Edgerton, 1969). Several hypotheses are likely: alcohol became increasingly more available through the active commercial and fur trade; tribes did not have to divert valuable food supplies into producing alcoholic beverages; the content of alcohol in beverages increased dramatically with the introduction of distilled spirits, which was largely unknown to American Indians except by the Aztec who had some familiarity with rudimentary distillation processes (Bourke, 1894); and lastly, and perhaps most likely, massive social and cultural changes came about as the result of outside contact. Social rules governing drinking behavior shifted as a result of these changes. Alcohol became a menace, not necessarily because it was novel in use, but as an expression of a dramatic sociocultural shift.

Patrick J. Abbott, M.D.  
Center on Alcoholism, Substance Abuse, and Addictions  
2350 Alamo SE  
Albuquerque, NM 87106

## References

- Anderson, T. I. (1988). *Alaska Hooch*. Fairbanks, AK: Hoo-Che-Noo.
- Berberman, G. D. (1956). Drinking patterns of the Aleuts. *Quarterly Journal of Studies on Alcohol*, 17, 503–514.
- Bourke, J. G. (1894). Distillation by early American Indians. *The American Anthropologist*, 7, 297–299.
- Cherrington, E. H. (1925). Aborigines of North America. In E. H. Cherrington (Ed.), *Standard Encyclopedia of the Alcohol Problem, Vol. 1* (pp. 3–42). Westerville, OH: American Issue.
- Davydov, G. I. (1977). *Two Voyages to Russian America, 1802–1807*. Kingston, Ontario: Limestone Press.
- Devereux, G. (1948). The function of alcohol in Mohave society. *Quarterly Journal of Studies on Alcohol*, 9, 207–251.
- Driver, H. E. (1961). *Indians of North America*. Chicago, IL: University of Chicago Press.
- Driver, H. E. (1969). *Indians of North America*. Chicago, IL: University of Chicago Press.
- Fortune, R. (1989). *Chills and Fever*. Anchorage, AK: University of Alaska Press.
- Heath, D. B. (1964). Prohibition and post-repeal drinking patterns among the Navajo. *Quarterly Journal of Studies on Alcohol*, 25, 119–135.
- Heath, D. B. (1983). Alcohol use among North American Indians: A cross-cultural survey of patterns and problems. *Research Advances in Alcohol and Drug Problems, Vol. 7*. New York: Plenum Publishing Co.
- Heidenreich, A. (1976). Alcohol and drug use and abuse among Indian-Americans: A review of issues and sources. *Journal of Drug Issues*, 6(3, Summer), 256–272.
- Horton, D. (1943–1944). The functions of alcohol in primitive societies: A cross-cultural study. *Quarterly Journal of Studies on Alcohol*, 4, 199–320.
- Hrdlicka, A. (1904). Method of preparing tesvino among the White River Apaches. *American Anthropology*, 6, 190–191.
- Jilek-Aall, L. (1974). Psychosocial aspects of drinking among Coast Salish Indians. *Canadian Psychiatric Association Journal*, 19, 357–361.
- Josephy, A. M. (1991). *The Indian Heritage of America (Rev. Ed.)*. Boston, MA: Houghton Mifflin Co.
- Kennedy, J. G. (1963). Tesquino complex: The role of beer in Tarahumara culture. *American Anthropologist*, 65, 621–639.
- Kroeber, A. L. (1931). The Seri. *Southwest museum papers*, 6, Los Angeles.
- Kunitz, S. J., & Levy, J. E. (1974). Changing ideas of alcohol use among Navajo Indians. *Quarterly Journal of Studies on Alcohol*, 35, 243–259.



- LaBarre, W. (1938). Native American beers. *American Anthropologist*, 40, 224–234.
- Langdon, S. J. (1989). *The Native People of Alaska (Rev. Ed.)*. Anchorage, AK: Greatland Graphics.
- Leland, J. (1976). *Firewater myths North American drinking and alcohol addiction*. New Brunswick, NJ: Rutgers Center of Alcohol Studies.
- Lemert, E. M. (1954). Alcohol and the Northwest Coast Indians. *University of California Publications in Culture and Society* 2, No. 6. Berkeley, CA: University of California Press.
- Lender, M. E., & Martin, J. K. (1982). *Drinking in America*. New York: The Free Press.
- Loeb, E. M. (1943–1944). Primitive intoxicants. *Quarterly Journal of Studies on Alcohol*, 4, 387–398.
- MacAndrew, C., & Edgerton, R. B. (1969). *Drunken comportment a social explanation*. Chicago, IL: Adeline.
- Newcomb, W. W. (1969). *The Indians of Texas*. Austin, TX: University of Texas.
- Ortiz, A. (1969). *The Tewa world*. Chicago, IL: University of Chicago Press.
- Paredes, A. (1975). Social control of drinking among the Aztec Indians of Mesoamerica. *Journal of Studies on Alcohol*, 36(9), 1139–1152.
- Price, J. A. (1975). An applied analysis of North American Indian drinking patterns. *Human Organization*, 34(1, Spring), 17–26.
- Reddy, M. A. (Ed.). (1993). *Statistical record of Native North Americans*. Detroit, MI: Gale Research Inc.
- Scomp, H. A. (1888). *King alcohol in the realm of king cotton*. Chicago, IL: Blakeley.
- Spenser, R. F., Jennings, J. D., Johnson, E., King, A. R., Stern, T., & Steward, K. M. (1977). *The Native Americans ethnology and background of the Native American (2nd ed.)*. New York: Harper and Row.
- Spier, L. (1933). *Yuman tribes of the Gila River*. Chicago, IL: University of Chicago Press.
- Waddell, J. O., & Everett, M. W. (1980). *Drinking behavior among Southwestern Indians*. Tucson, AZ: University of Arizona Press.
- Weibel-Orlando, J. (1986). Indians, ethnicity, and alcohol. In L. A. Bennett & G. M. Ames (Eds.), *American Experience with Alcohol* (pp. 201–226). New York: Plenum Press.
- Williams, M. (1985). Alcohol and ethnic minorities: Native Americans — an update. Research reports. *Alcohol and Research World*, Summer, 66–67.
- Winkler, A. M. (1968). Drinking on the American frontier. *Quarterly Journal of Studies on Alcohol*, 29, 413–445.2

# COMPARATIVE STUDY OF PROBLEMATIC GAMBLING BEHAVIORS BETWEEN AMERICAN INDIAN AND NON-INDIAN ADOLESCENTS WITHIN AND NEAR A NORTHERN PLAINS RESERVATION

Darryl Zitzow, Ph.D.

*Abstract: This study compared the gambling behaviors of American Indian adolescents with their non-Indian peers. Results indicated that perhaps due to socio-economic status, cultural issues, increased direct and vicarious exposure to gambling and gambling availability, that American Indian adolescents displayed greater frequency of gambling involvements, earlier onset of gambling experiences and greater tendency to exhibit problematic gambling behaviors.*

Historically, gambling has been available to American Indians through various traditional activities, including shell games, hand games, and moccasin games. Some historical summaries have documented pow-wows and associated games of chance in the 1800s where visitors left "only with the clothing on their backs" after gambling away possessions (Mille Lacs Band Museum, 1992).

Currently many American Indian communities have greater gambling opportunities (e.g., large stakes bingo, video poker, slots, and pull-tabs), frequently with higher stakes than is available within non-Indian communities. Many reservation communities already exist with legacies of more than 20 years of gambling availability. The literature also suggests that the greater the length of exposure to gambling, the greater the potential is for developing gambling problems (Livingston, 1974). Exposure issues may be both direct or indirect (including vicarious exposure through adult family members).

The assumption persists, that compulsive gambling behaviors exist at a higher rate for American Indian adolescents in comparison with neighboring non-Indian populations. This assumption had *not* been tested and forms the basis of the present study.

Within the rural reservation involved in this study, large stakes bingo has been available for at least fifteen years. Video poker machines

have been available for five years and tribal pulltabs for six years. State-sponsored scratch tabs and lottery became available in 1990. To date, there has been no formal assessment concerning the impact of the burgeoning gambling industry on reservation youth.

In an "adolescent survey of gambling behaviors in Minnesota" abstinence from gambling was defined as "rare" among Minnesota teenagers (Winters, Stinchfield, & Fulkerson, 1990, p. 26). Nearly 90% indicated they gambled at least once in their lifetime. The most popular games for adolescents were cards for money, bingo, betting on games of personal skill, sports betting, scratch tabs, and pulltabs. The study indicated 6.3% were problem gamblers, 19.9% "at risk" gamblers, with 73.9% "no problem" gamblers. Results also indicated that problem gamblers tended to be male (86%), and resided primarily within a metro area (71%). The majority (60%) began their gambling during or before the sixth grade. Of those identified in the adolescent problem group, 72% were regular drug users; 83% admitted to engaging in illegal activities; 75% disclosed that at least one of their parents gambled. There was some concern that the Minnesota study *did not* effectively sample the rural areas of Minnesota or represent adequately American Indians as well as other minority communities within the Upper Midwest.

Jacobs (1990) suggested that until as recently as 15 years ago adolescent gambling was not perceived as a problem, despite evidence of problem gambling with adults and youth involvement with other addictive behaviors. His review of the literature revealed that from 40% to 80% of juveniles had gambled in the previous twelve months, that perhaps as many as seven million juveniles gambled with or without adult awareness in 1988, 85% to 90% of high school youth who gambled were under the legal age, and more than one million juveniles were experiencing gambling-related problems. Jacobs (1991) also felt that teenagers, by virtue of the developmental demands of adolescence, were most "at risk".

Researchers have attempted to examine the antecedents of risk for all addictions. Marston, Jacobs, Singer, Widaman, and Little (1988) focused on adolescents' lack of "addiction resistance" skills as being related to poor personal self-esteem and unhealthy parent models. They suggested universality of characteristics that may lead to addictions, including alcohol.

The literature indicates a high degree of correlation between alcoholism and the potential for gambling addiction (Roston, 1961). Jacobs (1991) discussed the similarities between alcohol and gambling addictions, and expressed special concern about the conditions and characteristics that predispose to alcohol misuse, may also exist for the problematic gambler. High rates of problematic and dependent use of alcohol among American Indians, as a minority, have been well documented by numerous studies (Midwest Regional Center, 1988). Depression, poverty, and unemployment within American Indian reservation communities also

appear to have the potential of increasing gambling problems, since they already appear to increase alcohol addictions.

### Methodology

#### Definition of Terms

For the purposes of this study, the following terms were used:

1. *Non-bettors*: Persons who never gamble for money (or any material currency).
2. *Non-problematic gamblers*: Someone who gambles but does not appear to possess a persistent problem, dependency, or compulsion with gambling.
3. *Problematic gambling characteristics*: Gambling related attitudes and behaviors gleaned from the literature and derived from the South Oaks Gambling Screen (SOGS) (Lesieur & Blume, 1987). A *problematic gambler* is one who meets SOGS criteria for having a gambling problem (3 or 4 characteristics).
4. *Pathological/compulsive gambling*: A pathological gambler is a person who meets the criteria for pathological/compulsive gambling according to the South Oaks Gambling Screen. (5 or more characteristics).

#### Study Population

The reservation participating in this study includes three separate counties. The total population within the three counties is 41,234 with 3,687 or 8.9% of American Indian descent (1990 Census, P.L. 94-171). Within the reservation there are five separate and distinct villages, with primarily American Indian residents. Six separate communities border the reservation, with an average of less than 8% persons of American Indian descent.

#### Hypothesis

American Indian adolescents (ages 12-19) within the study community possess a significantly greater number of respondents qualifying for both problematic and pathological gambling status when compared to a control group of non-Indian peers within adjacent communities.

### Development of Protocol

The Adolescent Gambling Survey protocol included items or questions drawn from the South Oaks Gambling Screen (SOGS) (Lesieur & Bloom, 1987), Diagnostic and Statistical Manual (DSM-III-R) (American Psychological Association, 1987) symptoms of pathological gambling, a section on personal feelings, a section summarizing types of gambling activities participated in, and descriptive information. (Note: All of the SOGS items regarding borrowing money for gambling were deleted in favor of a single question on borrowing activity. Pilot study results previously indicated no response to these SOG items. This was perhaps due to the fact that many of the alternatives in borrowing listed on the SOGS were not available to the rural sample population.) Items from the "20 Questions" test were also used (Gambling Anonymous 20 Questions, 1982). These measures (SOGS, 20 Questions, DSM-III) have been used primarily with adult gambling populations. As a result, they may not be sensitive to the characteristics of adolescent gamblers. Additional questions were asked as a means of focusing on adolescent-specific gambling choices. Survey items were examined and altered until they met the criterion of content validity determined by four separate mental health professionals with backgrounds in treating gambling addictions. A pilot study was completed in order to obtain maximum understandability of items. An identical item was repeated within the survey to establish a measure of respondent reliability. The majority of items were yes/no questions with some Likert-type items. Analyses for nominal/ordinal statistics were used for each comparison, but total scores were treated as ratio data.

Permission was obtained from secondary school officials within four separate communities to administer the survey to all students in grades 9–12 on a Wednesday. Students and their parents were advised about the study and given permission forms to complete, two weeks prior to survey administration. Both the students and parents were required to sign consent forms prior to administration of the survey. The survey was monitored by the author and trained associates. A stipend was given to student participants upon completion. Students in alternative education, EBD classrooms, homebound and GED/independent studies were included in the study population (less than 1% of area students had dropped out from high school education).

Within the schools, there were 307 possible participants. Of the total possible, 22 were absent during the day of protocol administration and 8 had not completed permission forms, resulting in 277 completed surveys. This represented 90.2% of the eligible population within the schools. All surveys were reviewed for accuracy and consistency in completion. All surveys were used in the analyses. No names were attached to the surveys. The surveys measured student participation in a variety of gambling alternatives including: bingo (up to \$2000 totals could be won),

scratch tabs (state-sponsored scratch-off tickets purchased from convenience stores that provide for instant winning), pull tabs (tribally sponsored pull-off tabs for instant winning), and cards for money (any game such as smear, poker, black jack for money).

### Results

Table 1 describes the adolescent participants in the adolescent gambling survey. The majority of respondents (57%) were male. Respondents ranged in ages from 14 to 19, and averaged 16.5 years.

The sample is consistent with general adolescent parameters within the surrounding area. Just over one-fourth of all respondents claimed American Indian ancestry as their main ancestry. Over 41% (115 respondents) claimed some degree of American Indian blood. (Note: The following comparisons of American Indian youth contrast the 115 respondents who claimed some degree of American Indian blood with the 161 respondents who claimed no degree of American Indian blood, simply because quantum was perceived as more accurately measurable.)

Table 2 summarizes the problem gambling items that yielded no significant differences between American Indian and non-Indian adolescents. This represents nearly half (22 out of 46) of the problem gambling items presented in the study. Items most frequently endorsed by adolescents were: having at least one parent that gambled (63%), believing minors should be allowed to gamble (56%), dreaming of solving problems by winning a lot of money (52%), and felt guilty or sad over money lost when gambling (37%).

Table 3 summarizes 24 items where significant differences existed in problem gambling behaviors using Chi Square or t-score tests. More American Indian adolescents (94%) indicated at least one experience with gambling than did non-Indian adolescents (86%). American Indian students also started gambling at an earlier age and grade level (12 years and 6.7 grade) as compared to non-Indians (13.27 years and 7.7 grade). American Indians also tended to have higher single wins and losses (average most *won* = \$124, average most *lost* = \$24) than non-Indians (average most *won* = \$29, average most *lost* = \$24). (Note: Several American Indian adolescents reported single wins as high as \$1000 at a single time, when playing bingo.) Indian adolescents admitted to 24 out of 46 problem gambling behaviors more frequently ( $p < .01$  to  $p < .05$ ), than non-Indian adolescents. Multivariate analyses yielded similar support for the same items, suggesting the noted differences were *not* due to chance. (Correlations ranged from  $r = .28$  to  $.83$ .)

American Indian adolescents reported more problematic behaviors and attitudes associated with gambling, including: lying about what they won or lost; got into arguments with others because of gambling; borrowed money or pawned to pay for gambling; used money they were

**Table 1**  
**Descriptive Data (N = 227)**

	N	%
<b>SEX</b>		
Male	159	57
Female	118	43
<b>AGE</b>		
14	12	4.4
15	46	16.8
16	74	27.0
17	83	30.3
18	54	19.7
19	4	1.5
Average age: 16.5 yrs		
<b>ANCESTRY</b>		
Norwegian	60	26.3
German	93	35.0
Italian	2	.8
French	2	.8
English	14	5.3
American Indian	71	26.7
Swedish	3	1.1
Other	11	4.0
N/A	11	
<b>BLOOD QUANTUM</b>		
None	161	58.3
Less than 1/8	30	10.9
1/8 to 1/4	24	8.7
Over 1/4 to 1/2	16	5.8
Over 1/2	17	6.2
Don't know	28	10.1
N/A	1	

not supposed to for gambling; chased previous gambling losses; and tried to cut down or stop gambling, but could not.

American Indian adolescents were more likely to believe that gambling was a fast and easy way to earn money (Indians, 55% and

Table 2  
Problem Gambling Items With No Difference Between  
Ethnic Groups (N=277)

Item #	N	%
I try to hide my gambling from my family or friends.	6	2.2%
I often daydream about gambling.	19	6.9%
I often dream of solving my problems by winning a lot of money.	143	51.6%
I feel people look up to you when you win at gambling.	51	18.4%
I have taken money from my family, without their permission, for gambling.	8	2.9%
I get nervous or irritable if I can't gamble.	6	2.2%
I have felt guilty or sad over the money I lost when gambling.	101	36.5%
My involvement with gambling makes it hard for me to concentrate on my school work.	5	1.8%
I believe that minors should be allowed to participate in gambling.	156	56.3%
My relationship with my family has suffered because of my gambling.	2	.7%
Recently, it seems, I can't resist the urge to gamble.	6	2.2%
I have difficulty sleeping because of my gambling.	2	.7%
I have used gambling to escape worries or troubles.	7	2.5%
I owe people money for gambling debts I haven't paid yet.	10	3.6%
Gambling is on my mind much of the time.	2	.7%
I keep a special amount (stash) just for gambling.	28	10.1%
I keep gambling even though I don't have money to pay for it.	11	4.0%
Sometimes I feel I have a problem with gambling.	6	2.2%
I feel getting lucky with gambling is the only way I'll ever get ahead.	43	15.5%
I have borrowed money from others to cover my gambling losses.	10	3.6%
I feel worried/desperate over gambling losses.	8	2.9%
At least one of my parents gambles.	175	63.2%

non-Indians, 27%). They also felt some of their happiest memories were of winning at gambling (Indians, 32% and non-Indians, 8%).

American Indian adolescents reported significantly greater frequency of gambling involvements ( $p < .05$ ) in 6 of the 13 gambling alternatives provided (e.g., state scratch tabs, tribal pulltabs, state lottery, casino blackjack, cards/poker for money, and bingo) than did non-Indian adolescents. There were no significant differences among the adolescent groups regarding frequency of participation in local sports pools, track betting, sports betting, games of skill, casino roulettes, and casino craps.



Table 3  
Differences Between Adolescent American Indian (N=115)  
and Non-Indians (N=161)

Item #	Non-Indian	American Indian	t-score $\chi^2$ Prob	Greater for
I would be happier, if I just had more money.	42%	61%	$p<.01$	Am. Indian
People who gamble generally make money at it.	4%	24%	$p<.01$	Am. Indian
I feel my childhood years with my family were not very happy ones.	6%	13%	$p<.05$	Am. Indian
Gambling money makes games more fun and interesting for me.	37%	51%	$p<.01$	Am. Indian
I have gambled for money at least once in my life.	86%	94%	$p<.05$	Am. Indian
The grade level I was in the 1st time I gambled.	7.7 grade	6.7 grade	$p<.01$	Am. Indian younger
The age I was the 1st time I gambled for money.	13.27 years	12 years	$p<.05$	Am. Indian younger
The largest amount of money I ever won gambling at one time was.	\$29	\$124	$p<.01$	Am. Indian
The largest amount of money I ever lost gambling at one time was.	\$14	\$24	$p<.05$	Am. Indian
I often spend my free time gambling.	4%	10%	$p<.08$	Am. Indian
I sometimes don't complete things because of my gambling.	2%	8%	$p<.05$	Am. Indian
I have lied about what I won or lost gambling when I talk to friends or family.	9%	21%	$p<.02$	Am. Indian
I've gotten into arguments with others when I bet for money.	24%	49%	$p<.01$	Am. Indian
I've borrowed money from others so I could gamble.	18%	41%	$p<.01$	Am. Indian
I have pawned, sold or traded something of my own to pay for gambling.	1%	9%	$p<.01$	Am. Indian

Table 3 (Continued)  
Differences Between Adolescent American Indian (N=115)  
and Non-Indians (N=161)

Item #	Non-Indian	American Indian	t-score $\chi^2$ Prob	Greater for
I have sometimes used money I wasn't supposed to in order to pay for gambling.	7%	27%	$p<.01$	Am. Indian
I have done something illegal (or thought of it) in order to get money for gambling.	2%	9%	$p<.03$	Am. Indian
I believe gambling is a fast and easy way to earn money.	27%	55%	$p<.01$	Am. Indian
It's hard for me to stop gambling when I'm losing money.	9%	27%	$p<.01$	Am. Indian
I have gambled more money than I planned on gambling.	17%	28%	$p<.05$	Am. Indian
I go back to gambling sometimes and try to win back money I lost earlier when gambling.	24%	47%	$p<.01$	Am. Indian
I have tried to stop or cut down on my gambling but couldn't.	1%	9%	$p<.01$	Am. Indian
Some of my happiest memories are of winning at gambling.	8%	32%	$p<.01$	Am. Indian
It seems I have to keep betting with larger amounts of money than when I first started to gamble money.	3%	8%	$p<.04$	Am. Indian

The most popular gambling activities participated in by the combined adolescent population in order of preference were: (a) cards/poker for money, (b) local sports pools, (c) bingo, (d) betting on games of skill, (e) state scratch tabs, and (f) slot video machines. These gambling preferences were largely consistent with the previous studies of Winters et al. (1990), and Jacobs (1991). At least 34% reported being *under legal age* for participation in a gambling activity. Of all the adult gambling activities, adolescents tended to violate scratch tabs prohibitions the most (29%).

Table 4 depicts the prevalence of overall gambling behaviors and compares non-problematic to pathological gambling behaviors for American Indian and non-Indian adolescents. American Indian adolescents reported greater overall frequency of gambling activities than their

Table 4  
Comparison of Aggregate Gambling Behaviors Between  
Indian and Non-Indian Adolescents

	Non-Indian		American Indian		Total	t-score
	N	%	N	%	%	
*No problem gambling	91	56.5%	61	53.0%	54.8%	no
*Some problem gambling (3, 4 char)	17	10.5%	17	14.8%	12.3%	$p<.01$
*Pathological gambling (5 or more char)	9	5.6%	11	9.6%	7.2%	$p<.01$
*Non-bettors	44	27.3%	26	22.6%	25.3%	$p<.04$
TOTAL	166		115		277	

\*Using South Oaks Gambling Screen criterion (less SOGS items on borrowing).

non-Indian counterparts. Pathological gambling characteristics were exhibited by 9.6% of the American Indian respondents compared to 5.6% of the non-Indian respondents.

Of the American Indian adolescents, 14.8% reported some problem gambling characteristics (3–4 characteristics) as compared to 10.5% of the non-Indian adolescents. The number of non-problem bettors and non-gamblers were slightly greater for non-Indian adolescents.

#### Validity/Reliability

All items were reviewed for face validity by professionals trained in gambling therapy. Item analysis of individual items and group scores were completed. Individual item analyses, using Pearson  $r$ , ranged from .08 to .83; item-to-group analyses ranged from .19 to .67. These correlations suggest variation from item to item with a stronger correlation between items and their combined subtest scores. Concurrent validity estimates are reported in Table 5.

Table 5  
Pearson  $r$  Correlations Between Subtest Scores

	Neg. Feelings	DSM III-R	SOGS	Gambling Frequency
Negative Feelings	1.00	.38	.28	.04
DSM III-R Items	.38	1.00	.83	.45
South Oak Items	.28	.83	1.00	.59
Gambling Frequency	.04	.45	.59	1.00

Another way of measuring validity is to relate individual DSM III-R responses to a construct. The construct "Sometimes I feel I have a problem with gambling" was used for this purpose. DSM III-R items correlated from .47 to .82 with the individual responses to "I feel I have a problem with gambling." Finally, as a measure of reliability and internal consistency, the item "I have had someone die who was very important to me" yielded a response consistency ratio of 85%.

### Discussion

Adolescents have been labeled by the gambling literature as "high risk" for developing problematic gambling behaviors (Winters et al., 1990; Jacobs, 1991). Those same observations apply in this study. Adolescents may be at risk because of the negative feelings typical for adolescent development. Adolescence appears fraught with possible inducements of present and future gambling behaviors.

Adolescents, in general, may be at greater risk for developing problematic or addictive gambling behaviors perhaps because of frustration or helplessness often present during adolescence (e.g., "due for a lucky break", "chasing a big win"); the lure of personal power of winning when one feels powerless; boredom with social/recreational alternatives (e.g., the stimulation and challenge of gambling is more attractive than other alternatives), and immediate need gratification (e.g., winning provides immediate feedback to many adolescents unable to delay immediate gratification of their needs). Adolescents are still developing values and internal controls. By virtue of this developmental process, they may have fewer resources to assist them in resisting the seduction or excitement that gambling can offer.

The majority of adolescents within both groups indicated they have gambled at least once in their lives. This is similar to results found by Winters et al. (1990). Over half reported that at least one of their parents gambled. Adolescence appears to present a number of lures in regard to present and future gambling behaviors; 52% reporting dreaming of solving problems by winning, 18% felt others looked up to you when you won, and 35% felt gambling was a fast and easy way to earn money.

American Indian adolescents in this study presented with more serious problem gambling behaviors, earlier onset of gambling activity, and greater frequency of gambling involvement than their non-Indian peers. American Indian adolescents may also be at greater risk because of more recent extended and direct or indirect exposure (vicariously through adult family members) to gambling opportunities, lower socioeconomic status (impoverishment appears to magnify the importance of winning), cultural acceptance of the beliefs of mysticism or magical thinking that allows greater ease of generalization to trying one's luck or belief in fate, and minority status and perceived prejudice (the lack of control over personal destiny).

Length of exposure to gambling, and its role in promoting problem gambling, as discussed by Livingston (1974), appears to already be felt within this rural reservation population. The recent introduction of a large stakes casino within this reservation community *may not* be the most significant event in promoting gambling or availing gambling alternatives to the reservation community. The most significant events appear to already have occurred within the last 15 years due to the onset of bingo, pulltabs, state-supported scratch tabs, and the state lottery.

The adolescent problem gambling behaviors found in this study are substantial. Adolescent gambling in this country perhaps is one of our best kept secrets (Jacobs, 1991). The assessment of problem gambling in adolescent populations require further refinement. Long term developmental studies that compare adolescent behaviors to later adult gambling are crucial. A continued series of studies is needed, across this country, in order to accomplish the important task of assessing adolescent problem gambling behaviors and more specifically, minority adolescent gambling. Gambling behaviors should be measured in tandem with other adolescent problems (i.e., school problems, alcohol/drug abuse, depression, and family dysfunction). Further study of the unique correlations evidenced in American Indian reservations and believed to be predictive of adolescent problem gambling requires development.

Schools, social work agencies, and mental health systems will benefit from specialized training in the identification, diagnosis, and assessment of problem gambling as well as gambling treatment alternatives. A pro-active campaign in regard to gambling is needed, similar to current efforts aimed at stopping unwanted pregnancies, reducing child abuse, and protecting adolescents from the spread of AIDS. Reservation tribes, especially those with casinos or gambling alternatives, should consider launching public education efforts to inform, identify, and refer adolescents with current or potential problem gambling behaviors.

Darryl Zitzow, Ph.D.  
DHHS, PHS Indian Health Center  
P.O. Box 358  
White Earth, MN 56591

#### References

- American Psychological Association. (1987). *Diagnostic and statistical manual DSM III-R* (3rd ed., revised). Washington, DC.
- Gambling Anonymous 20 Questions*. (1982). Los Angeles, CA: Gamblers Anonymous Pub.
- Jacobs, D. (1990). Treatment focus on American teenage gamblers. *Behavior Today*, 21(11), 1-9.

- Jacobs, D. (1991, September). Teenage gambling in America. *Treatment Center Magazine*, 43.
- Lesieur, H., & Blume, S. (1987). The South Oaks Gambling Screen (SOGS): A new instrument for the identification of pathological gamblers. *American Journal of Psychiatry*, 144(9), 1184–1188.
- Livingston, J. (1974). *Compulsive gamblers: Observations on actions and abstinence*. New York, NY: Harper Torchbooks.
- Marston, A., Jacobs, D., Singer, R., Widaman, K., & Little, D. (1988, Fall). Adolescents who apparently are invulnerable to drug, alcohol and nicotine use. *Adolescence*, 23(91), 593–597.
- Midwest Regional Center. (1988). *Midwest study of ethnic differences, regarding alcohol and other substance abuse*. U.S. Office of Education, Chicago, IL.
- Mille Lacs Band Museum. (1992). Display on historical records.
- Roston, R. (1961). *Some personality characteristics of male compulsive gamblers*. Unpublished dissertation, University of California, Los Angeles, CA.
- Smith, F., & Craig, W. (1992, June). Who's in for how much? *CURA Newsletter, University of Minnesota*, 4.
- Winters, K., Stinchfield, R., & Fulkerson, J. (1990, October). *Adolescent survey of gambling behavior in Minnesota*. Department of Human Services, St. Paul, MN.

#### Author Note

The information and opinions expressed within this study are the author's and do *not* necessarily reflect the opinions and sentiments of the Indian Health Service.

# COMPARATIVE STUDY OF PROBLEMATIC GAMBLING BEHAVIORS BETWEEN AMERICAN INDIAN AND NON-INDIAN ADULTS IN A NORTHERN PLAINS RESERVATION

Darryl Zitzow, Ph.D.

*Abstract: This study compared the active gambling behaviors of American Indian adults, living on or near a reservation with those of non-Indian adults adjacent to or within the reservation. Results indicated that a variety of factors including economic status, unemployment, increased alcohol use, depression, historical trauma, and lack of social alternatives may predispose American Indian adults to greater problematic and pathological gambling behaviors. Unlike previous research that placed males at significantly greater risk for gambling problems, this study found that adult American Indian males and females appear to possess equal risk of problematic gambling.*

According to *Gaming and Wagering Business* (1990, July 15) over 246 billion dollars were handled in gross wagering within the U.S. in 1989. More than 400 million dollars were wagered within American Indian reservations alone. In 1991 gambling was legal in some form in 48 out of the 50 states in the U.S., with an estimated 80% of the adult U.S. population participating in gambling (Lesieur & Rosenthal, 1991). In the 1980s, gambling in Minnesota became a public business with the establishment of horse racing in 1982 and a state lottery in 1988. Between 1985 and 1989, charitable gambling increased from \$100 million to \$1.2 billion (Smith & Craig, 1992). The state's first reservation-operated casino was established in 1984. Minnesota scratch tabs and the lottery became available in 1990. Tribal pulltabs were introduced in Minnesota in 1985. Video poker machines became available at seven tribal bingo halls in 1989, with four more added in 1991. By 1992 there were 16 separate Indian casinos operating in Minnesota. Within the rural reservation community directly involved in this study, large stakes bingo was common for at least fifteen years. Video poker machines had been available for five years and tribal pulltabs for six years.

Historically, gambling was common among American Indians, embodied in various traditional activities, including shell games, hand

games, and moccasin games. Some historical summaries have documented pow-wows and subsequent games in the 1800s where visitors left "only with the clothing on their backs" after gambling away possessions (Mille Lacs Band Museum, 1992).

In a recent adult survey of Minnesota gambling nearly 1% of respondents were defined as pathological gamblers; .6% were potential pathological gamblers, 7% were identified as problem gamblers; and 37% were non-bettors (Laundergan, Schaefer, Eckhoff, & Pirie, 1990).

Pathological gambling may have an organic component. Ciarrocchi and Hohmann (1989) measured characteristics of male alcoholic gamblers. Male alcoholic gamblers tended to have significantly more conflicts and less independence than others within their family. Rugle and Melamed (1990) linked a childhood history of attention deficit disorder with the development of adult addiction disorders, specifically pathological gambling. Blaszcynski, Winter, & McConaghy (1986) found an increase in endorphin levels during gambling for the pathological gambler, that may explain subjective reports of a "high" that occurs. Jacobs (1989) saw gambling as a response to abnormally low arousal levels, providing a sensation-seeking outlet.

In an unpublished dissertation, Roston (1961) found compulsive gamblers more likely to possess the personality characteristics of hostility, aggressiveness, magical thinking, and social alienation than controls. Custer (1985), a leader in treating gambling addictions, felt compulsive gamblers gambled to reduce or avoid pain due to alienation or to overcome a perceived lack of nurturance. He concluded that family experiences significantly impacted eventual adult gambling behaviors. Within the Custer's (1985) treatment experiences, pathological and problematic gamblers were more likely to have experienced the death of a parent, a chemically dependent parent or a history of sexual abuse than others. Finally, gambling has been perceived as a means to overcome losses, a state of deprivation or alienation in an effort to boost self-esteem (Rambeck, 1991). All these findings are of particular importance to the assessment of gambling within American Indian communities, given their correlation to problematic gambling behaviors.

### Purpose of the Study

This descriptive and correlational study attempted to answer multiple questions concerning behaviors of adults currently gambling within and surrounding a selected rural and Northern Plains American Indian reservation community. A paucity of information exists regarding the gambling behaviors, gambling alternatives and gambling compulsions exhibited within rural American Indian communities. The literature has indicated a high degree of correlation between alcoholism and the potential for gambling addiction (Roston, 1961). The high rates of problematic



and dependent use of alcohol among American Indians has been well documented by numerous studies (Midwest Regional Center, 1988). Elia and Jacobs (1993) completed a study of American Indians treated for alcohol dependence in an in-patient setting and found a substantial prevalence of pathological gambling among the patients. Depression, poverty, and unemployment within the reservation community have the potential of increasing gambling problems. Because of these potential predisposing factors, the assumption remains that problematic and compulsive gambling behaviors would occur at a higher rate for American Indians in comparison with neighboring non-Indian populations. However, this assumption had *not* been tested.

Many American Indian communities currently possess greater gambling opportunities (e.g., large stakes bingo, video poker, slots, and pulltabs), frequently with higher stakes than available within the non-Indian communities of their same states. Many reservation communities have legacies of 20 or more years of formalized gambling. The relevant literature also suggests that the greater the time of exposure to gambling, the greater the addictive potential for individuals (Livingston, 1974).

A tremendous opportunity emerged to develop a longitudinal study and a cultural impact assessment regarding the introduction of an expanded casino facility within a rural reservation community. A large casino facility was planned for completion within the reservation under study in the immediate future. Gambling opportunities would soon be greatly increased for area residents. Tribal leaders had long demonstrated their concern for maintaining the health, integrity, financial security, and well-being of their fellow residents. Establishing the proposed casino as an economic boost to the community appeared to have been nurtured by those same concerns. Tribal leaders acknowledged the problematic potential of gambling for persons of all races and the possible negative effects of increasing such activities in their community. They supported this study's potential to evaluate the short-term impact of a new casino and to provide important information on which to base future gambling prevention and intervention efforts.

## Methodology

### Definition of Terms

For the purposes of this study, the following terms were used:

1. *Non-bettors*: persons who never gambled for money.
2. *Active non-problematic gamblers*: someone who gambled, but did not evidence a persistent problem, dependency on or compulsion for gambling.

3. *Problematic gambling characteristics:* based on a list of gambling-related attitudes and behaviors gleaned from the literature and the South Oaks Gambling Screen (SOGS). A problematic gambler is one who meets SOGS criteria for having a gambling problem, but not severe enough to be labeled a pathological gambler (i.e., SOGS scores of 3 or 4 characteristics).
4. *Pathological/compulsive gambling characteristics:* a pathological gambler is a person who meets the criteria for pathological/compulsive gambling defined by either the DSM III-R (at least 4 characteristics) or SOGS (i.e., 5 or above).

Pathological gambling has been defined within the Diagnostic and Statistical Manual III Revised 1987 (DSM III-R) as "a chronic and progressive disorder, characterized by at least four of the following:

1. Frequent preoccupation with gambling or obtaining money to gamble.
2. Often gambling larger amounts of money or over a longer period than intended.
3. Need to increase the size or frequency of bets to achieve the desired excitement.
4. Restlessness or irritability if unable to gamble.
5. Repeatedly loses money gambling and returns another day to win back losses ("chasing").
6. Repeated unsuccessful efforts to cut down or stop gambling.
7. Often gambling when expected to otherwise fulfill social, educational, or occupational obligations.
8. Has given up some important social, occupational, recreational activity in order to gamble.
9. Continues to gamble despite inability to pay mounting debts or has other significant social, occupational, or legal problems that the individual knows to be exacerbated by gambling" (American Psychiatric Association, 1987, p. 325).

### Study Populations

The reservation involved in this study partially covered three separate counties. The total population within the three counties was 41,234; 3,687 or 8.9% of whom were of American Indian descent (1990 Census, P.L. 94-171). Within the reservation there are five separate and distinct villages, with primarily American Indian residents (85% to 90%). Six separate communities border the reservation with an average of slightly less than 8% residents of American Indian descent.

### Pilot Phone Survey

A pilot phone survey was completed prior to this study to establish an understanding of possible frequency differences between American Indians and non-Indians. Of the 261 respondents, 45.6% were of American Indian heritage. Only 1.1% of the sample indicated they had never gambled for money in their lifetime, while 12.6% indicated never gambling within the previous 12 months. There were no differences between ethnic groups regarding overall gambling frequency. However, American Indians reported higher single wins (average \$645) than non-Indians (\$279); non-Indians reported greater participation in non-reservation gambling casinos (49%) than American Indians (39%); American Indians reported greater participation in other reservation casinos (48%) than did non-Indians (40%). There were no differences in gambling participation rates between ethnic groups at the local, temporary reservation casinos.

### Hypothesis

It was expected that American Indian adults (ages 19–76) actively gamble, and would show significantly ( $p < .05$ ): (a) greater participation in various types of gambling activities; (b) more adults diagnosed as possessing pathological or problematic gambling behaviors; and (c) greater amounts of money lost gambling than their non-Indian counterparts.

### Development of Protocol

Items for the *Adult Interview Survey* included: (a) questions from the DSM III-R section on pathological gambling, (b) items from the SOGS [excluding the section on borrowing], (c) items from Gambler Anonymous' 20 Questions screens, (d) assessment of participation in various gambling activities, (e) a section on problematic gambling behaviors, and (f) demographic background. All items were reviewed for content validity by mental health professionals experienced with gambling addictions. A pilot study was completed to maximize the clarity of questions and directions. A question was repeated within the protocol as a measure of respondent reliability.

This survey was designed to be administered as a paper/pencil questionnaire at selected sites, to persons actively gambling on and off the reservation, where gambling activities occur. Within the population studied, bingo was available seven nights a week and occurred at three separate sites. Tribal pulltabs were available at 22 separate sites; state lottery and scratch tabs at 53 separate sites. A random schedule of hours from 10:00 a.m. to 9:00 p.m. was established (using a table of random numbers) to select ten respondents (in order of entry) at each of the time slots at eight of the randomly selected sites brokering tribal pulltabs, state

scratch tabs, and state lottery tickets. These sites accounted for approximately 10% of the area's total sales in state scratch tabs and lottery tickets and 48% of the tribal pulltabs. Three separate days/nights at each of the sites were selected randomly identifying respondents who actively gambled at bingo or purchased tribal pulltabs. Time of day was not a factor with bingo players, due to the fact that participants are all present within one-half hour of the start of bingo. The participants were surveyed both at the beginning, middle, and ends of each week and month to eliminate possible bias of availability of funds.

The final sample totaled 221 respondents. One hundred nineteen persons (53.9%) listing American Indian ancestry and 102 persons (46.1%) indicating non-Indian ancestry. The American Indian sample represented about 9% of the eligible adult American Indian population, while the non-Indian sample represented about 3% of the available non-Indian population. All respondents admitted to at least one previous lifetime experience with a gambling activity. A \$15 stipend was provided for respondents. In the sampling process, a total of 242 persons were asked to participate. Twenty-one persons declined, yielding a participation rate of 91%.

### Results

Table 1 provides descriptive information about the sample. Over half (56%) were female. Respondents ranged in ages from 19 to 76 years.

For purposes of comparison, an attempt was made to equalize the size of the ethnic group samples. Just over half (53.8%) reported American Indian ancestry. The representation of females was slightly greater than males for the American Indian group.

The samples appear largely similar in age distribution and marital status. American Indians, however, reported a higher rate of involvement with both alcohol and marijuana, and had significantly more persons with less than a high school education or general education diploma (GED) than non-Indians. Annual household income was also lower for American Indians. The samples of each ethnic group appeared representative of the current area population parameters.

Chi square analyses were completed for each item with yes/no response choices. All interval and ratio data were analyzed by t-tests and analysis of variance. Multivariate analysis, item analyses (using Pearson *r*'s) and factor analyses also were completed on the data.

Table 2 illustrates response differences between Indian and non-Indian adults, who actively gamble, using t-tests and chi squares. Non-Indians reported an earlier average onset of gambling (20.2 years) than Indians (22.9 years). American Indians reported greater single wins by their parents (\$1,167 average) than non-Indians' parents (\$153), greater personal single wins (\$1,588) than non-Indians (\$840), and slightly greater single losses (\$166) than non-Indians (\$154).

Table 1  
Descriptive Characteristics (N = 221)

	Non-Indian (N = 102)	American Indian (N = 109)		
<b>Sex</b>				
Male	47.0%	42.0%		
Female	53.0%	58.0%		
<b>Age</b>				
19–20	6.8%	5.8%		
21–30	18.6%	21.8%		
31–40	23.5%	23.5%		
41–50	27.4%	23.5%		
51–60	11.7%	10.9%		
over 62	10.7%	14.2%		
Mean age	39.5 years	41.1 years		
<b>Marital Status</b>				
Married	52.9%	42.0%		
Divorced	10.7%	13.4%		
Single	22.5%	26.8%		
Widow(er)	5.8%	8.4%		
Living with someone	7.8%	9.2%		
<b>History of Substance Use</b>	<b>Alcohol</b>	<b>Marijuana</b>	<b>Alcohol</b>	<b>Marijuana</b>
Never used it	5.9%	68.6%	6.0%	52.9%
Couple times in life	14.7%	23.5%	13.4%	32.8%
Once a month	37.2%	0.0%	23.9%	1.7%
Once a week	16.6%	2.0%	11.1%	1.7%
More than once a week	16.6%	1.0%	11.4%	3.4%
Used it too much, no longer use it	8.8%	4.9%	34.2%	7.6%
<b>Total Annual Household Income</b>				
0-\$10,000	24.5%		33.6%	
\$10,001–20,000	28.4%		32.7%	
\$20,001–30,000	16.6%		15.1%	
\$30,001–40,000	9.8%		8.4%	
over \$40,000	20.5%		10.1%	
Mean Income	\$20,822		\$16,970	

Table 2  
Comparisons Between American Indian and  
Non-Indian Gambling Adults (N=221)

	Non-Indian	Indian	t-test $\chi^2$ p
<b>Problematic Gambling Behaviors</b>			
I try to hide my gambling from my family or friends.	1%	8%	<.02
I sometimes don't complete things because of my gambling.	1%	11%	<.02
I've borrowed money from others so that I could gamble	22%	45%	<.01
I have pawned, sold or traded something of my own to pay for gambling.	0%	19%	<.01
I have sometimes used money I wasn't supposed to, to pay for gambling.	14%	37%	<.01
I believe gambling is a fast and easy way to earn money	15%	41%	<.01
I go back to gambling and try to win back money I lost earlier when gambling.	21%	36%	<.03
My family has criticized my involvement with gambling.	3%	14%	<.01
I feel bored much of the time.	11%	21%	<.05
I owe people money for gambling debts I haven't paid yet.	0%	8%	<.02
Sometimes, I keep gambling even though I don't have the money to pay for it.	9%	16%	<.04
I feel I have a problem with gambling.	4%	17%	<.01
I feel getting lucky with gambling is the only way I'll ever get ahead.	7%	18%	<.03
It's hard for me to relax.	17%	40%	<.01
<b>Gambling Activities</b>			
Slot machines/video poker	86%	76%	<.01
Casino Craps	12%	6%	<.05
Bingo	85%	97%	<.01
<b>DSM III-3 Characteristics</b>			
I have failed, at times, to pay my bills because of money I lost when gambling.	5%	25%	<.01
My relationship with my spouse/or family has suffered because of my gambling.	3%	10%	<.04
Sometimes, I don't know where all the money went, that I spent gambling.	14%	26%	<.05
I have lost time at work or missed responsibilities because of my gambling activities.	1%	7%	<.04

More American Indians ( $p < .05$ ) than non-Indians reported the following problematic gambling behaviors: often spending free time gambling; hiding gambling from their family; failure to complete things because of gambling; borrowing money from others to gamble; pawning, selling, or trading for gambling money; gambling without enough money to pay for it; belief that gambling was a fast and easy way to earn money; chasing losses; family criticism about gambling; unpaid gambling debts; belief that getting lucky was the only way they would get ahead; and feeling they had a personal problem with gambling.

Preferences for different types of gambling activities appeared to follow differential availability across ethnic groups. Craps and slot machines, until just recently, were available only to those who could afford travel to non-Indian casinos (i.e., Las Vegas). More non-Indians ( $p < .05$ ) reported playing slot machines and craps than American Indians. However, more American Indians reported participating in bingo. Bingo had been available on the reservation for at least 15 years prior to this study.

American Indians were more likely than non-Indians to report the following DSM III-R characteristics: failure to pay bills because of money lost gambling, relationship difficulties with spouse/family due to gambling, not knowing where gambling money went, and losing time at work because of gambling.

Table 3 compares grouped data on gambling behaviors by American Indians and non-Indians. No differences were evident between ethnic groups with reference to frequency of gambling behaviors in the aggregate. A greater percentage of American Indian respondents ( $p < .01$ ) qualified for problematic and pathological gambling status than non-Indians by a ratio of nearly 2 to 1 for both problem and pathological gambling.

Table 3  
Active Adult Gambling Ethnic Comparisons of  
Combined Gambling Behaviors

Item	Non-Indian (N = 102)	American Indian (N = 119)	t-test $\chi^2$
Combined Gambling Behaviors mean	16.61	16.46	No Difference
Problematic Gamblers (SOGS)	4.6%	9.1%	$p < .01$
Pathological/Compulsive Gamblers (DSM III-R)	1.6%	2.8%	$p < .01$

Table 4 reflects additional findings revealed through multivariate analysis. Divorced and single adults tended to participate more in gambling activities and possessed more overall problematic gambling behaviors than persons from other marital statuses. Alcohol and marijuana use correlated more highly with overall gambling activities and problem gambling behaviors than non-use. Marijuana use was a slightly stronger predictor than alcohol use.

Table 4  
Other Significant Findings (N=221)

Item	Pearson <i>r</i>	<i>p</i>
Divorced and single adults participated in more gambling activities.	.36	.01
Divorced and single adults tended to more overall problematic gambling behaviors.	.36	.01
Marijuana users correlated more highly than alcohol users with gambling activities and problem gambling behaviors:		
Marijuana — range:	.21 to .24	.01
Alcohol — range:	.17 to .23	.01
Persons with lower incomes \$0 to \$10,000 were more likely to:		
Borrow money to gamble	.25	.03
Pawn, sell or trade something	.22	.04
Have more pathological gambling behaviors	.28	.02
Highest money won correlated with highest money lost	.64	.01
Those indicating “used too much alcohol, but quit” reported more:		
overall gambling activities	.17	.01
problem gambling behaviors	.22	.01

Persons at the lowest level of income (\$0 to \$10,000) were more likely to borrow money, pawn, sell or trade something, and had more pathological gambling behaviors than individuals from other income groups. Highest amount of money won correlated at .64 with highest amount of money lost. Big winners tend to be big losers. Abstaining alcohol users correlated the highest with overall gambling activities and problem gambling behaviors.

### Discussion

This study suggests that American Indians had initiated gambling later in life, but were quicker to display pathological and problematic gambling characteristics than their non-Indian peers. These conclusions are guarded because the numbers are small. Once gambling became available to the reservation community, adult Indian participation in gambling appears to have surpassed that of the non-Indian populations.

The survey results appear to support partially the hypothesis that, among adults who actively gamble, more American Indians ( $p < .01$ ) display both problematic and pathological gambling behaviors. Indian gamblers also reported greater wins by their parents and greater personal single wins than non-Indians. Losses between the ethnic groups were *not* significantly different. There were *no* significant differences recorded in



the overall gambling frequencies between American Indians and non-Indians. (In fact, non-Indians reported slightly greater over-all frequency of gambling.) Gambling preferences appeared to follow ethnic lines. No gender differences were apparent in problematic or pathological gambling behaviors. This is contrary to previous research that found males at significantly higher risk for gambling addiction (Laudergan et al., 1990). This may be influenced by the fact that this study involved a substantial subsample of bingo participants; bingo remains one of the activities typically and frequently preferred by females. Reservation populations can be encouraged by these results: over 88% of American Indian adults who actively gamble do not appear to have a problem with gambling.

Conditions that may place American Indian reservation adults at greater risk for problematic or compulsive gambling behaviors include:

1. *Lower socio-economic status.* This study found, however, when income was equalized statistically between ethnic groups, American Indians still remained at greater risk for displaying problem/pathological gambling behaviors. This study also found that, in reference to ethnicity, individuals at the lowest level of income (\$0 to \$10,000) were at significantly *greater risk* than all other socio-economic groups for developing problematic gambling characteristics.
2. American Indians within the reservation studied had a *longer, more intense and recent legacy of exposure to modern gambling* (up to 15 years) both directly through exposure to gambling activities or vicariously through other adults within the family.
3. American Indians, by virtue of their *minority status*, may be more prone to feel alienated, powerless, and *lack a sense of control over their destiny* (Jencks, 1972). As a result, the social recognition or immediate "power" associated with winning at gambling may be even more seductive: "winners" do *not* appear to be "victims". Also, persons with minority status may be more willing to accept the notion, suggested by Bergler (1958), that compulsive gamblers are involved in a more adversarial relationship with the world.
4. Greater *unemployment* and the *lack of financial resources* may push American Indians, because of frustration, into "quick fix" solutions through seeking "big wins".
5. *Evidence of increased depression*, noted by mental health personnel, may provide a substantial pre-condition for gambling addiction among rural, reservation communities. Gambling may be seen as a means to avoid or prevent depression (Błaszczynski et al., 1986).
6. Unique cultural values for some American Indians may lead them closer to *mystical or magical thinking* that may more readily become generalized into acceptance of "fate" or "luck". This might

enhance the lure of the gambling process. Also, traditional values that minimize material wealth or possessions may allow one to more easily “cast one's fate to the wind” because the possession of money may not be that important anyway.

7. The economically *impoverished existence* for many reservation American Indians *dependent* on welfare systems may encourage them to look *more* to the opportunity for *immediate need gratification* associated with *winning* and less to the *consequences of losing*.
8. The *higher prevalence of major historical trauma events* among American Indians who grow up within their communities, renders them more inclined to develop pathological gambling characteristics, related to trauma (Taber, McCormick, & Ramirez, 1987; Jacobs, 1989).
9. The *dependency cycle* of “feast or famine” appears well established for many reservation families. Other addictions — whether junk food, alcohol use, or sexual fulfillment — often observed in a familiar monthly cycle, appear to parallel the availability of finances. As a result, living “with” and later “without” may become an accepted norm. Gambling addiction fits readily into this experiential pattern.
10. *Low self-esteem* may be temporarily, but immediately boosted by the “high” one experiences from “winning”.
11. *Limited social/recreational options* within rural reservation communities makes getting out of the house and being with other adults (i.e., to the casino or bingo hall) that much more inviting. There is *no* doubt that gambling (especially bingo) provides substantial secondary social benefits.
12. The stimulation reduction (Brown, 1987) or sensation-seeking benefits (Jacobs, 1989, 1991) of gambling may be particularly important to American Indians within the reservation community. For example, a young mother may be going to bingo not only to win money, but to do something fun that is *away* from the *boredom* of parenting (enhancement) or escape from family dysfunction (stimulus reduction). Some may be using gambling to “dissociate from” (Jacobs, 1991) while others “filter out” (Brown, 1987) dysfunctional family relationships or alcoholic family behaviors, albeit, only for a little while.
13. A general theory of addiction supports the notion that maladaptive or addictive behaviors that can exist in the family environment (Jacobs, 1989), (e.g., alcoholism, food addiction, sexual addiction)

may be generalized to the maladaptive and addictive behaviors associated with gambling.

This study found that bingo was directly available to the study population as a form of reservational gambling for the longest time period of all gambling activities. Bingo appears to be the great "equalizer" among the gambling sexes, by providing greater availability of gambling to females. Increased length of exposure to gambling for American Indian females appears to equalize gambling opportunities with American Indian males, therefore increasing risk for females and greater addiction potential than previously suggested. Livingston (1974) discussed availability and exposure as key components in the establishment of gambling addiction potential. The importance and impact of availability appears to figure importantly in this study of problem gambling.

### Limitations

The demographic characteristics of American Indians within this study suggest that they possessed lower education, lower household income, and more frequent histories of alcohol and marijuana use than their non-Indian counterparts. The literature has described these demographic factors as significant predisposers to gambling addiction. The combination of these factors may bias the results that suggest American Indian adults are more prone to problem gambling. The sample sizes, though representative, are relatively small, thus not substantial enough for solid conclusions regarding subgroups within the ethnic samples. These data were obtained from active gamblers. As a result, they may not reflect the differences that could occur within ethnic groups, in terms of different levels of gambling frequency.

Generalizing these results to other reservations may not be appropriate, in view of the great variation in reservation exposure to gaming. However, results regarding ethnic differences become even more significant in light of the explosive growth of gambling opportunities in Indian country. American Indian leaders within the participating community remain vigilant and concerned about the continued potential for gambling addiction among Indian people and continue with earnest, to develop better education and referral alternatives for those who exhibit problematic gambling behaviors. There also were no significant differences between American Indians and non-Indians regarding overall pathological gambling characteristics (Zitzow, 1992).

Bingo clearly was preferred more significantly by American Indian respondents. Sub-population samples were not large enough to examine possible differences between selected problem gambling behaviors. Trends were noticed, within the data for bingo players, especially females, to be at higher risk for pathological gambling. Clearly, there is a bias in

this study because bingo has remained available the longest of all gambling alternatives and availability appears to be the key in most studies of gambling pathology.

Darryl Zitzow, Ph.D.  
DHHS, PHS Indian Health Center  
P.O. Box 358  
White Earth, MN 56591

### References

- American Psychiatric Association. (1987). *Diagnostic and statistical manual DSM III-R* (3rd ed., revised). Washington, DC.
- Bergler, E. (1958). *The psychology of gambling*. New York, NY: International Universities Press.
- Blaszczynski, A. P., Winter, S. W., & McConaghy, N. (1986). Plasma endorphin levels in pathological gambling. *Journal of Gambling Behavior*, 2, 3–14.
- Brown, R. I. F. (1987). Models of gambling and gambling addiction as perceptual filters. *Journal of Gambling Behavior*, 3, 224–236.
- Ciarrocchi, J., & Hohmann, A. (1989). The family environment of married male pathological gamblers, alcoholics and dually addicted gamblers. *Journal of Gambling Behavior*, 5(4), 289.
- Custer, R. (1985). *When luck runs out*. Facts on File Publications, New York: National Council on Compulsive Gambling.
- Elia, C., & Jacobs, D. (1993). The incidence of pathological gambling among Native Americans treated for alcohol dependence. *The International Journal of the Addictions*, 28(7), 659–666.
- Gaming and Wagering Business. (1990, July 15). *Newsletter*.
- Jacobs, D. (1989). A general theory of addictions: A new theoretical model. *Journal of Gambling Behavior*, 2, 15–31.
- Jacobs, D. (1991). Teenage gambling in America. *Treatment Center Magazine*, 43.
- Jencks, C. (1972). *Inequality: A reassessment of the effect of family and schooling in America*. New York, NY: Basic Books.
- Laudergan, J., Schaefer, J., Eckhoff, K., & Pirie, P. (1990, November). *Adult survey of Minnesota gambling behavior*. Dept. of Human Services, St. Paul, MN.
- Lesieur, H., & Rosenthal, R. (1991, Spring). Pathological gamblers a review of the literature. *Journal of Gambling Studies*, 7(1), 28.
- Livingston, J. (1974). *Compulsive gambling: Observations on action and abstinence*. New York, NY: Harper Torchbooks.
- Midwest Regional Center. (1988). *Midwest study of ethnic difference regarding alcohol and other substance abuse*. U.S. Office of Education, Chicago, IL.

- Mille Lacs Band Museum. (1992). Display on historical records.
- Rambeck, L. (1991, April 11). Training session sponsored by Minnesota Council on Compulsive Gambling, St. Cloud, MN.
- Roston, R. (1961). *Some personality characteristics of male compulsive gamblers*. Unpublished dissertation, University of California, Los Angeles, CA.
- Rugle, L., & Melamed, L. (1990). Neuro-psychological assessment of attention deficit disorder in pathological gambling. Unpublished paper.
- Smith, F., & Craig, W. (1992, June). Who's in for how much? *CURA Newsletter, University of Minnesota*, 4.
- Taber, J. I., McCormick, R. A., & Ramirez, L. F. (1987). The prevalence and impact of major life stressors among pathological gamblers. *The International Journal of the Addictions*, 22, 71-79.
- Zitzow, D. (1992, May). Unpublished pilot phone survey of gambling frequency.

#### Author Note

The information and opinions expressed within this study are the author's and do *not* necessarily reflect the opinions and sentiments of the Indian Health Service.

The author gratefully acknowledges the advice and counsel of Durand F. Jacobs, Ph.D., in the development of this article.

## SPECIAL COMMENTARY

Barbara J. Bowman, Ph.D.

As a component of the doctoral program in clinical psychology at the University of North Dakota, I spent seven months in residence on a plains Indian reservation. This portion of my graduate experience was designed to enhance my understanding of both rural and American Indian cultures. The practicum included teaching psychology classes at the tribal college, providing individual and community psychological services and the possibility of pursuing my research interests.

During the first several months on the reservation, I focused on meeting community members and trying to understand how rural and/or Native culture differed from my own experiences. I am of Scottish, Irish, English, and Dutch descent and have lived primarily in more urban communities.

Native women were warm and welcoming to me and helped me understand some of the intricacies of reservation life. They helped me find the best buys at the grocery store, told me which was the best cafe in town, taught me to make fry-bread, showed me how to quilt, invited me to sweat with them, and taught me about traditional healing methods. In addition, they helped me understand that one of the most valued things in this community was the recovery from addiction. They also began to let me see glimpses of their intimate relationships that suggested that domestic violence was as common here as in my own culture.

In regard to domestic violence, the use of alcohol by the victim, the offender, or both is common. For example, Silverman and Mukherjee (1987) found that in 54 of their investigated relationships (87%) alcohol had been consumed by one or both parties. Only 8 relationships (13%) were alcohol free. Although alcohol use is certainly not limited to American Indians (Edwards, 1992), and there is great variability among American Indian communities in the prevalence of alcohol use (Jessor, Grave, Hanson, & Jessor, 1969; Levy & Kunitz, 1974; Longclaws, Barnes, Grieve, & Dumoff, 1980; Whittaker, 1962), it has been suggested that the rate of heavy alcohol use is "common among American Indians, perhaps more so than in other populations" (Helzer & Canino, 1992). Given the relationship suggested between alcohol use and domestic violence plus the prevalence of alcohol use among Native populations, one might expect Native women to be a high risk group for experiencing violence in their homes.

My first attempt to reach this population was through a support group that had been formed for battered women by a Caucasian, female graduate student. She had been a provider of clinical services and had taught at the tribal college for four months before I arrived. Her practicum over, she had left the area. She had told me that the group met at the Indian Health Service (IHS). Upon arrival at IHS on the appointed evening, I found the emergency room door locked. It was necessary for me to press a buzzer and wait outside for the emergency personnel to open the door. I felt exposed to the observation of others while waiting and wondered if members of the group had similar feelings. Once allowed into IHS, I waited for some time, and no group (in fact no individual) arrived. After the third week of a similar attendance record, I questioned the emergency room nurse about how effective the group seemed to be. She told me that no one ever came.

My second attempt to reach this population involved a relocation of the support group. I chose the Catholic church which was often used for other social functions. The door was not locked, so one did not have to stand outside waiting for admission. I distributed flyers throughout the community to announce the change, using care not to identify the group as one for "battered women" but for discussing women's issues. The end result was a replication of my first attempt. No one came.

My third attempt involved the cooperation of the ALERT (formerly the Battered Women's Task Force) from a neighboring (off reservation), predominately Caucasian community. After discussions with their staff, we decided to hold an informal "fact-finding" meeting and invite women of the community to come in and visit about what needs they might like to see addressed in their community. This information was passed by word of mouth rather than by flyers. The social workers at IHS, the priests, medicine women, and other service providers were informed of the place and time for the meeting. It was stressed that any needs of women would be heard. I felt that if battering were defined as a problem within this community, the women might be willing to discuss it after trust had developed within the group while addressing less intense issues. The result of this attempt was the same as the previous two. The only women who attended the meeting were myself, the staff from ALERT, and a nun.

There may be many reasons why these attempts failed. Possibilities include, but are not limited to (a) battering was not defined as a problem by this population, (b) the tribal council did not support an effort to identify battering as a problem, (c) child care difficulties, (d) transportation difficulties, (e) my ethnic background and lack of integration into the community or lack of cultural understanding, and (f) men may have been reluctant to allow women to attend a support group focused on women's issues.

Karen Horney (in Monte, 1977) has suggested that neurotic coping mechanisms include compliance, aggression, and withdrawal. Similarly,



Walker (1979) found that the survival skills women develop to cope with violence in their homes are most often passive and include those designed to please the batterer (e.g., having supper ready on time, not talking with other men, dressing modestly). None of these passive strategies decreased the violence within the home. The women in Walker's (1979) study were afraid of expressing their anger overtly for fear of intensifying the battering incidents and therefore used more passive aggressive strategies.

Although these coping strategies were not effective in reducing violence and are often not seen as maladaptive in more normal situations, it should not be assumed that something was "wrong" with these women. Their responses were an attempt to survive, both physically and emotionally, in a possibly lethal situation. Those who study the psychological impact of the holocaust have suggested that people cope differently under extreme circumstances than when in a more normal environment (Gampel, 1979; Kestenberg, 1982).

Walker (1983) found that most battered women perceive the dangerousness of their batterer, with 86% believing that he could or would kill them. Given Walker's findings, one reason women did not attend these support groups may have been fear.

There is, as noted previously, a very active recovery movement in place upon this particular reservation. Groups that were addressing the recovery of members of this community included Alcoholics Anonymous (AA), Al-Anon (support group for family and friends of alcoholics), Narcotics Anonymous (NA), and Co-Dependents Anonymous (CODA). These meetings were well attended and helped form part of a social network that was acceptable to the tribe. The social activities included open meetings once a month which involved two speakers (AA and Al-Anon), and sobriety birthday celebrations. Dances were also held on holidays such as Halloween and New Years Eve.

I was an active member of Al-Anon both prior to and during my practicum due to circumstances in my private life. I began to wonder whether or not I might use the group process already in place, and my membership in it, to broaden the scope of the support provided to Native women. As an Al-Anon member, I was less of an "outsider" having had a common experience with other women in the group. Anonymity, or confidentiality, was already a valued component of the group, the group process was already well established, and would remain so after I left the reservation. I decided to teach a "Big Book Study" (BBS), a review of the AA "Big Book" (*Alcoholics Anonymous: The Story of How Many Thousands of Men and Women Have Recovered from Alcoholism*, 1976) with an Al-Anon focus. I hoped to be able to teach adaptive coping strategies to the women who attended this study.

The BBS was designed to be held for 16 weeks in the hour and a half prior to the regular Al-Anon meeting. Women did attend, and five women completed the course. Because of the reading limitations of some of the students, the course was expanded to 20 weeks.



The course was designed to complete chapters 1–12 in the Big Book. In addition, the students completed the 12 steps of Al-Anon (see Appendix). Each chapter was read by the instructor and the students followed along. At the completion of the reading, we returned to the beginning of the chapter and used underlining and note-taking to enhance the salient principles of each chapter.

Within the first section, “The Doctor’s Opinion,” we discussed the disease concept of alcoholism that is the basic concept of Alcoholics Anonymous.

Those who live with an alcoholic often adopt both cognitions and behavior patterns that are maladaptive. Horney (in Monte, 1977) would probably consider these behavior patterns to be neurotic. As is traditional in Al-Anon Big Book Studies, the women were instructed to substitute “thinking” for “drinking” through the Big Book to increase the emphasis on self rather than another and to engender a more self-centered focus.

Chapter one, “Bill’s Story,” was an overview of the history of the founding of AA and Al-Anon. It noted the progression of Bill’s alcoholism and reinforced the disease concept. It also gave a brief explanation of each of the twelve steps.

Chapter two, “There is a solution,” held hope that there was a way out. For members of AA, this is a way out of alcoholism. For members of Al-Anon it is a way out of maladaptive behaviors, obsessive thoughts, and feelings of low self-worth.

Chapter three, “More About Alcoholism,” was the point at which the group completed step one. Step one involved the acceptance of the disease concept of alcoholism. For Al-Anon women, we discussed some ways in which women had tried to deal with their alcoholic friend or family member in the past. Neither passively placating the alcoholic nor expressing rage overtly seemed to have worked for members of our group. Again, focus was directed to self. Freud might see this as contact with reality (or a strong ego), the most central aspect to effective coping (Coan, 1983).

Refocusing away from obsessive thoughts about the alcoholic and his behavior and toward oneself was seen as cognitive restructuring. Refocusing is facilitated by repeating Al-Anon slogans to oneself (see Appendix). As noted in Al-Anon literature, this refocusing helps lead to “. . . the idea we could take charge of ourselves.” (Al-Anon, 1990). Psychological literature as well supports both cognitive restructuring and positive self-talk as methods of developing self-control (Meichenbaum & Goodman, 1971).

Chapter four, “We Agnostics,” addressed the necessity that one accept the reality of a “higher power.” That power might be God as He is understood in our society, the support of others in the group, or the individual’s private and idiosyncratic conceptualization. Many appeared to feel less alone as they began to share their common experiences around the table.

As noted from Walker’s (1979, 1983) studies, abused women attempt to control their batterer through ineffective means. Beginning to

study the twelve steps seemed to help women talk about their common experiences with alcoholic loved ones which often included past futile attempts to cope. Additionally, seeing the "problem" differently (focus on self rather than other), the freedom to share with others, an acceptance of the lack of control one has over another's behaviors (step 1) and the knowledge that there is help available (step 2) seemed to engender a sense of hope that life could be better.

Chapter five, "How It Works," reassured the women that following the 12 steps would lead to an improvement in their situation. There was a qualification "those who do not recover are people who cannot or will not completely give themselves to this simple program. . ." (p. 58). Within this chapter, steps 2, 3, and 4 were taken (see Appendix).

Briefly, these steps included the preparation for and completion of a moral inventory of self. This led to a recognition of both strengths and weaknesses within the self. This recognition fostered the ability to choose more rationally how to cope with a difficult situation. Rogers (1961) suggested that the "self" is an internal locus of evaluation. Movement toward a more rational internal evaluation (rather than listening to the evaluation of self by the alcoholic) was facilitated by steps 2, 3, and 4.

Chapter six, "Into Action," addressed steps 5, 6, and 7 (see Appendix). Briefly, these steps involved the sharing of a personal moral inventory with a trusted other and privately asking a higher power to remove defects of character. These steps engendered self-acceptance as the trusted other accepted the individual's worst secrets. The private act of asking for removal of the self-defeating aspects of oneself cleared the slate for more adaptive strategies.

This chapter (six) also addressed steps 8 and 9 (see Appendix). These steps involved making a list of people one had harmed and making "amends" to them. Where possible, these "amends" took the form of an apology, or a change in behavior toward the injured party. These two steps helped bring the individual back into harmony with her society.

Chapter six also addressed steps 10 and 11 (see Appendix). Step 10 involved continuing to observe one's behavior toward others and attempting to correct those behaviors before they became maladaptive. Step 11 helped one to remain in contact with self and a high power through prayer, meditation, or simply taking time out to think.

Chapter seven, "Working With Others," addressed step 12 (see Appendix). This step allowed the women to become more socially involved. They now possessed knowledge to pass on to others and could, if they wished, teach a BBS themselves. Speaking at open meetings would be another example of service work suggested by step 12.

Chapter eight, "To Wives," is seen by many Al-Anon groups as outdated information that could be construed as reinforcing negative coping strategies (e.g., ". . .never be angry. . ." [p.111], ". . .often you must carry the burden of avoiding [family dissensions] or keeping them under control. . ." [p. 117], ". . .be careful not to disagree in a resentful or critical

spirit. . ." [p. 117]). The chapter was reviewed, however, and gave good impetus to the discussion of maladaptive strategies such as problem avoidance, wishful thinking, self-criticism, social withdrawal, and the hesitancy to express one's emotions. These were contrasted with the more adaptive coping mechanisms of problem solving, reality testing, cognitive restructuring, emotional expressiveness, and social contact.

The remaining chapters addressed reintegrating oneself into family, work, and society after the recovery process has begun. Those chapters included 9, "The Family Afterward," chapter 10, "To Employers," and chapter 11, "A Vision For You."

In summary, an attempt was made through the already existing avenue of the Al-Anon support group to teach effective coping strategies to women who might be at high risk for domestic violence. In brief, the students were guided through the 12 step process of Al-Anon while attending a study of the AA "Big Book." Although I did not approach domestic violence in an overt manner, the discussions during the BBS allowed women to share experiences that included incidents I would classify as abusive. Rather than focusing upon the violent nature of the incidents, we focused upon constructive ways of reducing such experiences in the future.

Relevant suggestions from interested others for future work in this area have included using private homes as meeting places to facilitate group cohesion and trust, providing dinner, child care, and transportation for the women.

It should be noted that the women who completed the BBS felt a great deal of pride. They held a graduation dinner to which I was invited and bestowed gold-colored pins that we could all wear in recognition of our accomplishment. As previously noted, there was already a well-functioning Al-Anon group in existence; the support of peers with anonymity was available for the women after I left the reservation.

Barbara J. Bowman, Ph.D.  
Dull Knife Memorial College  
and  
University of North Dakota  
305 3rd Street  
Soldier, Kansas 66540

#### References

- Al-Anon Family Group. (1968). *One day at a time in Al-Anon*, New York: Al-Anon Family Group.
- Bill, W. (1939). *Alcoholics anonymous: The story of how many thousands of men and women have recovered from alcoholism*. New York: Alcoholics Anonymous World Services, Inc.

- Coan, R. W. (1983). *Psychology of adjustment: Personal experience and development*. New York: John Wiley & Sons.
- Edwards, R. W. (Ed.). (1992). *Drug use in rural American communities*. New York: Haworth Press, Inc.
- Johnson, S. (Ed.). (1989). *Step by step: District 29-001 newsletter*.
- Jessor, R., Grave, T., Hanson, R., & Jessor, S. (1969). *Society, personality and deviant behavior: A study of a tri-ethnic community*. New York: Holt Rinehart & Winston.
- Jessor, R., Grave, T., Hanson, R., & Jessor, S. (1992). *Alcoholism in North America, Europe, and Asia*. In J. E. Helzer & G. J. Canino (Eds.), New York: Oxford University Press.
- Levy, J. E., & Kunitz, S. (1974). *Indian drinking*. New York: Wiley Interscience.
- Levy, J. E., & Kunitz, S. (1992). *Alcoholism in North America, Europe and Asia*. In J. E. Helzer & G. J. Canino (Eds.). New York: Oxford University Press.
- Longclaws, L., Barnes, G., Grieve, L., & Dumoff, R. (1980). Alcohol and drug use among the Brokenhead Ojibwa. *Journal of Studies of Alcohol*, 41, 32-36.
- Longclaws, L., Barnes, G., Grieve, L., & Dumoff, R. (1992). *Alcoholism in North America, Europe, and Asia*. In J. E. Helzer & G. J. Canino (Eds.). New York: Oxford University Press.
- Monte, C. F. (1977). *Beneath the mask: An introduction to theories of personality*. New York: Praeger Publishers.
- McConnell, J. V. (1983). *Understanding human behavior: An introduction to psychology*. New York: Holt, Rinehart, and Winston, Inc.
- Meichenbaum, D. H. & Goodman, J. (1971). Training impulsive children to talk to themselves: A means of developing self-control. *Journal of Abnormal Psychology*, 77, 115-126.
- Meichenbaum, D. H. & Goodman, J. (1973). *Readings in personality*. In H. N. Mischel & L. W. Mischel (Eds.). New York: Holt, Rinehart, and Winston, Inc.
- Rogers, C. R. (1961). *On becoming a person*. Boston: Houghton Mifflin.
- Silverman, R. A. & Mukherjee, S. (1987). Intimate homicide: An analysis of violent social relationships. *Behavioral Sciences and the Law*, 5, 37-47.
- Walker, L. (1979). *The battered woman*. New York: Harper and Row.
- Walker, L. (1983). Victimology and the psychological perspectives of battered women. *Victimology: An International Journal*, 8, 1-2, 8-104.

## Appendix

### Twelve Steps of Al-Anon

1. We admit we were powerless over alcohol — that our lives had become unmanageable.
2. Came to believe that a Power greater than ourselves could restore us to sanity.
3. Made a decision to turn our will and our lives over to the care of God *as we understood him*.
4. Made a searching and fearless moral inventory of ourselves.
5. Admitted to God, to ourselves, and to another human being the exact nature of our wrongs.
6. Were entirely ready to have God remove all these defects of character.
7. Humbly ask him to remove our shortcomings.
8. Made a list of all persons we had harmed and became willing to make amends to them all.
9. Made direct amends to such people wherever possible, except when to do so would injure them or others.
10. Continued to take personal inventory and when we were wrong, promptly admitted it.
11. Sought through prayer and meditation to improve our conscious contact with God *as we understood Him*, praying only for knowledge of His will for us and the power to carry that out.
12. Having had a spiritual awakening as the result of these steps, we tried to carry this message to others, and to practice these principles in all our affairs.

### Al-Anon Slogans

Let Go and Let God	Easy Does It	Live and Let live
First Things First	Think	One Day at a Time
Keep it Simple	Listen, and Learn	How Important is it?
Simple, Not Easy		

**Twelve Rewards to the Twelve Steps**

1. Hope instead of desperation.
2. Faith instead of despair
3. Courage instead of fear.
4. Peace of mind instead of confusion.
5. Self respect instead of contempt.
6. Self confidence instead of helplessness.
7. The respect of others instead of pity and contempt.
8. A clean conscience instead of a sense of guilt.
9. Real friendship instead of loneliness.
10. A clean pattern of life instead of a purposeless existence.
11. The love and understanding of our families instead of their doubts and fears.
12. The freedom of a happy life instead of the bondage of an obsession.

## Comments

**Ilena Norton, M.D.**

In her report, Dr. Bowman documents her attempts to provide domestic violence counseling to American Indian women living on a plains reservation. Although not successful in her efforts, she recognizes the existence of this problem through informal discussions with women on the reservation and through participation in an Al-Anon group, where some of the women were victims of wife-beating. This author's experience highlights the need for domestic violence interventions in these communities, and also illustrates the challenges of developing successful programs for battered American Indian women.

In 1977 the White Buffalo Calf Women's Society opened the first shelter for battered women on the Rosebud reservation (DeBruyn, Wilkins, & Artichoker, 1990). Subsequently, many American Indian communities have developed shelter and victim assistance programs. Dr. Bowman argues that battered women did not utilize her services because of fear; the success of domestic violence programs in their respective American Indian communities is evidence to contradict this theory. Fear may be a factor for some women, but many women will seek informal and formal sources of help to end the violence. Although there is no literature on help-seeking among battered American Indian women, a significant percentage of battered women in the general population utilize services (Bowker, 1983; Gelles, & Straus, 1988). In the study by Gelles and Straus, human services were used by 38% of the women who were beaten by their partners.

Non-Indian professionals are faced with the task of establishing themselves as a provider who is trustworthy and able to help the community. Dr. Bowman reports she was assigned to the reservation for a seven month practicum. Establishing these relationships occurs over time, and this process would be hampered by the knowledge that her practicum was time-limited. Concerns about confidentiality and the revelation of highly personal and sensitive material would inhibit women from seeking assistance from an unknown non-Indian professional. The abuses and oppression that American Indians have endured from Whites is another important barrier in this regard.

These barriers can be overcome, but the professional therapist must expand beyond the office or clinic based approach, and instead be willing to provide outreach to battered women. An American Indian program director of a domestic violence program provided shelter for a battered woman in her home. Although providing shelter for women in one's home may be beyond the abilities of most counselors, caregivers in

American Indian communities who are active in meeting their clients needs will be more effective.

Dr. Bowman mentions providing dinner, child care, transportation, and meeting in private homes as potential strategies in planning domestic violence interventions. I have found that home visits facilitated establishing an alliance with many battered American Indian women in an urban setting, who were then receptive to individual and group counseling. Additionally, sharing meals in our domestic violence group created an informal atmosphere for sharing experiences. Importantly, counselors should obtain the woman's permission prior to initiating a home visit, because home visits may be dangerous for the woman if the partner is at home (Norton & Manson, in press).

There is presently scant literature regarding domestic violence intervention in American Indian communities, and Dr. Bowman's paper adds to this literature by illustrating the potential problems that arise in program implementation. There is also a tremendous need for information describing successful domestic violence programs, to guide program directors who are interested in starting new programs. Dr. Bowman mentions that alcohol abuse may be a risk factor for domestic violence among American Indians; there is also little information on risk or protective factors for domestic violence in this special population. These are important areas for further study as well as documentation of existing efforts.

Ilena Norton, M.D.  
University of Colorado Health Sciences Center  
Department of Psychiatry  
National Center for American Indian and Alaska Native Mental Health Research  
4455 E. 12th Ave., Campus Box A011-13  
Denver, CO 80220

#### References

- Bowker, L. H. (1983). *Beating wife-beating*. Lexington, MA: Lexington Books.
- DeBruyn, L., Wilkins, B., & Artichoker, K. (1990). It's not cultural: Violence against native American women. Paper presented at the 89th American Anthropological Association Meeting.
- Gelles, R. J., & Straus, M. A. (1988). *Intimate violence: The causes and consequences of abuse in the American family*. New York, NY: Simon & Schuster, Inc.
- Norton, I. N., & Manson, S. M. (in press). Domestic violence intervention in an urban Indian health center. *Community Mental Health Journal*.