Volatile Substance Abuse Among the Kickapoo People in the Eagle Pass, Texas Area, 1993

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Volatile Substance Abuse Among the Kickapoo People in the Eagle Pass, Texas Area, 1993

Although heavy use of spray paint is a pattern of substance abuse rarely seen among adults, a significant number of of Kickapoo people living in the Eagle Pass, Texas area are volatile solvent abusers (VSAs). The Kickapoo Traditional Tribe of Texas has identified chronic use of spray paint as the most pernicious problem the tribe currently faces.

This study, primarily ethnographic in nature, began in the summer of 1993 to provide documentation on the lives of the Kickapoo chronic VSAs, examining their substance abuse patterns and the problems they experienced as a result of this abuse. The study also aimed to provide estimates of the numbers of Kickapoo adult VSAs in need of chemical dependency treatment and to provide suggestions for appropriate treatment for this culturally distinct population.

INTRODUCTION

Purpose of Study

A significant number of Kickapoo people living in the Eagle Pass area of Texas practice a pattern of substance abuse rarely seen among adults—chronic heavy use of spray paint. The problem is so prevalent that the leaders of the Kickapoo Traditional Tribe of Texas (KTTT) identify chronic use of spray paint as the most pernicious problem currently facing the Kickapoo people. Volatile solvent abuse has been endemic among them for twenty years, and according to the Traditional Counsel, "threatens to do what 350 years of hardship could not: extinguish the traditional Kickapoo way of life from the earth."

Little is known about adult chronic users of volatile solvents such as paint. In his recent review, Fred Beauvais (1992) observed that:

There are . . . anecdotal reports of isolated instances in which groups of adults have devel-

oped a pattern of solvent use that is extremely heavy and seem to have become endemic in that population. Adult use of solvents is an extremely underresearched problem and is deserving of much more attention. The highly deviant nature of these groups and their marginal living arrangements will make this work difficult.²

Reginald Smart underscored the observation:

The epidemiology of solvent-inhalant abuse [among solvent-addicted youth and adults] is not well understood.... [T]he clinical epidemiology of solvent abuse, especially the natural history of abuse, remains to be studied.³

One goal of this study was to provide documentation on the lives of adult Kickapoo chronic VSAs, including their patterns of substance abuse and the problems they experienced as a result. The ethnographic section of this report focuses on this topic. A related goal was to provide estimates of the numbers of Kickapoo adults living in the Texas-Mexico



borderlands who are chronic VSAs and in need of chemical dependency treatment. Primarily methodological in nature, this section presents a procedure for estimating treatment needs in a small and culturally distinct population. The third section of the report focuses on the issue of appropriate treatment; the therapeutic, cultural and pragmatic considerations of designing effective treatment for this unique population of chemically dependent individuals.

Materials, Methods, and Techniques

The data collection for this study took approximately one year and included about 60 days of ethnographic fieldwork on site in Eagle Pass. The fieldwork was concentrated over a five-month period that spanned the late summer and fall of 1993.

Ethnographic research attempts to describe a set of practices, knowledge, or beliefs that characterizes a culture or a subgroup. In this case, Kickapoo adults who are chronic volatile solvent abusers (VSAs) comprise the group of interest. Three approaches were used to gather data on the behaviors of these people: structured interviews, direct observation, and a systematic protocol utilizing information solicited from informants regarding the substance use patterns of adults living on the KTTT reservation.

Structured interviewing is a technique that is commonly used in cross-cultural settings where the researcher and the interviewee are likely to bring different precepts to a discussion. Unlike survey questionnaires, structured interviews are not scripted (e.g., read verbatim from a text). Instead, the investigator outlines a series of questions related to a topic area, and works through the series with several informants, asking follow-up questions when a response is confusing or of special interest. The question series is revised based upon responses the investigator receives. Unproductive questions are discarded and new ones added to query topics of interest uncovered in previous interviews.

Direct observation, or participant observation, provided a second major source of data for this report. Operationally this means the researcher spends time with subjects, waiting to see what happens next. In this case, many of the Kickapoo chronic VSAs were semi-homeless and spent much of their time in the streets and under the bridges of Eagle Pass. The author spent many hours in these locations until subjects became accustomed to his presence and resumed their normal patterns of life. For many of these VSAs, this routine consisted of drinking beer and huffing paint until they passed out, sleeping for a few hours and then beginning again, which meant the author spent many hours interacting with people at various stages of intoxication. While these conditions were not conducive to the rigors of structured interviewing, these experiences provided insights into the lives of these VSAs not otherwise accessible.

A third set of related research activities were directed toward systematically determining how many problematic paint and alcohol users there are among the Kickapoo. The methods used are detailed later in this report, and involve comparison of information gathered from official records, interviews with key informants about the substance use patterns of other members of the tribe, and direct observation. While such procedures would be inappropriate for epidemiological research in large communities, the Kickapoo population is small, composed of individuals who interact with one another over a lifetime. Moreover, the problematic aspects of substance abuse in this population are often obvious. Chronic VSAs have a wide array of chemical dependency-related problems (arrest for public intoxication, domestic violence, contacts with social service agencies, etc.) that quickly become public knowledge in the tightly knit Kickapoo community of the Texas-Mexico borderlands.

When possible, the data presented in this study were cross-validated from multiple sources of information. For example, interviews were arranged with people who had been

referred to the KTTT intervention program for problems related to volatile solvent abuse. These people were invited to discuss their lives, patterns of substance use and any associated problems. Frequently they volunteered information related to a specific incident—perhaps a fight or an arrest. Often the incidents involved several individuals, and information could be acquired from several perspectives. These incidents were sometimes also reported in local newspapers, providing another source for data corroboration.

Background of the Kickapoo People in Texas

Eagle Pass (population 25,637) is the county seat of Maverick County, Texas (population 36,378). It is situated about 150 miles west-southwest of San Antonio along the Rio Grande on the Texas border across from its Mexican neighbor, Piedras Negras. The county lies in the scrub thicket of the northeastern edge of the Chihuahuan desert, and has among the lowest per-capita incomes in the United States. Just over half of this county's residents have family incomes at or below the Federal poverty level and just over one-third of adults ages 25 or older have completed high school or a GED equivalency.

The history of how the Kickapoo people came to reside in the Eagle Pass area is too complex to detail here. However, in the early 17th century the Kickapoo people lived in present-day southern Michigan and northwestern Ohio. Westward expansion of European peoples fragmented the Kickapoo people and gradually forced them south from their original homeland. For over 200 years, battles were fought, Kickapoo villages were burned, treaties were signed, and reservations were created and dissolved. One Kickapoo settlement eventually ended up in Kansas, another in Oklahoma, and the third in the Texas/Mexico border area. More recently, three events are of administrative significance.

On January 8, 1983, Public Law 97-429 officially recognized the Kickapoo people living in Eagle Pass and in Nacimiento (their land grant in Mexico) as the "Texas Band of the Oklahoma Kickapoo Tribe." The act provided band members dual U.S./Mexico citizenship and authorized a reservation for these people. In 1985, final payment was made on a 125-acre tract eight miles south of Eagle Pass in the Rosita Valley—land that would become the KTTT reservation. In 1989, the Secretary of the Interior approved the Constitution of the KTTT and the former "Texas Band of the Oklahoma Kickapoo" became "A Federal and State Recognized Sovereign Indian Nation," administratively separate from the Oklahoma tribe.

The KTTT reservation was settled in 1987 by individuals who previously resided in makeshift shanties under the International Bridge in Eagle Pass. The reservation received water in 1988, electricity in 1989, and a sewage system in 1993. It is home to more than 450 registered members, including 250 adults ages 18 and over. In addition, there are perhaps 150 persons enrolled in the Kickapoo Tribe of Oklahoma who reside in the Texas-Mexico borderlands all or part of the year. The exact number is difficult to specify because the Kickapoo population is highly mobile, spending time in South Texas, Northern Mexico, Oklahoma, and agricultural fields across the U.S.

Tribal enrollment is an administrative rather than social distinction. Oklahoma-enrolled Kickapoo receive medical and social services through the Oklahoma Tribe whereas Texasenrolled Kickapoo receive these services through the KTTT. However, the members of the two administrative entities are descended from the same grandparents, intermarry, interact frequently, and share a common history. In other words, the Oklahoma- and Texas-registered Kickapoo are a single people. Tribal enrollment is voluntary and can be changed simply by relinquishing membership in one group and requesting enrollment in the other.



Most Kickapoo families earn their livings as migrant farm laborers. Breaking up into familial work groups in mid-May, about half of the Kickapoo families scatter to points between Idaho and Florida, performing agricultural work ranging from weeding onion fields to harvesting fruit. They appear highly regarded by the farmers who consider them skilled and meticulous workers who are honest in their business dealings.

The work groups return to Eagle Pass in the fall when the religious and ceremonial season begins. All religious ceremonies and activities are conducted in Nacimiento, the spiritual center of the tribe. Nacimiento is located about 100 miles south-southwest of Eagle Pass in the Mexican state of Coahuila. It is a 20,000-acre *ejido* (communally owned township) which was given to the Kickapoo people as a reward for protecting peasants from marauding Indians in the mid-19th century.

Kickapoo people living in Texas are even more economically disadvantaged than other Maverick County residents. In August, 1993, a total of 317 KTTT members, ages 16 through 64, were counted in the Potential Adult Labor Force. These are people who theoretically could work if suitable employment were available. Of these, 116 (37 percent) were not employed and 162 (51 percent) were employed but made less than \$7,000 per year. Only 39 (12 percent) were employed with an income of \$7,000 or more. Moreover, all but three KTTT-registered families receive food stamps and/or other incomequalified benefits for at least part of the year.

Educational attainment is correspondingly low. Only two KTTT adults have completed high school and 16 have completed GEDs. Only one-half of the adult tribal members have completed as many as two years of formal education and one-quarter of the adult membership is functionally illiterate. While a few of the Kickapoo who have a GED or better have permanent jobs, nearly everyone else is unemployed from November through May.

The Kickapoo living in the borderlands are a remarkably resilient people and among the most traditionally oriented Native Americans extant on the North American continent today. The group has preserved its cultural heritage and lifeways through more than 350 years of contact with the Western world, even as they adapted to an environment where traditional subsistence opportunities such as hunting, gathering, and limited horticulture have disappeared. To understand the VSAs among the Kickapoo, it is helpful to be familiar with certain aspects of the Kickapoo culture. Some major cultural features of the traditional lifestyle currently practiced in Texas include the following:

The Kickapoo language remains a vital linguistic tradition.

The Kickapoo language, a part of the Algonquin language family, is the first language learned by children and the only language spoken by some older adults. While most younger individuals are bilingual or trilingual (Kickapoo plus Spanish and/or English), members of the Kickapoo Traditional Tribe generally prefer to speak their native tongue and are most comfortable speaking this language.

The traditional Kickapoo social organization remains intact.

The Kickapoo utilize Omaha Kinship terminology, a way of classifying relatives that forms the basis for interactions among kin. They are organized into lineages and clans by a system similar to that of their Algonquin ancestors who lived in the North Central United States in the early 17th century.

The Kickapoo maintain a rich traditional religious, philosophical, spiritual, and ceremonial life.

People acculturated into the Kickapoo tradition view life differently than those brought up in a Judeo-Christian tradition. They have their own explanations of

creation, the nature of the universe, and description of the spiritual world. They have their own theories of illness, health, and healing, and a highly developed system of religious observances during the ceremonial season. The Kickapoo are notoriously private about their spiritual life and dislike discussing spiritual beliefs with outsiders.

• Traditional mores govern interactions among individuals in the tribe.

The Kickapoo people highly value generosity and freely exchange commodities foodstuffs, tools, etc.) with other members of the tribe, a practice known by anthropologists as generalized reciprocity. They also prize maintaining harmony and consensus within the group and are embarrassed by confrontation, avoiding it when possible.

ETHNOGRAPHY: THE LIVES OF KICKAPOO ADULT CHRONIC VSAS

The Kickapoo adult VSAs were brought up to share the values, attitudes, and traditions and to endure the economic hardships of the Kickapoo way of life. Although they were children of a cross-section of the Kickapoo population and many of them had fathers who were the religious and political leaders of the tribe, they have low status within their cultural community because their behaviors are inconsistent with those required by Kickapoo tradition.

These VSAs were born in Nacimiento, Eagle Pass, Oklahoma, or the northern US while their families were on annual migration. Their older male relatives hunted for them and provided them with a Kickapoo name and social identity as is customary in their culture.

As children they learned first to speak the Kickapoo language, then Spanish and sometimes English. They migrated to northern farms with their families and began working as soon as they could handle a hoe at ten or twelve years

of age. Some of them attended school for a few years, but many received no formal education. Many acquired self-taught rudimentary reading skills and learned simple addition and subtraction. Their early experiences doing agricultural piecework taught them the importance of hard work, and the poverty of their early existence led them to expect few material rewards from life.

When in their early teens (but sometimes in their twenties), they began to drink and use paint. They were taught to do so by their siblings, relatives, and/or friends. As customary among the Kickapoo people, they married young and without civil or religious ceremony. Many times their partners were also substance abusers. They had children and experienced increasing difficulty supporting their families and maintaining domestic harmony as their chemical dependency increased. Marriages broke up, their children were taken from them, and they were ostracized by their relatives as their chemical dependency deepened.

At the time of this study, the population of chronic VSAs included men and women who ranged in age from their late teens through their 60s. Some were married and maintained homes with a spouse and dependent children. Others had lost their homes and "lived with relatives" but slept many nights on Eagle Pass streets. Some had jobs, some performed migrant labor, some collected disability, and many had not worked for several years. Some stayed primarily on the KTTT reservation, others had homes in Eagle Pass, and others spent much of their time in Nacimiento. Most of these people moved back and forth among these venues, living a week or two in one setting and moving on to the next. As their settings and activities changed, so did their substance-abuse patterns and the material conditions of their lives.

The social and economic circumstances of these VSAs were subject to rapid change. For years a person may have used paint sporadically, lived in a house, worked, ate regular meals, had ******

transportation, cared for children, and discharged social obligations. A few days later the same VSA could be penniless, eating out of dumpsters, and passing days in a quest for paint and beer in the streets of Eagle Pass. Conversely, a semi-homeless person could find a job and/or reunite with a spouse or find rapprochement with relatives, and experience marked improved social and economic circumstances within a brief time. The rapidity of these changes, for better or worse, was perhaps a reflection of the material condition of the Kickapoo people. They are among the poorest residents of one of the most economically distressed areas in the United States. The safety net has large gaps, and often these are the first people to fall through.

Kickapoo chronic VSAs typically drank alcohol and huffed paint in the context of what might be characterized as a party. These spontaneous events arose at people's homes, "hiding places" near the KTTT reservation, or in any of a dozen areas near downtown Eagle Pass. The parties took place any hour of the day or night, floating from one place to another as people sought each other, finding out who had paint and/or beer or a few dollars to buy these substances.

There were several aspects of the substanceabuse pattern common among semi-homeless Kickapoo. These people usually spent more time seeking paint and/or beer than they spent intoxicated. They relied on a combination of kin, social programs, friends, and wits to support their lifestyle. Solitary use of paint and/ or alcohol occurred among Kickapoo VSAs but was unusual since they preferred to become intoxicated with others. Their relatives and friends were exceedingly important to them, so they spent most of their time in the company of other Kickapoo VSAs. Though they frequently ran afoul of the law, these problems were usually offenses such as public intoxication and disorderly conduct. These people were rarely, if ever, arrested for theft. Their culture places a

very high value on generosity, and they were accustomed to asking for what they wanted and being treated generously rather than stealing.

Substance Acquisition

Although some adult Kickapoo chronic VSAs claimed they preferred to drink beer, the poverty of this population dictated that they most often used paint. The cost of staying intoxicated on paint was much lower than the cost of getting drunk. In Eagle Pass, a can of spray paint sold for \$1.00 - \$8.00 depending on the source. The normal retail price was between \$2.00 and \$3.00 per twelve ounce spray can for the brand most commonly used. A can of paint, judiciously conserved, could satisfy a chronic VSA for up to five days. After the propellant was exhausted, the remaining paint was drained from the can by perforating the container. Such holes or cuts were the distinctive marks that the contents had been used by VSAs.

Inexpensive spray paint was not always easy for Kickapoo VSAs to acquire in Eagle Pass. Texas law requires that it be kept under lock and key, and merchants are prohibited from selling paint to known users. A distinctive odor and appearance made the chronic VSAs easy to recognize. They dressed in tattered, paint-spattered clothing. The odor of toluene on their breath was unmistakable even hours after they stopped using. VSA informants insisted that the town merchants knew which people used paint and remarked that "Indians can't buy paint in stores in Eagle Pass," although VSAs were observed leaving retail outlets carrying bags containing spray paint.

Occasionally Kickapoo VSAs bought paint from dealers who sold it from the trunks of their cars at \$7.00 or \$8.00 per can. Alternately, dealers sometimes sold small quantities of paint by spraying about an ounce into a soda can. This was enough to keep the user high for about an hour and cost \$1.00 on the streets of Eagle Pass. VSA informants also reported that non-

Kickapoo friends often bought paint for them, and sometimes they paid others to drive them to a neighboring town where they were unknown and could more easily purchase paint. That the VSAs paid inflated prices or traveled long distances to buy paint suggests the state sales prohibition complicated the process of acquiring paint, but clearly did not prevent them from doing so.

Among the semi-homeless VSAs in Eagle Pass, there was a great variation in the mix of paint and alcohol they used from day to day depending on how much money they had. Some days they pooled their meager resources to buy a quart of beer to share. On days when these VSAs could not afford beer, they used only paint. Other days, when they had neither beer money nor paint, they gathered simply to sit and talk. However, if they had enough money, they would drink and huff paint for many hours, becoming increasingly intoxicated. As people reached their tolerance limit a "reverse dominoes" phenomena ensued. First, someone would pass out lying on his/her side in a sleeping position. Soon, someone else would pass out using the first person as a pillow. Before too long, three or four people would be sleeping on each other, making a pillow of the person who had previously passed out. Those still awake continued drinking and huffing paint until the last person passed out or the last beer money was spent.

Economic Status of the VSAs

Ways in which these semi-homeless VSAs supported their chemically dependent lifestyles changed daily. More fortunate relatives supplied these VSAs with monetary gifts and/or loans because this was expected behavior in the Kickapoo culture. When VSAs asked for money or a gift of beer and/or paint, their relatives were obligated to comply. The amounts involved were usually small (from \$2.00 to \$10.00) but on special occasions could be larger. The people who gave the VSAs money were usually close

relatives such as parents, siblings, aunts and uncles, or nephews and nieces as defined by the Kickapoo kinship system. Sometimes, gifts were given in a customary context. For example, people were expected to share the proceeds of their labors with close relatives when they returned from annual migration. The most common form of gift exchange was called a loan, although these sums were rarely repaid. It should be emphasized that in this type of cultural system there is a tradeoff between generosity and status. Those who provide more gifts than they receive rise in status and viseversa. One of the reasons that VSAs had low status in the Kickapoo community is that they constantly asked for loans but were rarely able to provide loans.

The Kickapoo semi-homeless VSAs engaged in other activities that yielded small amounts of money. Some sold blood plasma, which brought \$15 per donation. Most received food stamps and some sold all or part of their coupons at a discount for cash. Many VSAs begged for spare change, recycled scrap metals, or checked washers and dryers in Laundromats for change. When they found anything of potential value on the street such as a lost pen, they attempted to sell it. Men would run errands or accept any work that was offered. Women sometimes made traditional craft items to sell. Some women were reputed to exchange sexual favors for cash, beer, or paint. When capable, these VSAs would perform farm labor, accept Job Training Partnership Act opportunities, or take advantage of any other legitimate opportunities to get money.

Perhaps the most important feature of their lifestyle is that it costs these VSAs only a few dollars per day to support their chemical dependency. Most necessities were acquired without cost. Free food was obtained from trash bins or from relatives, and clothing was taken from rag piles discarded by clothing recyclers. These people paid little or no rent and their transportation costs were negligible—they walked and/or



hitchhiked. In many cases their children had been taken from them and their spouses had left them so they did not have families to support.

Sharing and Violence

There was a strong ethic among these VSAs that whatever intoxicant they had would be shared. This norm was enforced with retaliation that sometimes included violence. An example was an informant who burned a woman's clothes because her husband would not share beer. This, in turn, provoked retaliation by the woman's son who hit the man with a can of paint, cutting his face. This pattern of low-level violence was quite common among Kickapoo chronic VSAs, who sometimes pulled knives. In a typical week, one or two such conflicts would occur, resulting in black eyes, bruises, abrasions, and/or cuts.

These fights were invariably provoked by a failure of someone to share beer or paint and flared up when people were intoxicated, but were usually rapidly concluded which limited the severity of the injuries—one punch or slash and the perpetrator would flee. Sometimes conflicts would escalate to involve kin and friends, but most of these side conflicts were limited to verbal harassment. Animosities among VSAs tended to be short lived—they were often forgotten before the physical wounds had completely healed. Two people who were sworn enemies on one day, would be walking around town inseparable in their common quest for paint and beer by the next week.

Kickapoo VSAs generally were not violent with outsiders.

Gathering Places and Substance Use

There were many gathering places where Kickapoo adult VSAs met in groups, large and small, to share paint and beer. Because possession of these substances was prohibited on the KTTT reservation, people frequently went to Eagle Pass to get high. In town, many gathering places were located on the floodplain under the International Bridge and along the drainage canal at the edge of downtown.

The International Bridge

The International Bridge was used by many of the less affluent Eagle Pass citizens as a place to socialize. In the summer and fall of 1993, a favored meeting place of the Kickapoo VSAs was under the seventh span of the International Bridge west of the U.S. Customs Station. A discarded couch provided comfortable seating for three during the day, and a bed for someone to sleep at night. Groups of three to eight people were usual, and the groups often included women. Non-Kickapoo people were rarely present, and those who stopped to visit usually moved on after a brief exchange of pleasantries.

People pooled their money to buy quarts of beer for these gatherings. All present shared the beer whether or not they had contributed to purchasing it. These VSAs bought the least expensive brands of beer in quart bottles usually one, at most, two quarts at a time. Only one quart was open at a time, and it was passed around the circle from person to person. There was a strong expectation that all present would drink. The pace of drinking was leisurely and a quart might last for a half hour even when shared among four or five people. When the quart was finished, someone would walk to the grocery or gas station to buy another bottle. This went on until the group ran out of money.

People who huffed paint at these gatherings sprayed about one-half ounce of paint from the spray can into an empty aluminum soda can or plastic soda bottle—enough to last for about an hour before it evaporated. These transfer containers were not shared—each VSA huffed from an individual can or bottle. The user put the can to his/her mouth, tilting it slightly as one might a full can of soda. Then air from the lungs was exhaled, and the user took a series of short, shallow breaths until their lungs were full. From a distance, it

looked much like the person was drinking a soft drink.

Somewhat different procedures were used with plastic soda bottles. Paint was sprayed into the bottle, and the contents shaken to increase the concentration of paint vapors. The bottle was then slowly crushed to expel vapors under slight pressure. The paint vapors were huffed in the same manner as described above as from cans. This procedure used more paint than when huffed from a can, but, according to informants, produced more rapid and profound intoxication.

As people inhaled paint, they underwent rapid and remarkable behavior changes. Those who were normally quiet and shy became talkative, extroverted, and loud, often to the point where their friends would apologize for their behavior. Their attention span became short and often their conversations would assume a streamof-consciousness quality, shifting rapidly from one topic to the next, unconnected to what others were saying. As people became very paint intoxicated, their breathing became rapid and shallow; sometimes to the point of sounding raspy. Their eyes and nasal passages watered, and often they paced around in small circles, giving the general impression of being in distress. However, perhaps the most notable aspect of their behavior was that the VSAs would often become overtly possessive of their paint, reminiscent of how a toddler might guard a toy.

Kickapoo VSAs favored silver spray paint, though gold and clear were used also. These colors were said to have "the best taste" and produce the most desirable high. They used other colors only as a last resort, and they also favored one brand of paint.

Like others who gathered under the bridge to drink, the Kickapoo VSAs were open about drinking. They left open beer bottles in view, and did not try to conceal their drinking from people who strolled down the access road or drove by. The VSAs, however, were covert about huffing paint. They kept spray-paint containers out of sight and timed their paint

huffing to moments when they felt unobserved. Transfer containers were concealed when not in use. Some people held their transfer container under their arm and placed it under loose clothing. They were adept at sneaking subtle huffs by bending their neck to their shoulder, bringing their mouths into the proximity of the can. These VSAs, however, were not discrete about their empty spray cans which would be left lying about at their gathering places or, at most, thrown into a clump of weeds.

The groups that gathered to huff paint and drink beer were normally small and interactions dependent on the kinship relationships among those present. The VSAs did their best to maintain conventional behaviors towards kin even when intoxicated. For example, if they called each other by terms appropriate for brother and sister, they would look down toward the ground and speak in quiet and serious tones when talking to one another.

The bridge site also served as a central meeting place where chronic VSAs rested between errands, linked up with friends, and planned their day's activities. These activities frequently centered around finding paint, getting money to buy beer, or finding someone who would share beer with them, but they also engaged in other activities. Locating food or transportation, visiting relatives, attending social service appointments, and looking for work also occupied their time. They rarely stopped at the couch for protracted periods although they usually returned there several times in a day.

The Sleeping Site

Another important locus of chronic VSA activities was located about 200 yards north of the couch under the bridge. In this report, the area is referred to as the "sleeping site."

To the uninitiated eye, the site most resembled an illegal dump—the kind of place where people discard trash at midnight to avoid paying disposal fees. At its center was a burned ******

area surrounded by two or three discarded and worn-out mattresses as well as jumbles of tattered blankets and what appeared to be discarded clothing and shoes. The area was littered with empty paint cans, beer bottles, and used transfer containers. Hundreds of yellow and red fast food chicken boxes and chicken bones in varying states of decomposition littered the ground. Ripped paper bags, discarded batteries, rusting mattress springs, plastic food containers, and battered and broken suitcases completed the picture. This site was not only used for parties, it was where people lived when they were in town and it furnished an archeological record of some significant aspects of their lives.

Because it was slightly elevated from the road and obscured by low-hanging branches and tall weeds, the sleeping site offered some privacy for the VSAs. Here people came to eat, sleep, see their friends, and to "hide" to become very intoxicated. Moreover, because this area was difficult to see, it was possible that a small fire on a cold night might go undetected by authorities. Open fires were not permitted in the International Bridge floodplain, but this regulation was frequently breached at the sleeping site.

The site was located less than two blocks from a fast-food chicken restaurant that caters to shoppers from Mexico. The dumpsters behind this restaurant were a reliable food source for this population of chronic VSAs. The restaurant did a brisk lunch business and by correctly timing visits to these dumpsters, the VSAs were reasonably assured of unspoiled food. However, they had to glean bones discarded by strangers and ate an abundance of fried chicken skin and flour coating. Though the diet of semi-homeless VSAs was not limited to this source, it was a staple.

The jumbles of clothing and blankets had a similar provenance. One important enterprise in Eagle Pass is recycling used clothing for export to Mexico. There were several salvage yards in the downtown area which sorted used clothing. Some of this clothing had no utility except as rags, but these rags were often cleaner, in better condition, and most importantly less covered with paint residue than anything in the VSA's wardrobe. The semi-homeless VSAs often discarded their filthy clothing because they had no means to wash these items. However, some clothing at the sleeping site was left for future use. Though it was difficult for an outsider to distinguish between clothing that had been discarded and that intended for future use, the people who frequented this site knew the difference and could identify the owner of each article of clothing.

Relations with Eagle Pass Residents

Although Kickapoo adult VSAs interacted primarily with one another, they had established relationships with other Eagle Pass citizens. Informants many times pointed out people in the community and said something like, "Hey, I know that guy." They would then go on to describe the person's position, the nature of their relationship, and often conclude with the sentiment that he/she was a friend. The informants seemed to take greatest satisfaction in knowing people in uniform such as the police, firemen and border patrol agents.

There were ground rules about where one could go and what one could do while intoxicated in Eagle Pass. The conventional wisdom among VSAs was that if they were discrete about huffing paint, the police would not harass them. Moreover, they believed that drinking was tolerated on the floodplain, but they also knew that if they were seen staggering on downtown sidewalks, passed out in a public place, or drinking in the park, they could be arrested. Creating a disturbance or getting into a fight with another VSA were also perceived as causes for arrest. They believed that if they cooperated when arrested, the worst thing that could happen would be that the police would take their paint and/or beer.

Although these people had been arrested many times, they did not bear animosity toward the local police. They did not complain of unfair treatment or harassment. They accepted a night in the drunk tank as no more than a minor unpleasantness—something best avoided but not a matter of great concern. However, they clearly did not like to spend extended time in the county jail. Even more terrifying for them was the prospect of going to court to face charges. They speculated endlessly about what might happen as a result and were grateful for any assistance or explanation of the judicial process.

The informants appeared well acquainted with the people who lived and worked on the street bordering the International Bridge floodplain. The small houses along this street were in disrepair and primarily inhabited by low-income Mexican Americans without families. Mixed in with the houses were a few businesses including a sausage plant, recycling businesses, and parking lots and fenced yards that served as flea markets two days a week. The Kickapoo VSAs knew many of the people who lived and worked here by name, and remembered small favors these people had done for them in the past. There appeared to be a well-developed sense of community along the street, and the Kickapoo chronic VSAs were part of this social scene, generally accepted, and certainly not feared by those who lived in close proximity to them. Many non-Kickapoo people expressed a concern over the well being of Kickapoo VSAs who inhabited the area. A flea market proprietor said of the Kickapoo VSAs, "I've been around them for a year now, and can tell you that they are honest and they don't steal. They ask you for a quarter sometimes but if you say 'no' they don't get mad. The only thing wrong with them is that they are addicted to paint."

Other elements of the town setting were less hospitable. Informants complained that young people crossing the International Bridge would throw things down at them and shout insults. They worried that they would be blamed for setting brush fires when people dropped burning cigarettes off of the bridge walkways into the dry grass near the areas where they gathered. They also said that they were not welcome near downtown shops, and that the merchants often asked them to move on if they stopped in front of a store seeking shade.

One reason that the VSAs frequently changed the locations of their in-town gathering sites was that they were often told in a variety of ways to move on. For example, in the fall of 1993, the discarded couch was removed from under the seventh span of the bridge and the cane abutting the river cut down in the annual clean-up of the area. In the spring of 1994, the sleeping site was cleared and graded with a bulldozer, and the mattresses sent to the dump. The VSAs were told that they could no longer use the site. The Kickapoo VSAs have since established new locations for their activities in Eagle Pass.

Female VSAs

The poverty of female chronic VSAs combined with their style of discourse regarding sexual relations made these women vulnerable for sexual exploitation. It was not uncommon for female chronic VSAs to exchange sex for money, paint, or beer. Because of their abject poverty and chemical dependency, these women were vulnerable to any number of contingencies, including getting stranded in a far-away place, being hungry, needing a place to stay for the night, requiring protection from the uncertainties of homeless life on the street, needing a can of paint, or wanting to drink beer. Sometimes they had no apparent alternative except to directly exchange sex for these things, but more often sex was only one aspect of a more complex relationship with someone who had more resources than they. It must be remembered that even the Mexican homeless public inebriates in Eagle Pass tended to be more financially fortunate than these women. Very often

Kickapoo female VSAs viewed these people as their benefactors or "friends."

Each female VSA interviewed was asked if while living on the street she had ever been raped, sexually assaulted, or intimidated into having sex. Curiously, none of these women reported this experience.4 It was verified in each case that the women actually understood the meaning of this question. Moreover, these women were not hesitant to discuss past relationships with men, the paternity of their children (which in some cases they could not identify), and some even described instances when they exchanged sex for money. Since they were able to discuss these related and equally sensitive issues without embarrassment, it seemed unlikely that they would not talk about sexual assaults had such incidents occurred. A few women, however, complained about being harassed by men who lived on the street.

Marriages of the VSAs

For Kickapoo male chronic VSAs, one of the nearly inevitable consequences of their chemical dependency was that their wives would leave them. One indication of the ubiquity of this problem was that three of the male VSAs lost their wives and families during the course of this fieldwork. These men spoke frequently and passionately about their distress due to their breakups, and attributed their recent increased use of paint and alcohol to the changes in their domestic status. One man explained how he once had a steady job, a trailer, a pickup, a wife, and children. After he started drinking heavily and using paint with his friends, he lost his job. The police began to arrest him for being drunk. They took his pickup because he was arrested for DWI and didn't have insurance. His wife threw him out and would not let him see his children. "I had it all," he lamented, "but I couldn't stop drinking and using paint."

In Kickapoo culture, marriages are fragile and at high risk of dissolution even in the best of circumstances. Chemically dependent VSA husbands had great difficulty providing adequate economic and social support for their families, and these tensions frequently translated into domestic violence.

Having few other alternatives for mates, VSA men and women often married, although such unions were often strained and temporary. A few VSA couples lived together as man and wife and a few, with great difficulty, cared for dependent children. Most VSA couples, however, had lost custody of their dependent children even if they still managed to maintain a household separate from relatives. Other VSA couples did not have resources to maintain a household but stayed together on the streets in Eagle Pass or with relatives when they were on the reservation. In a few cases, husbands and wives relied on their respective kin for support and lived separately. Though these people spent little time together and maintained separate lives, they were regarded by the community as married.

The KTTT Reservation and the Low Status of VSAs in the Community

The KTTT reservation offered some respite from the hardships of street life for Kickapoo chronic VSAs but some of them visited there only rarely and briefly. Public showers were available and close relatives provided them with meals, a place to sleep, or other financial support within their limited means. Efforts were made by KTTT-sponsored social programs to meet the needs of these individuals, but, the chemically dependent lifestyles of the VSAs were incompatible with reservation life and they normally returned to the relative freedom of the streets of Eagle Pass within a few days.

That the Kickapoo chronic VSAs had low status within their cultural community was obvious. One indication was that some nonpaint-using Kickapoo people pointedly refused to speak with the VSAs. Moreover, Kickapoo chronic VSAs were rarely invited to participate in social, economic, or recreational group activities. The VSA men, for example, were not invited to hunt with others, and because they did not own guns, pickup trucks, or pack horses, they were not able to initiate these activities for themselves. Hunting is a religious obligation and their failure to participate in this activity diminished their status. Furthermore, chronic VSA men were not assigned ceremonial obligations in religious observations nor did they serve in positions of religious or political leadership though by virtue of their birth some normally would have been expected to assume these roles.

Many chronic VSAs were discouraged by their patrilineal kin from participating in family work groups because they could not be relied upon to show up consistently for the long hours of arduous work required of agricultural laborers. Shut out of this work opportunity, the VSAs had great difficulty providing gifts to their close relatives as required by tradition, making reciprocal loans, or helping to sponsor the feasts that accompany religious ceremonies. Their limited ability to participate in the traditional exchange system reinforced their low status in a cultural community that values generosity above all.

The VSAs created sometimes serious disruptions to reservation life. Fights among intoxicated VSAs sometimes erupted on the reservation and several incidents involving domestic violence between VSA husbands and their wives were reported. Beyond physical injuries, these incidents posed additional problems by creating serious tensions among patrilineal kin groups that were sometimes difficult to resolve. Retaliation is a fundamental aspect of the traditional system of control, and this retaliation can take several forms—destruction of property, physical violence, or witchcraft.

Chronic VSAs also compounded the financial burdens of their close relatives who were obligated to provide food, shelter, loans, and other necessities for their less fortunate relatives. Such needs were generally unabating for the chronic VSAs. Moreover, it was also ethically required that relatives help support dependent children when their parents could not provide or care for them. Although the community accepted these economic burdens as a matter of course, grumbling was inevitable and the relationships between VSAs and kin closest to them were often strained. Because Kickapoo people are expected to live harmoniously and maintain good relationships with their kin, this disharmony itself became a source of criticism.

Female VSAs were often criticized by others in the community for not sufficiently observing the requirements of secluding themselves from men during their menstrual cycles and, especially, for not providing adequate care for their children. Chemically dependent Kickapoo women were at high risk of losing their children and those who lived on the streets were forced to give up their infants for adoption. Their behaviors were frequently discussed among the women in the community, as gossip is one of the traditional methods of social control in tribally organized communities.

Substance Use on the Reservation

From the chronic VSA's perspective, reservation life was problematic because they risked losing any alcohol or paint they brought onto the property. KTTT security officers confiscated these substances when people were seen possessing them in public areas, but did not search private homes for this contraband. However, the reservation is small (125 acres) and security staff were present 24 hours per day. Intoxicated people were easy to spot as they walked along reservation roads, and the chronic VSAs were known individually to KTTT security officers because they had been apprehended repeatedly for possession of paint or

causing disruptions. Thus, when VSAs ventured from their homes with paint, they were at significant risk of losing their intoxicants.

As in Eagle Pass, the chronic VSAs frequented a number of "hiding places" on the KTTT Reservation where they retreated to drink beer and use paint. One area commonly used was the bottomland between the reservation and the Rio Grande. Overgrown with bamboo, the VSAs could disappear into a warren of trails and remain undetected and undisturbed for many hours. Sometimes people fished to pass the time as they leisurely huffed paint or drank beer and sometimes they swam to cool off. Empty paint containers and beer bottles were discarded into the river leaving no physical sign that the area was used for this purpose. Another favorite area was a hidden trail. The most common places for paint to be used on the reservation, however, were the homes of the chronic VSAs. During the study, one informant produced 63 empty and perforated cans which had accumulated around his home during the one-and-a-half years he had lived there.

People apprehended for paint possession on the reservation were referred to the KTTT intervention program. The intervention program referred clients for services including outpatient counseling, educational programs, occupational training, and other social and medical services as required. However, chronic VSAs have difficulty taking advantage of these opportunities. In particular, outpatient chemical dependency counseling has proven ineffective for these clients who most times fail to keep their counseling appointments.

Although Kickapoo chronic VSAs had lost the respect of most and were shunned by some members of the community, they were regarded by others on the reservation with a mixture of kindness, compassion, and resignation. The community worried about the health and safety of these VSAs and the futures of their children. Many were compassionate, having experienced chemical dependency themselves. Others ex-

pressed a sense of resignation, having many times experienced the hope that comes when loved ones attempt to confront their chemical dependency only to experience disappointment when there is a relapse.

Beliefs, Attitudes, and Preferences Related to Substance Use

Issues concerning beliefs, attitudes, and preferences related to substance use are among the most difficult to ascertain in a cross-cultural research setting, and it is difficult to generalize about such matters because there is substantial individual variation.

Some of the VSAs clearly expressed a preference for paint while others insisted that they preferred alcohol and used paint when they could not afford alcohol. Some were reluctant to admit that paint was their drug of choice. They identified themselves as "alcoholics," explaining that they used paint when they had nothing else. This description, however, could have been a reflection of the low status of paint users in the Kickapoo community because it was not an accurate characterization of their behavior. Of five informants who claimed to be "alcoholics," three used paint on a daily, or near daily basis whenever they drank beer. Their behavioral patterns were virtually indistinguishable from people who more readily admitted their fondness for paint.

The informants recognized a qualitative difference between being high on paint and drunk on alcohol. One person explained, "Alcohol makes you numb but paint changes the way you see things. The world doesn't look the same when you're high on paint." When asked how paint was different, he responded, "Well you see patterns on things. . . if you look at somebody's face, you see things on it." He elaborated, "Sometimes it looks like you are drunk on paint but you don't feel that way. You see things sometimes—like in a vision. That's what's best about paint."

Other informants were less articulate about the difference between paint and drinking alcohol but several volunteered that they sometimes experienced "visions" when high on paint. These visions were sometimes dramatic, and included living through earthquakes, seeing strange animals, and encountering someone who had died. Although the informants agreed that such visions were rare, they seemed in awe as they spoke in quiet tones about their respective experiences. In general, Kickapoo people hold visions and dreams in high regard, and they are an integral part of their religious experience. The informants all remembered some paintinduced visions that they had experienced, and felt this was a central aspect of their paint experience.

Another thought often expressed by paint-oriented chronic VSAs is that, unlike beer, one could control the "high" by adjusting the rate of huffing. If the user was getting too high, he/she could simply put the transfer container down for a few minutes and start huffing again to maintain a desired state of intoxication where he/she felt good but did not stagger. This state of intoxication could, at least theoretically, be maintained for many hours.

One informant explained another aspect of paint intoxication seen as advantageous by the VSAs. "It only takes about an hour to sober up after you stop using paint," he said. "That's good when you have something you have to do because you can get high in the morning, and get things done in the afternoon." Others believed that because they could sober up quickly after using paint, they were less subject to arrest because the police were less likely to see them obviously intoxicated. This perception, however, did not fit the reality of their lives because it was normal for them to drink while using paint, and more often than not, they failed to control their consumption.

Yet another aspect of paint use informants commonly mentioned was that it was highly addictive. As one informant said, "You get so

you don't care about nothing—your family, your job, or even eating. All you want to do is use paint starting first thing when you wake up." Several informants saw paint as a way to suppress hunger. However, it was the disruption of conventional kin relationships that current users and people who had stopped using paint spoke of the most.

An informant who had used paint heavily in the past but had quit explained that it was very hard to stop. Even many years later he still wanted to use paint whenever he thought about it, especially when he smelled it on someone's breath. He said he did not use paint because his father would not respect him and would not teach him what he needed to know to take over as a religious leader.

Another former chronic VSA explained that his turning point came when he became angry when he was high and almost struck his brother. The idea of hitting his brother was shocking to him and the antithesis of the formal, correct, and cooperative relationship that adult Kickapoo people have with their siblings. The problem faced by these men at their turning points was not limited to damaging an emotional attachment with a closely related person. More broadly, it was a problem that threatened to disrupt the entire fabric of their economic, social, political and religious lives, for in a tribal society these activities are organized along kinship lines.

Women who formerly used paint also cited relations with their kin as a reason for stopping. One woman explained that for many years she had lived a semi-homeless paint-addicted life on the streets of Eagle Pass. She gave birth to several children but had given them up for adoption because she was unable care for them. She stopped using paint, she explained, because she wanted to raise a child and her former lifestyle made that impossible.

Active VSAs spoke many times as well of the distress from the family-related problems that addiction created. One woman tearfully explained that because she used paint, Child Protective Services had taken her children from her and placed them in foster care in a distant city. She talked with them on the phone weekly but could not afford to visit them. She used paint, she said, to relieve her grief over the absence of her children. She reasoned that if the children were returned to her she would then stop using paint. She would no longer need to use it because she would not be sad.

Initiation of Paint Use

Relations with kin were not only an important factor in understanding how addiction impacts the lives of these individuals, but how they started using paint in the first place. Several informants were asked to explain the circumstances surrounding their first use of paint. The following accounts were typical of how the informants began using paint.

One man explained that when he was thirteen, his older siblings forced him to use paint because they feared he would tell their parents of their paint use. His siblings pressured him to mimic their patterns of substance abuse to ensure his silence. Another man also started using paint at age 13 when his uncle brought beer and paint as a formal gift. It was the first time he had been exposed to either of these substances, and he was nervous that his parents would find out but he feared offending his uncle by refusing a gift—it would be unthinkable in the context it was presented. He had no alternative, he says, except to consume the gift with his uncle and hope that his parents would not find out.

Another informant was in his late teens when he first used paint. A cousin and his friend drove him 20 miles from home, threatening to abandon him if he did not use paint with them. One woman was in early adolescence when she first used glue with a friend who was a distant relative. The friend warned her that if she did not use glue, she would no longer be her friend.

The informants' accounts of their first use were consistent in two significant respects: they all involved relatives and at least some element of coercion. The former is explicable because there are few interactions among Kickapoo people that do not involve kin—everyone is in some way related through blood or marriage. The coercive aspect of these accounts is more intriguing and could relate to the traditional mechanisms of social control found in tribally organized societies. One motivation for actively encouraging others to mimic one's non-normative behaviors may be that it decreases the risk that one's friends and neighbors will apply social sanctions. The smaller the community, the greater the feasibility of this strategy.

Apart from paint and alcohol, Kickapoo chronic VSAs reported experience with only a limited range of drugs. Many admitted having used marijuana on a few occasions, but none of the informants reported experience with cocaine, crack, amphetamines or heroin. Their experience with inhalants other than spray paint was more extensive, but perhaps not as great as one might expect. Many said they had used a glue, *Cinco Mil*, in their youth. A few others admitted youthful experimentation with gasoline and Mexican shoe polish, but no one admitted recent use of these substances.

Perceived Deleterious Effects of Volatile Solvent Abuse

Another area of questioning concerned the deleterious consequences of long-term paint use. The question here was not whether these VSAs had suffered actual neurological or other injury, but rather what they thought the consequences of their long-term chronic solvent abuse might be.

A number of VSAs admitted to having heard that using paint causes brain damage but believed that neither they nor their friends had suffered such adverse consequences from using paint. One woman said she had heard many times that using paint caused brain damage and she believed it was true. She reported that she easily forgot things and had to make notes to herself to remember to do things.

Another related area of questioning concerned the perceived relationship between substance abuse and birth outcome. Through the course of this study, the researcher became acquainted with several women who admitted they had used large quantities of paint and alcohol while they were pregnant. Many children were born as a result of these pregnancies, but only one of these children had signs of possible subtle cranial dysomorphism. However, many had very low birth-weight babies that were two and three months premature.

One woman suffered a miscarriage and gave birth to three low birth-weight, premature babies while using alcohol and inhalants. Her fifth child, born when she was drug free, was full term and weighed seven pounds. When asked if she thought her heavy use of paint and alcohol might have had anything to do with the low birth weight of her babies, she was emphatic that it had not. She said that she knew this because her older sister was also a heavy paint user through two pregnancies and gave birth both times to full-term, normal weight babies. Three other women also echoed sentiments claiming that they did not believe there was a connection between heavy paint and alcohol use while pregnant and low birth weight.

NEEDS ASSESSMENT

Two information sources were compared to prepare estimates for substance abuse treatment. These included client records from a KTTT-operated intervention program and informant perceptions regarding the substance use patterns of other people living on the KTTT reservation. Then concepts and definitions from the *Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised (DSM-III-R)*⁵ were used to estimate the number of people living on the KTTT

reservation who would likely be deemed appropriate for treatment if they were assessed by a clinical professional.

Intervention Program Records

The KTTT operates an intervention program for tribal members with problematic patterns of substance abuse and maintains records on individuals referred for assistance. When these records were compiled in May of 1993, 81 adults were listed on intervention rolls. The gender and age distribution of intervention clients is shown in Table 1.

Most of the women in this program had male partners who were also VSAs, and all but one of the women had children. In one-third of the cases, the children resided with relatives, were in foster care, or had been adopted outside of the Kickapoo community. The case load included 17 families where both parents were VSAs with dependent children living at home. Collectively these clients had 92 children ages 17 or younger; 36 of these children were fiveyears-old or younger.

People were referred to KTTT intervention through a variety of sources. Some were sent by criminal justice authorities because they were found passed out or staggering in the streets of Eagle Pass. Others were arrested for fights or solvent-exacerbated domestic disputes. Some were referred by the Tribal Administration for using paint or causing disturbances while intoxicated on the reservation, and others were sent by child welfare authorities for neglect related to chronic patterns of solvent and alcohol abuse.

Program personnel collected information from the clients regarding employment status, educational attainment, family status, and dependent children. Clients were asked questions regarding the incident which led to their referral and about past and current substance abuse patterns. Pertinent newspaper clippings, arrest reports, and actions taken based on the referral were also included in these files.

Table 1.

Ages of Intervention Clients by Gender

	Females		Males			
A ====	A 900	Ages 35 and	Agos	Ago	Ages 35 and	
Ages 18-24	Ages 25-34	Older	Ages 18-24	Ages 25-34	Older	
15	15	1	11	24	15	

Regarding pattern of use, 50 clients (21 females and 29 males) were listed as "occasional" volatile solvent abusers. They used paint from weekly to monthly with an average of just over two occasions per month of self-reported use. These individuals also admitted drinking alcohol, usually more frequently than they used paint. The remaining 31 clients (10 women and 21 men) were classified as daily users, many who had fallen into a homeless lifestyle centered around solvent and alcohol dependence.

The average annual income of these intervention clients was low. All clients were eligible for, and most received, income-qualified benefits such as food stamps, Aid to Families with Dependent Children, or commodities for at least part of the year. They averaged three years of formal education. Ten percent had never attended school while 20 percent had six or more years of formal education. At the time the records were compiled, none of these clients had completed their GED, and only 25 percent had ever participated in vocational programs.

Informant Perceptions Regarding the Substance Use of Others

The purpose of surveying informant perceptions was to assess the extent that intervention client records did not reflect the true rate of substance problems in the population. In other words, were there Kickapoo people with problematic patterns of substance abuse who had not been referred to the intervention program and, if so, how large was this group? Conversely, were there people listed on intervention rolls who were no longer problematic substance users?

This procedure would not be appropriate in populations where people tend to know little about one another's lives. However, one of the paramount features of life on a small reservation is that people tend to know a great deal about each other, even intimate aspects of behavior.

The original plan called for working through the KTTT membership roll with two informants asking about the substance abuse pattern of each tribal member. However, the design was modified because of an unanticipated problem. Kickapoo people have both and Indian and Spanish names. Indian names are used almost exclusively when conversing among themselves and Spanish names are used only when dealing with outsiders. Consequently, the two informants tended not to know the Spanish names of other members of the tribe, and a housing-based strategy for identifying individuals was adopted. Working from a sketch map of housing compounds on the reservation, a list of the residents of each household was compiled. The informants were then asked about the gender, age, and substance use pattern for each resident, and whether anyone in the household displayed a problematic pattern of substance use, with follow-up discussion to probe the basis for these opinions.

Both informants easily recalled the Indian names of the residents of the 77 compounds in use on the KTTT reservation in August, 1993. "In use" meant that someone had lived in the house or compound within the past year. Both informants were knowledgeable about the social identity of KTTT members, and could recall the names of the mothers and fathers of even middle-aged persons. Because the informants

independently supplied essentially identical information regarding names and ages of the residents, it was deemed reliable.

One hundred and sixty-seven adults were identified using this method, significantly fewer than the 250 adults on KTTT membership rolls because many members did not have homes on the reservation, but lived in Eagle Pass or spent most of their time in Nacimiento. While they visited the reservation frequently, and sometimes stayed there with relatives for protracted periods, they were not identified into the sample because they did not maintain homes on the reservation.

One informant was reluctant to identify people as paint and/or alcohol users until it was made clear that the goal was only to count the number of people who "might need help" and that no one would learn the names of the substance users. Neither informant had any difficulty identifying whether the adults in the household drank alcohol and/or used paint, and whether they had stopped using these substances. They also expressed opinions about problematic substance users. They knew who had been arrested for public intoxication, DWI, and other offenses. They had opinions on who had been picked up for possessing paint on the reservation, and whether people frequented the "hiding places" downtown and around the reservation where people customarily drank beer or used paint. There were, however, some gaps in their knowledge.

First, these informants knew little about the substance abuse-related behaviors of adolescents on the reservation, especially youths more distantly related to them. When queried about the patterns of use of adolescents, the informants most often said that they simply did not know. Though several attempts were made to cultivate younger people as informants, these proved unsuccessful. Consequently, it was not possible to make estimates of the prevalence of substance use among Kickapoo people under the age of 18. Second, about half of Kickapoo

families migrate to work in the north, but not all of them return to Texas every year. The informants knew little about these migrants' current substance use. However, they provided some information on the substance use histories of a few of these individuals and in most cases could guess where they were living.

Although the two informants worked independently, their respective perceptions of the substance use patterns of adults identified on the household census were remarkably concordant. Moreover, there was substantial agreement with respect to the identity of problematic users of alcohol and/or paint. In cases where the informants disagreed, the conservative interpretation was used. For example, a tribal member was not recorded as a "problem drinker" unless both informants agreed with this designation.

Table 2 summarizes the informant perceptions of rates of alcohol and paint use of 167 adults who maintain a current residence on the KTTT reservation. More than half of the adults (61 percent) on the compound were identified as current drinkers and 44 percent were identified as people who had ever used paint in their lifetimes.

The last step in the informant survey was to obtain the Spanish names of individuals identified as problem users of alcohol and/or paint so that this information could be matched with intervention records. As mentioned previously the intervention records used the Spanish names of tribal members instead of the Indian names the informants were accustomed to using.

A Comparison of Data Sources

The high levels of concordance between information provided by client records and the two informants working independently of one another suggest that client records were a reliable indicator of the number of Kickapoo adults who may have problematic patterns of substance use related to use of volatile solvents and/or alcohol. The high levels of agreement also indicated that the great majority, perhaps



nearly all, of the adult VSAs with substance abuse-related problems had already been referred to the intervention program. This information, however, was not sufficient to substantiate a need for chemical treatment.

DSM-III-R Assessments

The Diagnostic and Statistical Manual of Mental Disorders: Third Edition, Revised (DSM-III-R) provides health professionals with a system for classifying and diagnosing mental disorders, including substance abuse and addiction as well as standards for judging problem severity and appropriateness of treatment. More recently, the framework has been

used as a basis for survey questions that gage the likelihood that a respondent would be deemed "in need of treatment" if assessed in a clinical context. The *DSM-III-R* was used for a parallel purpose in this study, but some modifications were required to put these concepts into a framework of problems typically experienced by Kickapoo VSAs.

The *DSM-III-R* diagnostic criteria for *Psychoactive Substance Dependence* include having at least three of nine potential symptoms listed below.⁶

- A substance is often taken in larger amounts or over a longer period than the person intended.
- 2. A person has a persistent desire for the

Table 2.

Rates of Problematic and Non-Problematic Use of Alcohol and Paint on the KTTT Reservation Based on the Perceptions of Two Kickapoo Informants

	Sample *	People Who Drink (1)	Problem Drinkers (2)	Lifetime Paint Users (3)	Current Paint Users (4)	Problem Paint Users (5)
All Adults	167	61%	34%	44%	23%	21%
Gender						
Male	87	71%	41%	52%	28%	26%
Female	80	50%	26%	36%	18%	18%
Age						
18 to 24	36	78%	42%	53%	31%	22%
25 to 34	50	74%	40%	60%	28%	28%
35 to 44	33	64%	42%	52%	21%	21%
45 to 64	25	52%	32%	32%	24%	24%
65 +	23	13%	0%	0%	0%	0%

^{*} Adults age 18 and older who maintain a residence on the KTTT reservation

Definitions

- (1) Non-abstainers, people who drink alcohol at least on occasion
- (2) People who often drink to much, got into a fight while drunk, were arrested for being drunk or DWI, or had an alcohol-related automobile accident in the past year
- (3) People who have ever used paint
- (4) People who used paint within the past year
- (5) People who often use paint, got into a fight while high on paint, were arrested for using paint within the past year.

- substance or has had one or more unsuccessful efforts to cut down or control substance use.
- The person spends a great deal of time on activities necessary to get the substance, taking the substance, or recovering from its affects.
- 4. The person has frequent intoxication or withdrawal symptoms when expected to fulfill major obligations or when substance use is physically hazardous.
- 5. The person gives up or reduces important social, occupational or recreational activities because of substance abuse.
- The person continues substance use despite knowledge of having a persistent or recurrent social, psychological, or physical problem that is caused or exacerbated by the use of the substance
- The person requires increasing amounts of the substance to achieve intoxication or the desired effect.
- 8. The person experiences withdrawal symptoms characteristic of the substance.
- 9. The substance is often taken to relieve or avoid withdrawal symptoms.

A person has mild *Psychoactive Substance Dependence* when he/she has few symptoms in excess of those required to make the diagnosis, and the symptoms result in no more than mild impairment of occupational functioning. A person has severe *Psychoactive Substance Dependence* when there are many symptoms in excess of those required to make the diagnosis, and the symptoms markedly interfere with holding a job, usual social activities, or relationships with others. Moderate *Psychoactive Substance Dependence* is defined as functional impairment between mild and severe dependence.

The *DSM-III-R* also defines diagnostic criteria for *Psychoactive Substance Abuse* as a maladaptive pattern of psychoactive substance use indicated by at least one of the following:⁷

- The person continues use despite knowledge of having persistent or recurring social, occupational, psychological, or physical problem caused or exacerbated by use of the psychoactive substance.
- 2. Recurrent use in situations in which use is physically hazardous.

The symptom(s) must have persisted for at least one month and the person must not be diagnosable with psychoactive substance dependence.

Application of DSM-III-R Concepts

The research design called for DSM-III-R concepts to be used to assess treatment needs for three randomly selected samples as defined by intervention program client records. The first group of seven was to be randomly selected among KTTT adult members who were not intervention program clients. The second and third groups of seven were to be randomly selected among intervention clients identified on program records as occasional users and daily users, respectively. The hypotheses were straightforward; daily users were expected to meet DSM-III-R criteria for severe substance dependence whereas people who had not been referred for intervention would not meet the criteria for dependence. It was also predicted that the occasional users would have fewer DSM-III-R symptoms and lower DSM-III-Rmeasured severity than people identified as daily users. The purpose of this test was to ascertain if intervention client records were adequate indicators of treatment need.

It was not possible to implement a rigorous sampling design to select people for study. Because the Kickapoo are highly mobile, it was possible to complete only about half (10 of 21) of the *DSM-III-R* studies on people randomly selected into this study. The rest were not in the Eagle Pass vicinity at any time during the study. They were in Colorado, Wyoming, Oklahoma, Nacimiento, or other places and unavailable for this research. However, there were no difficul-

ties finding other people of the same gender, general age (plus or minus five years), and classification to interview for this study.

People who were classified in client records as "occasional users" were easier to contact. Three of the seven randomly selected individuals were interviewed and observed. Among the client record-identified "daily users," six of the seven randomly selected *DSM-III-R* studies were completed. One possible explanation that it was much easier to complete studies on randomly selected "daily users" could be that heavy substance involvement decreases the mobility of these individuals.

Table 3 shows how the 21 persons sampled were classified according to *DSM-III-R* criteria.

As was expected, none of the non-intervention clients was classified with *Psychoactive Substance Dependence*, although three of the non-clients admitted they drank heavily and two of these were classified as having *Psychoactive Substance Abuse*.

Also, as expected, almost all of the daily users were assessed to have severe *Pschycoactive Substance Dependence* along with two occasional users. Three of the individuals demonstrated all 11 *DSM-III-R* symptoms listed above, and one person demonstrated 10. Many of those assessed with severe *Psychoactive Substance Dependence* were semihomeless, had health problems and lived in abject poverty. Overall their lives were in turmoil.

Of the seven people assessed with mild *Psychoactive Substance Dependence*, five were occasional users who maintained a semblance of a normal Kickapoo lifestyle, though they suffered a range of marital, financial, health, and social problems. The two daily users who were assessed with mild *Psychoactive Substance Dependence* used only alcohol at the time of the study and were similar to the daily users classified as having severe dependence except that they might not drink everyday and sometimes stopped drinking before passing out.

Discussion

These results generally support KTTT intervention client records as reasonable indicators of current needs for substance abuse treatment in the Kickapoo population. There were no indications that client records either significantly overstated or understated rates of problematic substance use.

The DSM-III-R assessment substantiated that persons listed on KTTT intervention client records were very likely to meet DSM-III-R criteria for Psychoactive Substance Dependence; particularly those identified as daily solvent users. Of the 31 individuals so listed, 14 were assessed using DSM-III-R criteria and 13 were found to have severe or moderate Psychoactive Substance Dependence. Of the other 50 adults listed on client records as occasional solvent users, 11 were assessed using DSM-III-R criteria. Nine were found to have severe to mild Psychoactive Substance Dependence and two met criteria for Psychoactive Substance Abuse. However, caution is required when making inferences about the number of individuals listed as occasional solvent abusers who require substance abuse treatment at this time because only three of these 11 individuals were randomly selected into the sample. The remaining eight individuals were contacted because of their involvement in the VSA street scene. It is likely that this group overrepresents current rates of treatment need among occasional solvent abusers as defined by client records.

Taken as a whole, this suggests that the number of Kickapoo adults in the Eagle Pass area who needed substance abuse treatment was between 40 and 72. The lower bound was computed by adding the nine occasional solvent users assessed with *Psychoactive Substance Dependence* to the 31 individuals who are listed on client records as daily users. The upper bound is computed by multiplying the number of occasional users on client records (50) by the proportion of occasional users in the sample

indicating *Psychoactive Substance Dependence* (9/11) and adding this product to the number of daily users (31). The best estimate of Kickapoo people in the Eagle Pass area who needed substance treatment at the time of this study was likely near the midpoint of this range or on the order of 55 individuals. This represented about 14 percent of the 400 adult Kickapoo who resided in the Eagle Pass area.

SPECIAL TREATMENT REQUIREMENTS

A separate but equally important treatment needs assessment issue relates to the special treatment requirements of the Kickapoo VSAs. These special requirements may arise from any number of causes which may be classified as somatic, programmatic, and cultural.

Somatic Requirements

Somatic requirements are generally those arising from the physical and neurological condition of clients when they enter treatment. In this case, the clients are volatile solvent abusers who had been using paint for many

years. Chronic VSAs often begin treatment in poor physical health even as compared to other substance abusers. Medical complications (renal, hepatic, pulmonary, and/or cardiac) exacerbated by malnutrition are not uncommon.8 Although some clinicians suggest that there is a fetal solvent syndrome which produces dysomorphic facial features as well as other physical impairments,9 the teratogenic effects of volatile solvent abuse on unborn children are not well understood.10 However, given the neurological and other health problems from chronic exposure among adults, it is reasonable to expect that such exposure could present significant problems for a developing fetus.

Most chronic VSAs develop acute and/or chronic neurologic impairments. Ataxia, dullness of intellectual functioning, attention deficits, altered affect, and hypersensitivity to verbal and visual stimuli are among the many conditions clinically observed. These symptoms often represent the acute effects of solvent neurotoxicity, and they improve with prolonged abstinence. However, irreversible brain damage has also been documented. Researchers believe that the reversibility or irreversibility may be related to factors such as type(s) of solvent used,

Table 3.
Summary Results of DSM-III-R Study

	Daily Users	Occasional Users	Non- Intervention Clients	Total
Subjects Located for Random Sample	6 of 7	3 of 7	1 of 7	10 of 21
DSM-III-R Classification				
Severe Psychoactive Substance Dependence	11	2	0	13
Moderate Psychoactive Substance Dependence	2	5	0	7
Mild Psychoactive Substance Dependence	0	2	0	2
Psychoactive Substance Abuse	0	2	2	4
No Symptoms	0	0	4	4
Could Not Assess	1	0	0	1
Total Subjects Studied	1 4	11	6	3 1



the duration of use, dose, how the solvents are taken, and interactions with other substances. Current knowledge is insufficient to generalize about the consequences of chronic volatile substance abuse. However, what is clinically important is that the cognitive abilities of most solvent-dependent clients improve with abstinence, although some do not return to a premorbid level of functioning.

For chronic VSAs, detoxification tends to require substantial time.¹² Many of the volatile solvents (including toluene, the primary active ingredient in spray paint) are stored in body fats and released into the blood stream for a month or more after use is discontinued. This explains why few withdrawal symptoms are associated with chronic volatile solvent abuse and that supportive care is required before VSAs can participate in intensive treatment activities.¹³ This is best envisioned as a low-stress, drug-free respite from solvent abuse that permits the body to detoxify and neurological systems to heal before engaging in intensive treatment.

Programmatic Requirements

Programmatic requirements include issues such as preferred treatment setting, optimal treatment duration, and major treatment activities.

The question of treatment setting refers to whether outpatient or residential services are most suitable. In this case, residential services are required because of the characteristics of the potential treatment population. A majority of these Kickapoo VSAs are unemployed and semi-homeless and would be best served in a residential setting. Though 31 of these potential clients have been referred by the KTTT intervention program for outpatient counseling through United Medical Center, a nonprofit treatment provider in Eagle Pass, these services have not met this population's needs. These VSAs have great difficulty complying with outpatient treatment, frequently miss appoint-

ments, and generally are unable to maintain sobriety for more than a few days or weeks, despite UMC's best effort to furnish quality outpatient services. Kickapoo chronic VSAs simply have more extensive problems than can be dealt with effectively on an outpatient basis.

There is currently no preferred model for treating adult chronic VSAs. However, some general considerations regarding how treatment should be implemented have been suggested. The recommendations of Pamela Jumper-Thurman and Fred Beauvais are summarized below.¹⁴

- Designated treatment programs According to Jumper-Thurman and Beauvais:

 "Solvent abusers appear to present enough differences in their clinical profile to suggest that they cannot be treated in the context of programs that work with drug abusers in general. The extended period of detoxification and recovery of neurological function, the relative unresponsiveness to early treatment efforts, and the multitude of collateral problems dictate that, in general, solvent abusers need to be treated in separate programs." 15
- Long-term residential treatment Chronic VSAs tend to be impulsive, making it very difficult for them to comply with an outpatient treatment regime. The treatment must be long-term because chronic VSAs typically have numerous problems in addition to chemical dependency. Very low educational attainment, unstable work histories, criminal justice involvement, and a disorganized social life typify these users.
- Criminal justice referral as preferred method of placement - Involuntary commitment adds additional incentive to enter into and remain in treatment. This is particularly important for chronic VSAs who require lengthy detoxification before they begin to perceive treatment benefits.
- Treatment phased to accommodate changing needs of clients - The first phase

should be a low-stress, drug-free respite and assessment period (30 days minimum, 90 days expected). The second phase should consist of intensive, individualized, comprehensive services (nine months, possibly more). The third phase should be intensive aftercare and case management (one year minimum).

- Detoxification Clients should be provided medical services, a comfortable stress-free supportive environment, and nutritional programs to facilitate health improvements. Organized activity sessions must be brief (20 minutes) and varied, and deal with concrete subject matter consistent with the limited attention span and capacity for abstract thought of clients experiencing the acute effects of neurotoxicity. Periodic assessment of cognitive function is required to monitor changes and determine readiness for more intense therapeutic interventions.
- Primary treatment There is no particular model, philosophy, or special set of procedures recommended for treatment of chronic VSAs beyond those associated with detoxification. However, some special emphases are recommended: extensive family involvement in the treatment process, remediation of academic (literacy) deficits, vocational training, lifeskills training, and advocacy with the criminal justice and child protective services systems.
- Aftercare Extensive aftercare and followup is recommended. General educational activities must receive a special consideration in planning treatment for little, if any, formal education. Many will not have achieved the minimal seventh grade competencies required for entrance to a GED program. Special individualized and selfpaced learning programs designed to improve educational competencies to the point required for entry into a communitybased GED and/or vocational program should be considered.

Since many of these potential clients are women, their gender-specific needs should be considered in treatment planning as well.

Special programs for women might include parenting, life-skills, household budgeting and management, traditional women's craft activities, groups focusing on victimization as a result of sexual, physical, and/or emotional abuse, family planning, and risk of involvement with the child welfare system. Because prenatal exposure to alcohol and volatile solvents entails grave risks for developing fetuses, priority should be given to serving VSAs who become pregnant.

Culture-Specific Requirements

Culture-specific treatment requirements include considerations that make treatment acceptable and effective for culturally distinct clients. Acculturated as traditional Kickapoo, the potential clients in this study have unique needs not found in other treatment populations.

Language

All of these potential clients speak their traditional Kickapoo language as a first language. Though many subsequently learned Spanish and English, they express themselves most easily in their native tongue. Communicating in a second language is by definition more difficult. Requiring patients to do so adds to their frustration and detracts from their comfort, especially when suffering acute effects of neurotoxicity (e.g., cognitive impairment) early in treatment. Thus, offering services in the patient's native language is particularly important when providing treatment services for VSAs.

Other Cultural Communication Barriers

Cultural communication barriers are even more significant than linguistic problems when planning treatment services for traditionally oriented Kickapoo clients. As previously



described, these potential clients have had vastly different life experiences than most Americans. They have different standards for acceptable and unacceptable behavior, observe different customs and traditions, have their own view of spirituality, religion, and healing, and have a special relationship to the natural world. Their views on marriage, the family, kin, and relations between men and women as well as their sense of community tend differ from those of other cultural groups. They enjoy different foods and activities and, most importantly, they often have very different aspirations in life.

For treatment to be maximally effective for the clients, the following general considerations should be kept in mind:

- De-emphasize the use of clinical confrontation Kickapoo people view maintenance of harmony as a cultural ideal. They see confrontation as disharmony—a crazy and destructive approach to human relations. However, confrontation plays a central role in breaking denial in chemical dependency treatment as it is normally practiced in the U.S. Alternative methods that are less confrontational for breaking denial may be advisable when serving these clients.
- Consider traditional Kickapoo economic adaptation and organization when planning programming -Two aspects of the economic adaptation and organization of this population should be taken into account when planning treatment delivery. First, a significant proportion of these potential clients are migrant laborers which could affect both treatment recruitment and aftercare. With respect to recruitment, some potential clients will be in the Eagle Pass area only during the winter season. Winter client recruitment efforts should focus on these VSAs who migrate. The more sedentary VSAs can enter treatment throughout the year. Moreover, the lifestyle of VSAs who migrate could complicate the delivery of aftercare services. One potential strategy
- would be to encourage clients who normally migrate to take up sedentary occupations. This will require strong ties to educational and vocational training programs, and developing additional employment opportunities for Kickapoo people who live in the Eagle Pass area year around. Second, because of the strong link between generosity and status in the Kickapoo community, it is recommended clients be afforded opportunities to participate in the traditional Kickapoo economic exchange system consistent with their recovery progress. One possibility would be to operate a modest agricultural program that would afford clients an opportunity to raise crops, part of which might be donated to support the feasting that accompanies religious observances in Nacimiento during the ritual season. This gesture would help clients build self esteem, and it would also enhance the stature of the treatment program in the Kickapoo community at large.
- ered when making housing and programming for these potential clients Kickapoo standards for conventional behavior require that certain types of kin be treated with a high degree of deference and respect to an extent that this can affect how people feel when around certain kin. These standards should be considered when making housing and group therapy assignments. Since the traditional Kickapoo kinship system is complex, it is advisable to ask clients if a particular housing or group assignment is acceptable.
- Certain conventions regarding politeness and personal space should be observed It is advisable for medical or treatment personnel to always ask before touching a client. Failure to do so may violate a client's sense of personal space. However, it is important to touch small children when you praise them in front of their parents. You do not have to ask. If you fail to do so and the

child gets sick, you may be suspected of witchcraft.

• The Kickapoo people are serious and devout about their religious traditions - Depending on which clan a person belongs to, different religious prescriptions and proscriptions—things they are required to do or prohibited from doing—must be adhered to. For example, some people are not allowed to eat a certain food while others may do so. It is important not to generalize about what people may or may not do from what one client says or does. Somebody baptized into a different clan will have different religious obligations. However, certain practices and approaches are warranted as discussed below.

Religious Issues

It is unwise to ask Kickapoo people about their religion and beliefs. They are prohibited from talking with outsiders about these issues. If they consider someone a friend, they will experience conflict about their answer whether they lie about it or tell the truth. In time, clients will reveal information needed to deal with them in a manner sensitive to their customs.

Certain activities of religious significant take place only at Nacimiento as they are allowed only in a place considered sacred. Playing the drum is an example. When planning programmatic and/or recreational activities targeted to improving a sense of identity and spiritual well being for these clients, it is important to consult a traditional religious leader to determine what might be appropriate for a given place.

The Kickapoo religious calendar is not fixed but rather determined by changes in nature. It is therefore unreasonable to expect advance knowledge about when religious observances will occur. However, there are certain observances that require the presence of traditionally oriented Kickapoo people in Nacimiento; particularly the celebration of "New Year" that

takes place in early spring. This has obvious implications for treatment programs employing traditional Kickapoo people as staff and/or serving this population of Kickapoo clients.

Kickapoo people have different conceptions of sin compared to some other ethnic or religious groups. Among the Kickapoo, less emphasis is placed on regulating sexual behavior. This difference in traditional value orientation among clients could have implications for the operation of residential programs that serve male and female Kickapoo clients. Special attention should be given to the question of acceptable behaviors with regard to people of the opposite sex. In making these decisions, it should be understood that if from the Eagle Pass population of VSAs, a male and a female were selected at random, it is very likely that the two people would have histories that included sexual relations with each other.

As part of their religious obligation, traditionally oriented Kickapoo women observe certain requirements for seclusion during their menstrual periods. They cannot prepare food that will be served to men or eat the same food also eaten by men. Residential programs serving male and female Kickapoo clients should be aware of these seclusion requirements. Those employing Kickapoo women as kitchen staff should consider hiring post-menopausal women.

Other Treatment Requirements

Other special treatment requirements may be so obvious that they are easy to overlook. Most chemical dependency treatment in the US takes place in a hospital or a clinical setting. Such environments may be appropriate for mainstream treatment populations because these clients customarily seek assistance for health-related problems at such facilities—the setting puts them in mind of healing. However, traditionally oriented Native Americans such as the Kickapoo may have different notions of the causes of illness and may be accustomed to activities such as sweats, fasting, chanting, and

vision quests as standard healing activities. Normal treatment environments and standard treatment activities therefore, may be less effective with such groups.

SUMMARY AND CONCLUSIONS

The question of why there is a high incidence of volatile solvent abuse among Kickapoo adults is beyond the scope of this investigation. However, adult chronic volatile solvent abuse tends to be most often evident in communities characterized by poverty, low educational attainment, cultural distinctiveness, and cultural isolation, and that are undergoing cultural change. 16 The traditional Kickapoo community has these characteristics, but so do many other Native American communities in both North and South America where adult chronic volatile solvent abuse is unknown. Thus, these characteristics are not in themselves sufficient to explain high rates of volatile solvent abuse among adults but may offer some clues as to why certain communities are at risk of developing a volatile solvent abuse problem, and once established, why the problem is so difficult to

The poverty of the Kickapoo population, of course, articulates the fact that spray paint is a relatively inexpensive high. What is more rarely appreciated, however, is that spray paint has a very significant abuse liability. Kickapoo VSAs enjoy huffing spray paint and identify several positive attributes of the experience. Paint reduces hunger, the degree of one's intoxication is (at least theoretically) easy to modulate, and inhaling spray paint sometimes produces visions. For some VSAs paint represents not just a low-budget high, but also "good high," one many VSAs prefer even when alternative intoxicants are available. Moreover, spray paint can be highly addictive and many former users report cravings for paint even many years after they stop using the substance.

It is difficult to convey the depth of concern regarding the volatile solvent abuse problem expressed by traditionally oriented Kickapoo people. The chronic VSAs, themselves, express often a desire to stop drinking and using paint. There is among them an acute realization that chemical dependency has adversely affected their lives and they often earnestly express a desire to hold a job, raise a family, eat regular meals, have possessions, and the respect of other members of their community. Yet such is the pull of their chemical dependency that the VSAs feel powerless to change their circumstances.

The nonaddicted Kickapoo people are concerned with several aspects of volatile solvent abuse. Some worry that a VSA's behavior in public will negatively influence an outsider's perceptions of the Kickapoo people as a whole. Others complain that volatile solvent abuse disrupts the peace and security of reservation life. Kickapoo parents are concerned the VSAs present negative role models for their young children. Most of all, however, the community fears deeply for the health and safety of the VSAs. There have been two fatal solvent abuserelated accidents in the past two years, and other people have been hospitalized for severe substance abuse-related illnesses. These VSAs are not strangers in this small and tightly knit community. Every traditional Kickapoo person in the Texas-Mexico borderlands has a close relative who is a VSA, and every family has been affected by the problem.

The Kickapoo people must also contend with the threat posed by volatile solvent abuse for their cultural survival. They are one of the very few Native American peoples to survive into the late twentieth century speaking their native language and with their traditional social organization, religion, and lifeways largely intact. The leaders of the Kickapoo community are gravely concerned about how volatile solvent abuse impacts their traditional culture, and their ability to pass these traditions on to

future generations. One problem identified by these leaders is that volatile solvent abuse disrupts social relations among close and more distantly related kin. This problem is of particular concern because their society is kinship based, woven together through a complex web of obligations for reciprocal exchange. The economic demands of chemical dependency limit the ability of the adult VSAs to participate as full partners in this traditional exchange system and the system is undermined by the unreciprocated demands that the VSAs make on their relatives who are obligated by tradition to provide assistance.

The dependent children of the VSAs pose a particular dilemma. On one hand, there is an acute realization that these children are at risk because of the chemical dependency of their parent(s). Problems arise more often from parental neglect than abuse, and are primarily related to the extreme poverty of these families. In a community where poverty is the norm, VSA-headed households are by far the least prosperous. Many, if not all, dependent children of these VSAs have gone to bed hungry. Many grow up in and out of Texas Department of Human Services-sponsored foster placements off the reservation and away from their people. The dilemma for the community is balancing the health and safety of these children (the highest priority) against the need for the children to be acculturated as traditional Kickapoo. The Kickapoo people are few in number, and every Kickapoo child raised outside of their unique cultural community diminishes chances that their way of life will survive into the 21st century.

While the situation is grave, there is also some optimism that the situation can be substantially improved. First, among the traditional Kickapoo there are many who were formerly addicted to paint but have not used the substance for many years. This suggests that recovery for adult chronic VSAs is possible. Second, because of strong support from within the

Kickapoo community, the Center for Substance Abuse Treatment funded an application to develop a long-term residential treatment facility for Kickapoo VSAs. The center opened late in the Summer of 1994, and the treatment program was specifically designed to meet the unique linguistic, cultural and somatic treatment needs of this population. The goal is to treat all chemically dependent Kickapoo VSAs over the next five years and establish a community of recovering traditional Kickapoo people.

Endnotes

- Most of what has been done with respect to volatile solvent abuse has concerned adolescents. Cf. Texas Commission on Alcohol and Drug Abuse, *Understanding Inhalant Users* (Austin, Tx.: Texas Commission on Alcohol and Drug Abuse, 1991) and Fred Beauvais, "Volatile Solvent Abuse Trends and Patterns;" Eric Fredlund, "Epidemiology of Volatile Substance Abuse: The Texas Experience;" and E. R. Oetting and Jay Webb, "Psychosocial Characteristics and Their Links with Inhalants: A Research Agenda," in *Inhalant Abuse: A Volatile Research Agenda*, eds. Charles W. Sharp, Fred Beauvais, and Richard Spence (Rockville, Md.: National Institute on Drug Abuse, NIDA Research Monograph 129, NIH Publication No. 93-3475, 1992).
- Fred Beauvais, "Volatile Solvent Abuse: Trends and Patterns," in *Inhalant Abuse: A Volatile Research Agenda*, eds. Charles W. Sharp, Fred Beauvais, and Richard Spence (Rockville, Md.: National Institute on Drug Abuse, NIDA Research Monograph 129, NIH Publication No. 93-3475, 1992), 33.
- ³ Reginald G. Smart, "Epidemiology of Inhalant Abuse: A Canadian View," in *Inhalant Abuse: A Volatile Research Agenda*, eds. Charles W. Sharp, Fred Beauvais, and Richard Spence (Rockville, Md.: National Institute on Drug Abuse, NIDA Research Monograph 129, NIH Publication No. 93-3475, 1992), 56-57.
- One such incident was alleged after this fieldwork was concluded. It involved strangers who picked up a female VSA in a car—they weren't the "winos" who hang out in town.
- ⁵ American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders, Third Edition, Revised* (Washington, D.C.: American Psychiatric Association, 1987). Since this study was conducted, the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition has been published.
- American Psychiatric Association, op. cit., 167-168.
 Ibid., 169.
- Neil L. Rosenberg and Charles W. Sharp, "Solvent Toxicity: A Neurological Focus," in *Inhalant Abuse: A Volatile Research Agenda*, eds. Charles W. Sharp, Fred



Beauvais, and Richard Spence (Rockville, Md.: National Institute on Drug Abuse, NIDA Research Monograph 129, NIH Publication No. 93-3475, 1992), 117-117-171 and Pamela Jumper-Thurman and Fred Beauvais, "Treatment of Volatile Substance Abusers," in *Inhalant Abuse: A Volatile Research Agenda*, eds. Charles W. Sharp, Fred Beauvais, and Richard Spence (Rockville, Md.: National Institute on Drug Abuse, NIDA Research Monograph 129, NIH Publication No. 93-3475, 1992), 203-213.

- ⁹ J. H. Hersh, P. E. Podruch, G. Rogers, and B. Weisskopf, "Toluene Embryopathy," Journal of Pediatrics 106 (1985): 922-927 and A. G. W. Hunter, D. Thompson, and J. A. Evans, "Is there a Fetal Gasoline Syndrome?" *Teratology*, 20 (1979): 75-80.
- Milton Tenenbein, "Clinical/Biophysiologic Aspects of Inhalant Abuse," in *Inhalant Abuse: A Volatile Research Agenda*, eds. Charles W. Sharp, Fred Beauvais, and Richard Spence (Rockville, Md.: National Institute on Drug Abuse, NIDA Research Monograph 129, NIH Publication No. 93-3475, 1992),173-180, and Neil Rosenberg and Charles W. Sharp, op. cit.
- ¹¹ See Rosenberg and Sharp for a review of research on solvent neurotoxicity.
- ¹² Pamela Jumper-Thurman and Fred Beauvais, op. cit.
- 13 Ibid.
- 14 Ibid.
- 15 Ibid., 210.
- ¹⁶ G. E. Barnes, "Solvent Abuse: A Review," *International Journal of Addictions* 14 (1979): 1-26; Beauvais, op. cit., 34-37; Reginald Smart, op. cit., 54; and E. R. Oetting and Jay Webb, "Psychosocial Characteristics and their Links with Inhalants: A Research Agenda," in *Inhalant Abuse: A Volatile Research Agenda*, eds. Charles W. Sharp, Fred Beauvais, and Richard Spence (Rockville, Md.: National Institute on Drug Abuse, NIDA Research Monograph 129, NIH Publication No. 93-3475, 1992), 59-97.