

# GAMBLING —IN— TEXAS

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1992 Texas Survey  
of Adolescent  
Gambling Behavior

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Texas Commission on Alcohol and  
Drug Abuse

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# 1992 TEXAS SURVEY OF ADOLESCENT GAMBLING BEHAVIOR

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Texas Commission on Alcohol and Drug Abuse

September 1993

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# CHAPTER 1: INTRODUCTION

As part of its legislative mandate to “conduct studies to identify adults and juveniles in the state who are, or who are at risk of becoming, problem or compulsive gamblers,” the Texas Commission on Alcohol and Drug Abuse carried out a telephone survey of the gambling behavior of 6,308 adults aged 18 and over and 924 adolescents aged 14–17. The survey was conducted in spring 1992, in the few months preceding the start of the Texas Lottery, and was intended to describe the gambling behavior of adults and adolescents before the state lottery began. The results of the adult survey were published in a separate document (Wallisch, 1993). The present report presents the results of the adolescent survey. It serves as a baseline for future assessments of gambling and problem gambling among adolescents in Texas after a state lottery has begun, as well as a resource for addressing the needs of adolescents who currently have gambling problems.

Gambling is popular among teenagers. Surveys of high school students in several states and other countries have found rates of past-year gambling ranging from 40 to 99 percent (Jacobs, 1989; Ladouceur & Mireault, 1988; Fisher, 1993), with rates of lifetime gambling even higher. Like adults, most adolescents who gamble do so for recreation or to socialize. However, a small number experience problems related to their gambling. The above-mentioned surveys have estimated rates of adolescent pathological gambling at about 4 to 6 percent and as high as 9 percent in one study.

Within the last three years, two pioneering statewide surveys of adolescent gambling were conducted,

one in Minnesota in 1990 (Winters et al., 1990) with a recent longitudinal follow-up (Winters & Stinchfield, 1993), and one in Washington state in 1993 (Volberg, 1993). These studies were the first to be based not only on students or convenience samples but on a representative sample of all adolescents in the state. They are also noteworthy in having contributed to the development of new methods of assessing problem gambling among adolescents. The present study has drawn on the Minnesota survey in developing the questionnaire and on the Washington survey for the methodology to assess problematic gambling among youth.

## Sample

Obtaining a sample of youth by telephone is not a straightforward procedure, since most telephones are registered to adults and it is not known in advance whether a young person lives in the household. Based on comparisons of telephone lists, driver’s license applications and voter registration lists, Survey Sampling of Fairfield, Connecticut, developed a sample of telephone numbers with an increased probability of representing households with children aged 14–17. Using this sample still requires a large number of screening calls, since only about 37 percent of the households contacted turned out to have children in the required age group.

A parent’s permission was obtained before a youth was interviewed. Parents were asked for the ages of children in the household, and one child in the 14–17 age group was randomly picked to be interviewed. Both parents and youth were assured that the

respondent's answers would remain anonymous and confidential. The overall consent rate was 61 percent among the eligible families (at least one 14–17 year-old in residence) that were successfully contacted. The large majority of refusals were due to parents' denying permission for the interview to take place. About 86 percent of the teens for whom parental permission was granted agreed to be interviewed.

A total of 924 teens aged 14–17 were interviewed: 819 (88.6 percent) were interviewed before the Texas Lottery and 105 (11.4 percent) were interviewed during the first week the Lottery was available. There were no significant differences in reported gambling behavior between the samples interviewed pre- and post-Lottery, with the exception of one question directly related to intentions to play the Texas Lottery. Therefore, for the purposes of this study, the samples were combined for all responses except those related to lottery playing.

Although the sample was chosen randomly, telephone surveys tend to underrepresent parts of the population. In order to make the results more generalizable to the Texas adolescent population as a whole, post-hoc weights were computed for all combination of ages (14 through 17), race/ethnicity (white, black, Hispanic and other) and gender based on the 1990 census. Since Texas has a large Hispanic population, the survey was translated into Spanish; however, only 5 respondents requested Spanish-language interviews.

The demographic distribution of the sample as drawn and of the sample after being weighted to reflect the Texas population is shown in Table 1.

### Limitations of the Study

Because the data were collected by telephone and required parental permission, teens living in house-

holds without telephones and teens living in institutions or by themselves were not included. Households without telephones represent about 10 percent of all households in Texas. The number of teens living in institutions or by themselves is a very small component of all teens aged 14–17. Therefore, inclusion of these two segments of the population would probably not have affected the results by more than a small fraction. The fact that parental permission was required for the survey may have introduced some bias if parents of teens who gambled more than average or less than average were more likely to refuse permission. It is not known whether this was the case and, if so, what the direction of bias was.

Another potential source of bias in any self-report survey is under- or over-statement of actual behavior. It is generally assumed that, out of concern for privacy, social desirability or negative repercussions, people tend to underreport behavior which they perceive as sensitive or "deviant." In the case of teenagers, however, the opposite may be true; some teens may brag about behavior that they consider adult or risqué. The completed interviews were screened for evidence of faking or exaggeration. Claiming to have bet on an excessively large number of activities, to have first placed money bets at impossibly early ages or to have used every one of the drugs asked about would be considered evidence of faking. There were no respondents whose answers indicated across-the-board faking or exaggeration.

Another possible source of bias in surveys is the effect of someone else's presence during the interview. This is a particular possibility in interviews with teenagers where the parents' permission was sought beforehand. Interviewers were asked to indicate if there was evidence that a parent was or was not listening in the same room or on an extension phone.

**TABLE 1 DEMOGRAPHIC DESCRIPTION OF TEXAS TEEN GAMBLING SURVEY SAMPLE: 1992**

	<u>Actual</u>	<u>Weighted*</u>
<b><u>Gender</u></b>		
Male	53.5%	<b>51.4%</b>
Female	46.5%	<b>48.6%</b>
<b><u>Age</u></b>		
14	28.9%	<b>24.4%</b>
15	22.5%	<b>25.2%</b>
16	21.0%	<b>25.1%</b>
17	27.6%	<b>25.3%</b>
<b><u>Race/Ethnicity</u></b>		
White	67.5%	<b>50.3%</b>
Black	6.8%	<b>13.6%</b>
Hispanic	17.0%	<b>33.6%</b>
Other	8.7%	<b>2.4%</b>
<b><u>Region</u></b>		
Plains	14.9%	<b>13.5%</b>
Border	7.3%	<b>11.8%</b>
Dallas/Fort Worth	25.8%	<b>21.2%</b>
East	6.4%	<b>5.7%</b>
Houston	24.1%	<b>23.4%</b>
Central	10.1%	<b>11.0%</b>
San Antonio	7.4%	<b>8.3%</b>
Corpus Christi	4.1%	<b>5.1%</b>

\* Percentages are weighted to reflect the actual gender, age and race/ethnic composition of the Texas population. The sample was not weighted for region.

Interviewers indicated that a parent was definitely listening in 4 percent of the interviews and that a parent was definitely not listening in 15 percent of the interviews. In the other 81 percent of the interviews, it was not known whether or not a parent was within earshot.

From the limited analysis that could be done with this information, there appeared to be a small restrictive effect of parental presence. If a parent was definitely listening, the adolescent was slightly less likely to report problem gambling or illicit substance

use than if the parent was definitely not listening. There was no difference between teens whose parents were or were not listening in whether they reported having ever gambled or having ever drunk alcohol.



## CHAPTER 2: EXECUTIVE SUMMARY

### Gambling by Texas Teens

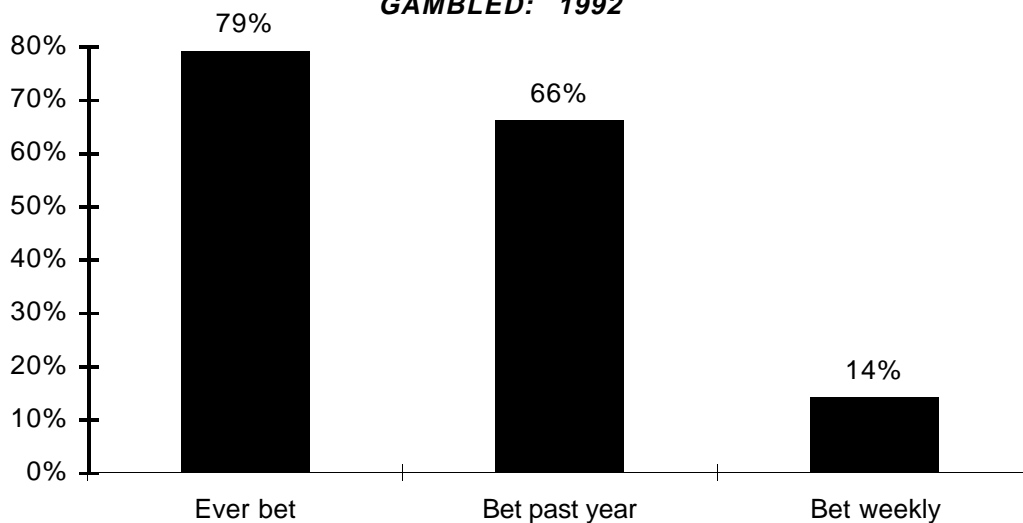
- 79 percent of Texas teens have ever bet money on an activity (Figure 1).
- 66 percent of Texas teens bet money within the past year, and 14 percent gambled weekly in the past year.
- On average, teens who have ever gambled made their first bet at age 12.
- The three most common types of gambling among Texas teens are betting on card/dice/board games with friends and family (59 percent lifetime prevalence), betting on sports or other events with friends (49 percent lifetime), and betting on games of skill such as bowling or pool (41 percent lifetime).
- About 15 percent of past-year gamblers spent over \$100 on their bets in that year.

- Teens who gamble frequently are more likely to be male, Hispanic, to receive a weekly income of \$50 or more, and to come from the Border or Corpus Christi regions (Figure 2).
- 25 percent of teens interviewed before the Texas Lottery began said they intended to buy tickets, compared to 40 percent of teens interviewed after the Lottery began.

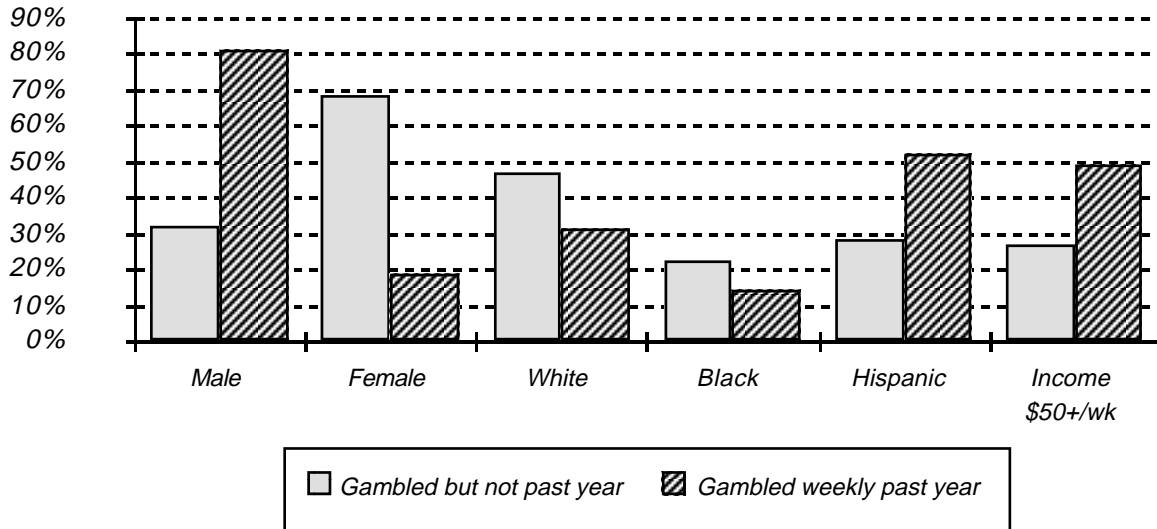
### Problem Gambling Among Texas Teens

- In Texas before the state lottery began, 5 percent of teens were identified as problem gamblers, and another 12 percent were at risk of developing problems.
- Problem gamblers are about five times more likely than non-problem gamblers to say that they gamble to forget their problems (35 percent vs. 7 percent).

**FIG 1 PERCENT OF TEXAS TEENS WHO HAVE GAMBLED: 1992**



**FIG 2 COMPARISON OF TEXAS TEENS WHO DIDN'T GAMBLE IN PAST YEAR AND THOSE WHO GAMBLED WEEKLY: 1992**



- Problem gamblers are much more likely than non-problem gamblers to have bet in the past year on dog/cock fights (23 percent vs. 0 percent), slot machines (29 percent vs. 10 percent), and horse/greyhound races (21 percent versus 6 percent).
- At-risk and problem gamblers are more likely to skip school, be sent to the principal, have friends who carry weapons and belong to gangs, to commit illegal acts, and to be arrested than non-problem gamblers.

### Substance Use and Gambling

- 14 percent of Texas teens have gambled, drunk alcohol, and used illicit drugs in their lifetime; 38 percent have done just two of these activities, and 32 percent have done just one (Figure 3).
- 34 percent of weekly gamblers have ever used illicit drugs or inhalants, compared to 17 percent

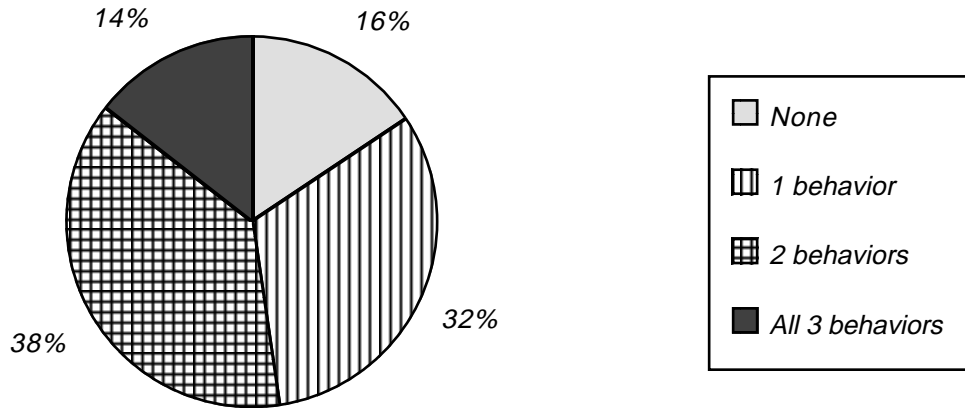
of past-year gamblers and 9 percent of not-past-year gamblers.

- 78 percent of weekly gamblers have drunk alcohol, as compared to 69 percent of past-year gamblers and 38 percent of not-past-year gamblers.

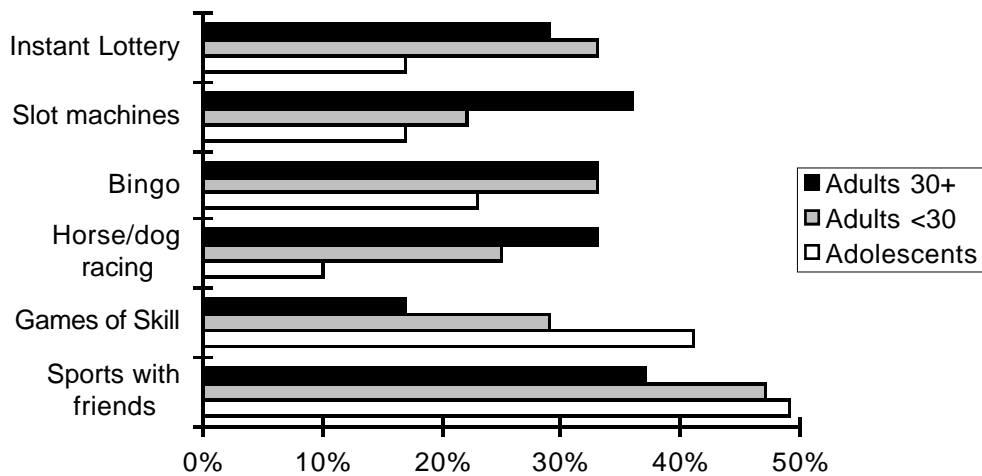
### Comparisons Between Adolescent and Adult Gamblers

- 79 percent of teens, 78 percent of adults under 30, and 75 percent of adults 30 and over have ever gambled.
- A higher percentage of teens have gambled on games of skill than adults (41 percent for teens, 29 percent for adults under 30, and 17 percent for adults over 30) (Figure 4).
- Adolescent problem gamblers are more likely than adults to be male and to be Hispanic.

**FIG 3 PERCENT OF TEXAS TEENS WHO HAVE GAMBLED, DRUNK ALCOHOL, AND/OR USED OTHER DRUGS: 1992**



**FIG 4 PERCENT OF TEXANS WHO HAVE GAMBLED ON VARIOUS ACTIVITIES, BY AGE GROUP: 1992**



## CHAPTER 3: GAMBLING BY TEXAS TEENS

### Gambling Categories

Teens were asked about the different types of gambling in which they had ever participated, the recency and frequency of their gambling, the total amount of money they had spent on gambling, their attitudes towards the Texas Lottery and towards gambling in general, their emotional experiences associated with gambling, and any problems they may have had related to their gambling. They were also asked questions about their family, friends, and school, their mental health, and their alcohol and drug use. Finally, they were asked the usual battery of demographic questions.

Adolescents were asked if they had ever bet money on 11 specific types of activities, plus an “other types” category. If they said that they had ever gambled on an activity, they were then asked whether they had done so within the past year and whether they participated regularly (once a week or more) in that type of gambling. The activities asked about were the following:

1. Instant lottery games, such as instant scratch-off tickets
2. On-line or video lottery games, such as Lotto or daily numbers
3. Cards, dice games or dominoes played with family or friends
4. Commercial card parlors or betting establishments, including casinos or riverboats
5. Slot machines or video poker or other gambling machines

6. Outcome of sports events, such as football, baseball, or basketball, among school or work friends, without using a bookie
7. Bingo or instant bingo
8. Horse or greyhound racing
9. Games of skill, such as bowling, pool, golf or video arcade-type games
10. Dog or cock fights
11. Bets with a bookie or bookmaker
12. Any other gambling activities, such as pull tabs, flipping coins or monopoly (specify)

For purposes of analysis, betting on monopoly was subsequently combined with betting on cards, dice games or dominoes played with family or friends, and flipping coins was added as a separate category.

### Prevalence and Recency of Gambling

Most Texas teens had gambled in their lifetimes: 79 percent of the respondents said that they had ever bet on one or more of these activities. This is very similar to the proportion of Texas adults who had ever bet in their lifetimes (76 percent). Most teens who had ever bet had done so within the past year: almost 66 percent of all teens had gambled within the past year, 14 percent on a weekly basis and 51 percent less regularly within the past year.

### Frequency of Gambling Within the Past Year

Teens who had gambled on one or more activities within the past year were asked, “Overall, how often would you say that you have bet money or gambled on something in the past year? Would you say it has been

every day, every week, every month or less often than that?"

Among adolescents who had gambled within the past year, only one said that he had gambled daily. Ten percent said they had gambled weekly, 21 percent monthly, and 68 percent less often than that.

In asking this question, it was anticipated that the percentage of teens who said they had gambled on anything at least weekly would be higher than the percentage who said that they had gambled weekly on any particular activity. This is because an individual may have bet overall at least weekly but have done so on a variety of different activities. However, the response pattern was different than expected. About 22 percent of past-year gamblers said they gambled at least weekly on one or more of the specific activities asked about, whereas only 10 percent of past-year gamblers said that they had "gambled on something" at least weekly. Apparently teens, when thinking about their gambling on the whole, do not think they bet as frequently as when they think about gambling on specific activities.

### Characteristics of Gamblers

Experimenting with gambling is widespread and basically democratic: most teens have gambled at least once during their lifetimes and gamblers come from every sociodemographic group. There was no significant difference between teens who had ever gambled and those who had never gambled in age, region, or the number of adults with whom they lived (Table 2). However, teens who had ever gambled were more likely to be male and more likely to have money with which to gamble. More than one-half of teens who had ever gambled were male, compared to only one-third of teens who had never gambled. Some 35 percent of teens who had gambled reported a weekly

income of \$50 or more, whereas only 16 percent of non-gamblers had that level of income. Gamblers were more likely both to get an allowance (55 percent vs. 42 percent of non-gamblers) and to work 10 or more hours per week (33 percent vs. 14 percent of non-gamblers). Teen gamblers were also slightly more likely to come from a minority group, although the difference was not statistically significant.

Characteristics of teens who have ever gambled vary significantly depending on the recency and frequency of their gambling (Table 3). Teens who had gambled more recently (within the past year) and more frequently (weekly or more) were more likely to be male, to be Hispanic, and to come from the Border or Corpus Christi regions. Recency and frequency of gambling was also associated with having a higher weekly income and with receiving an allowance (but only marginally with working 10 or more hours per week). There was a slight but not statistically significant tendency for recency and frequency of gambling to increase with age. Recency and frequency of gambling was not associated with number of adults in the household.

### Age at First Gambling

Among adolescents who had ever gambled, the mean age at which they started to gamble was about 12 years old. They were most likely to have started gambling on cards, dice and board games with friends and family (39 percent). Some teens said that their first gambling activities were betting on sports or other events with friends (19 percent), bingo (10 percent) or games of skill (8 percent). Fewer than 5 percent said that they had started gambling on any one of the other activities asked about.

**TABLE 2 DEMOGRAPHIC CHARACTERISTICS OF GAMBLING AND NON-GAMBLING TEENS IN TEXAS: 1992**

	<b>Never Gambled (N=208)</b>	<b>Gambled in Lifetime (N=716)</b>	
<b><u>Gender</u></b>			
Male	33%	56%	**
Female	67%	44%	
<b><u>Age</u></b>			
14 years old	29%	23%	
15 years old	24%	26%	
16 years old	22%	26%	
17 years old	26%	25%	
Mean age	15.45	15.53	
<b><u>Size of Household</u></b>			
1 adult	12%	10%	
2 adults	85%	85%	
3 or more adults	3%	6%	
<b><u>Race/Ethnicity</u></b>			
White	57%	48%	+
Black	10%	14%	
Hispanic	29%	35%	
Other	3%	2%	
<b><u>Income</u></b>			
Received an allowance	42%	55%	**
Worked 10 or more hrs/week	14%	33%	**
Had weekly income of \$50 or more	16%	35%	**
<b><u>Region</u></b>			
Plains	10%	14%	
Border	12%	12%	
Dallas/Fort Worth	25%	20%	
East	8%	5%	
Houston	21%	24%	
Central	14%	10%	
San Antonio	7%	9%	
Corpus Christi	4%	6%	

All percentages are weighted.

\*\*p<=.01 \*p<=.05 +p<=.10

Percentages may not add to 100% due to rounding.

**TABLE 3 DEMOGRAPHIC CHARACTERISTICS OF TEENS IN TEXAS WHO HAVE EVER GAMBLED, BY FREQUENCY OF GAMBLING: 1992**

	<b>Not Past Year (N=117)</b>	<b>Past Year Not Reg. (N=489)</b>	<b>Weekly Past Year (N=110)</b>	
<b><u>Gender</u></b>				<b>**</b>
Male	32%	55%	81%	
Female	68%	45%	19%	
<b><u>Age</u></b>				
14 years old	29%	23%	21%	
15 years old	24%	28%	18%	
16 years old	26%	25%	31%	
17 years old	22%	25%	30%	
Mean age	15.4	15.5	15.7	
<b><u>Size of Household</u></b>				
1 adult	9%	10%	11%	
2 adults	84%	85%	83%	
3 or more adults	7%	5%	7%	
<b><u>Race/Ethnicity</u></b>				<b>**</b>
White	47%	54%	31%	
Black	22%	13%	14%	
Hispanic	28%	32%	52%	
Other	3%	2%	3%	
<b><u>Income</u></b>				
Received an allowance	45%	56%	61%	<b>*</b>
Worked 10 or more hrs/week	25%	33%	37%	
Had weekly income of \$50 or more	27%	34%	49%	<b>**</b>
<b><u>Region</u></b>				<b>**</b>
Plains	14%	15%	11%	
Border	5%	12%	16%	
Dallas/Fort Worth	23%	22%	13%	
East	7%	4%	6%	
Houston	29%	24%	20%	
Central	10%	9%	14%	
San Antonio	10%	8%	9%	
Corpus Christi	2%	5%	11%	

All percentages are weighted.

\*\*p<=.01 \*p<=.05 +p<=.10

Percentages may not add to 100% due to rounding.

### Most Prevalent Gambling Activities

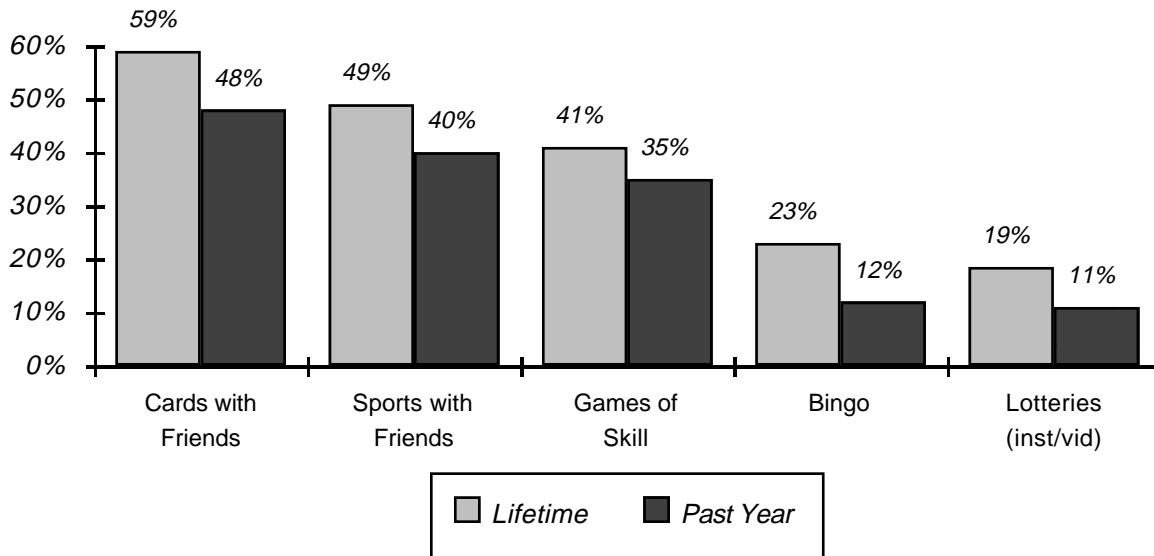
The most commonly reported gambling activity was betting on card, dice or board games with friends and family: 59 percent of teens had done this kind of gambling at least once in their lives (Figure 5). About 5 percent of teens had bet only on this kind of activity and on no other. The next most often reported gambling activity was betting on the outcome of sports or other events with friends (49 percent). About 41 percent of respondents had ever played and gambled on games of skill, such as bowling, pool, golf or video-arcade games. These findings are similar to those of other studies of high school students which have found that wagering on card games, sports events and games of personal skill are the most common forms of adolescent gambling (Volberg, 1993; Jacobs, 1989). The next most common forms of gambling were bingo (23 percent), lottery games (19 percent), slot or video poker machines (17 percent), and flipping coins (12 percent). The most prevalent

gambling activities of teens who had ever gambled varied somewhat with age, gender, race/ethnicity and region (complete prevalence tables for each activity by age, gender and race/ethnicity are presented in Appendix A).

**Age.** Bingo and flipping coins were the only activities that showed a significant age difference in prevalence. Whereas 17-year-olds were significantly more likely than others to have ever bet on bingo, 16-year-olds were the most likely age group to have ever bet on flipping coins. There were no important age differences in betting on cards/dice/board games, sports, games of skill, lotteries or slot machines.

**Gender.** Boys were more likely than girls to have ever gambled with friends or family on cards/dice/board games, sports with friends, games of skill and flipping coins, while girls had gambled more than boys on bingo. There was no difference between males and females in gambling on lotteries or slot machines.

**FIG 5 PERCENT OF TEXAS TEENS WHO HAVE GAMBLED ON SELECTED ACTIVITIES: 1992**





**Race/Ethnicity.** White youth were more likely than others to have gambled on lotteries. Black youth were more likely than others to have gambled on flipping coins but were least likely to have bet on lotteries or cards/dice/board games with family and friends. Hispanic youth were the most likely to have gambled on bingo and on cards/dice/board games with family or friends, and the least likely to have bet on flipping coins.

**Region.** For purposes of analysis, Texas counties were aggregated into eight survey regions (see Appendix B for a list of counties in each region). During 1991 and early 1992, the types of formal betting that were generally available in Texas were bingo (throughout the state), limited horse racing (in the Central, Dallas/Fort Worth and San Antonio regions), and greyhound racing (in the Border and Corpus Christi regions). Other types of betting were available in neighboring states. There were lotteries in Louisiana, Mexico and Colorado, horse racing in Oklahoma, New Mexico, Arkansas, Louisiana, Colorado and Mexico, and Indian bingo in Oklahoma and New Mexico. Betting on lotteries and horse/greyhound racing was not legal in Texas for youth under 18. Betting on bingo was allowed if the youth was accompanied by a responsible adult.

The prevalence of betting on the seven most common activities varied by region, and did not only reflect differences in availability, since card games among family or friends, betting on sports with friends, games of skill and flipping coins are activities equally available throughout the state. Bingo was theoretically also widespread, although it may be more prevalent in areas with large Catholic populations, since bingo is a common church fund-raiser (Texas Council on Problem and Compulsive Gambling, personal communication).

Youth from the Plains region did not favor any one betting activity, although they were relatively unlikely to have ever bet on flipping coins. Teens from the Border region were more likely to have bet on bingo and less likely to have flipped coins. Adolescents from the Dallas/Fort Worth region were more likely to play lotteries, use slot machines and flip coins, and were less likely to have bet on bingo or games of skill. Teens from the East region were more likely to play lotteries as well as bingo. This region borders on Louisiana, which had a state lottery during the year preceding the survey, as well as on Oklahoma, which has bingo on Indian reservations (adults from this region had also bet more frequently than others on lotteries). Youth from the Houston region were more likely to have bet on sports with friends, while teens from the Central region favored flipping coins. Adolescents from the San Antonio region were more likely to bet on card/dice/board games with family and friends. Teens from the Corpus Christi region were disproportionately likely to have gambled on lotteries, slot machines, bingo, games of skill and flipping coins.

### Number of Activities Gambled On

Most teens who had ever gambled had bet on more than one activity during their lifetimes. Only 20 percent of lifetime gamblers had bet on only one activity, and the average number of different activities for lifetime gamblers was 3.1. The average number during the past year was 2.6 activities.

For teens who had bet on only one activity in their lives, the most prevalent was betting on cards, dice, dominoes or board games with family or friends (36 percent of those who had bet on only one activity) and the next most common was betting on the outcome of sports with school or work friends (22 percent). The

next three most common sole activities, with close to 10 percent betting on each, were bingo, games of skill and slot machines. Lotteries were the activity of choice for only 6 percent of teens who had only bet on one activity.

### Amount Spent on Gambling

Adolescents who had gambled at all during the past year were asked, "If you think about all the times you have bet money in the past 12 months, how much total money would you estimate you have bet during that time?" They were asked to respond using the following dollar categories: \$0, \$1-9, \$10-19, \$20-49, \$50-99, \$100-199, and \$200 or more.

On the whole, teens who have gambled have not spent a lot of money doing so. Most respondents who had bet (69 percent) said that they had spent less than \$50 in all on gambling activities during the past year: 26 percent had spent less than \$10, 21 percent had spent \$10-\$19, and 22 percent had spent \$20-\$49. About 11 percent of past-year gamblers had spent

\$50-\$99 dollars, about 15 percent had spent over \$100 gambling in the past year, and 4 percent said they did not know (Figure 6).

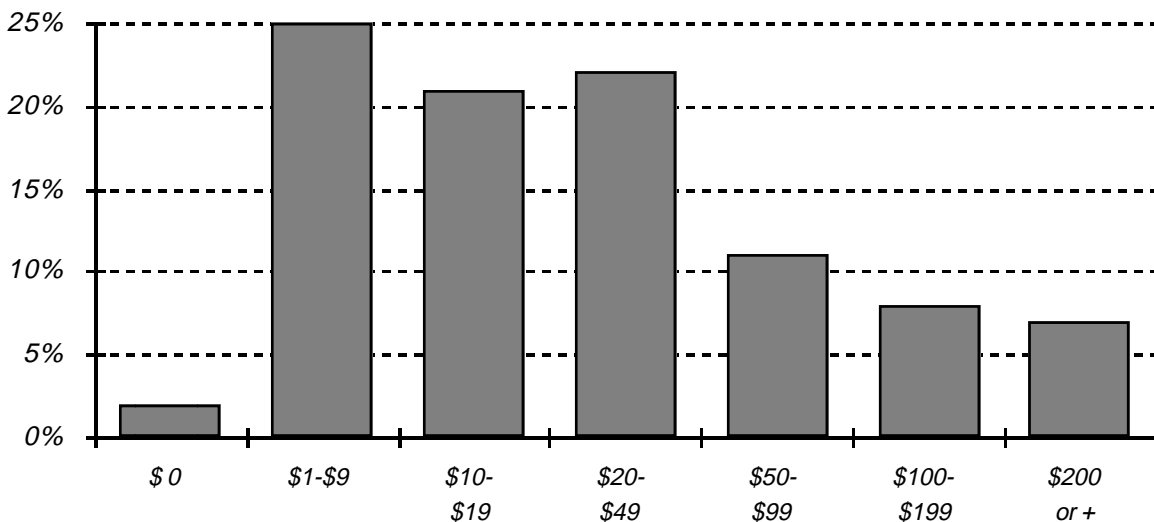
### Gambling Out of State

Teens who had gambled during the past year were asked if they had bet or gambled out of state during that time. About 12 percent of them had gambled outside of Texas during the past year. Although it is unknown which activities they bet on out of state, teens who had gambled out of state were more likely than those who had only gambled in-state to have bet on lotteries, casino games, slot machines, horse or greyhound races, and animal fights during the past year.

### Attitudes About Gambling

Respondents were asked whether they "strongly disagree," "disagree," "agree" or "strongly agree" with the following statements about gambling: "I do not think betting for money is harmful;" "If teenagers

**FIG 6 AMOUNT SPENT ON GAMBLING DURING PAST YEAR BY TEENS WHO GAMBLED: 1992**



want to bet money, they should be able to;” “I think I could make a lot of money playing games of chance like the lottery.”

Teens were about evenly divided on whether they perceived betting as harmful or not (Figure 7). However, a majority of respondents felt that teens should be able to bet if they wanted to. Most teens, though, did not think that gambling was economically advantageous.

### Behavior of Friends

Adolescents who had ever gambled themselves were asked how many of their friends gambled, whether they thought that any of their friends gambled too much, and whether they thought schools should have a program to help students with gambling problems.

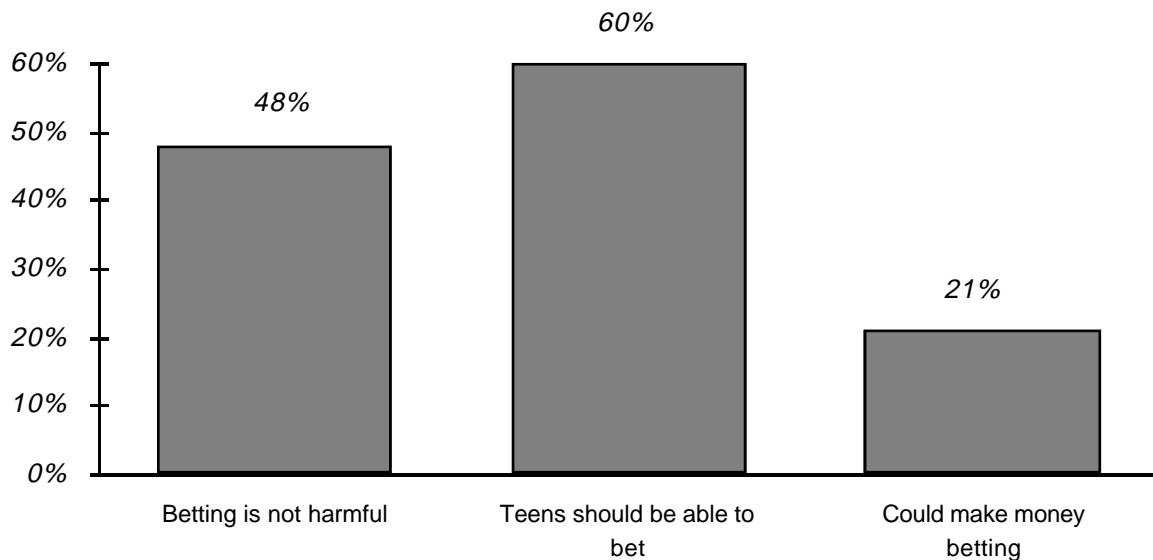
Most teens who had ever gambled themselves had friends who had also gambled: 68 percent said that some of their friends gambled and 22 percent said that most of their friends gambled. About 18 percent of

teens who had gambled had friends who gambled “too much.” Respondents were about equally divided on whether schools should have programs to help students with gambling problems.

### Non-Gamblers

About 21 percent of teens said that they had never bet money on any activity in their lives. As compared to youth who had ever gambled, the non-gambler was more likely to be female (67 percent) and white (57 percent), and to have a weekly income of less than \$50 (84 percent). In age, religion, region of residence and number of adults in the household, non-gamblers did not differ from gamblers. Not surprisingly, youth who had never bet were more likely to think that betting was harmful (66 percent), that teens should not be allowed to bet (57 percent), and that they would not make a lot of money betting (88 percent). They were also significantly more likely to have abstained from alcohol or other drug use as well.

**FIG 7 PERCENT OF TEXAS TEENS WHO AGREED WITH GAMBLING STATEMENTS: 1992**



## CHAPTER 4: GAMBLING ON THE LOTTERY

Because this research was planned in response to the Texas Lottery, the following section presents information specifically about intentions to buy Texas Lottery tickets, attitudes toward lotteries, the prevalence of gambling on lotteries before the Texas Lottery, and the characteristics of lottery gamblers. Since lottery-related questions were most likely to be affected by whether the interview took place before or after the Texas Lottery had begun, they were analyzed separately for the sample interviewed before (89 percent) and after (11 percent) the Lottery had begun. All interviews of the post-Lottery sample were completed within the first week of operation of the Texas Lottery, and therefore the Lottery would not have had much effect on actual behavior.

### Attitudes About the Lottery

Respondents were asked whether they thought lotteries were a good or a bad idea: "Some people say that lotteries are a good idea because they help raise money for state programs that can benefit people. Others say lotteries are a bad idea because they encourage people to waste their money on something that is a long shot. Which statement best reflects your view of lotteries: Lotteries are a bad idea/Lotteries serve a useful purpose."

Most (69 percent) of the teens felt that lotteries served a useful purpose. One-quarter (25 percent) said that they were a bad idea, and 6 percent were undecided. There was no difference in attitude between teens interviewed before and after the beginning of the Texas Lottery. There was also no differ-

ence in attitudes towards lotteries by sex, age, race/ethnicity or region of residence.

Respondents were also asked whether they thought it wise to have an 18-year-old age limit on playing the Texas Lottery: "As you may know, Texas will begin its lottery early this summer with an instant scratch ticket game and will begin a computerized lottery game with large weekly prizes later in the year. You must be at least 18 years old to play the lottery. Do you think it is wise to have this age limit on who can play?"

A majority of teens (76 percent) said that the age limit was wise, 20 percent said that it was not a good idea to have this age limit and about 4 percent were undecided. There was no difference in opinion between those interviewed pre-and post-Lottery. Females and 17-year-olds were the most likely to think that there should be an age limit on playing the lottery.

### Intention to Play the Texas Lottery

Respondents were asked if they would personally try to purchase any Texas Lottery tickets. Although none of the youth interviewed was yet 18 years old, slightly over one-quarter (26 percent) said that they would try to buy lottery tickets, 68 percent said that they would not try to buy them, and 6 percent were undecided. This was the only lottery-related variable that showed some variance in response by whether the respondent was interviewed in the months preceding the Texas Lottery or in the week after the Lottery had begun. While 25 percent of the youth interviewed before the Lottery said that they intended to purchase Lottery tickets, 40 percent of those interviewed after the

Lottery said that they intended to do so. Evidently, the actual beginning of the Lottery stimulated some purchases that may have been previously unintended.

Males, blacks and Hispanics, 17-year-olds and teens who lived in the Border, East or Corpus Christi regions were more likely than others to say that they intended to purchase tickets. Even among the youth who had expressed reservations about the Lottery, a small percentage nevertheless intended to buy lottery tickets: 12 percent of teens who said that lotteries were a bad idea and 24 percent of those who felt it was wise to have an age limit on playing the lottery said they intended to buy tickets themselves anyway.

There has been considerable concern that a state-sanctioned lottery might attract individuals who had never gambled before. In fact, as Figure 8 shows, teens who were already frequent gamblers were the most likely to say that they intended to purchase tickets, while those who had never gambled were less likely to plan on playing the Texas Lottery.

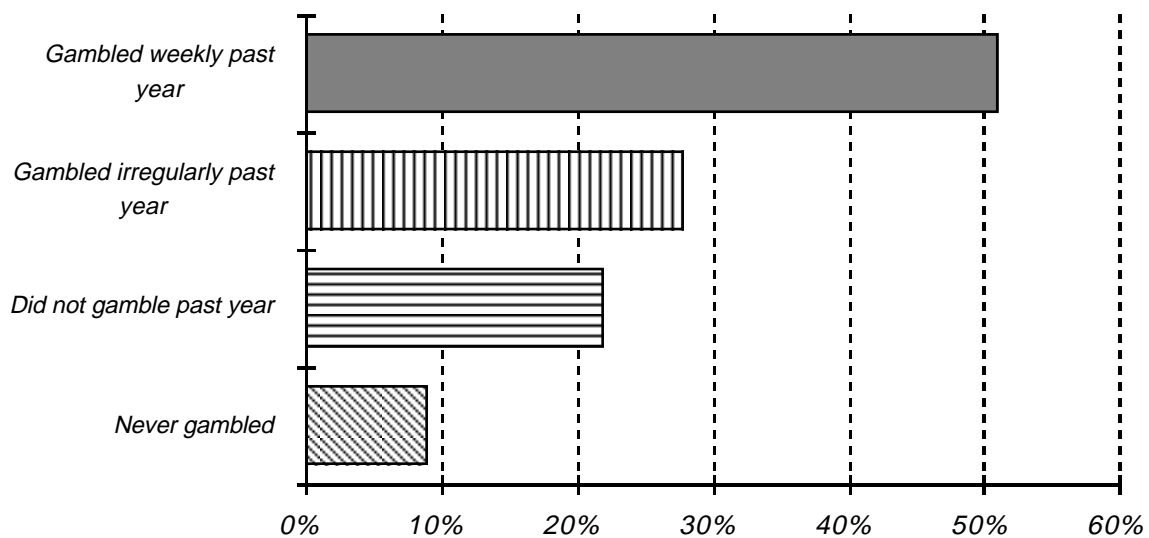
### Gambling on Lotteries Before the Texas Lottery Began

Even before the start of the Texas Lottery, almost 19 percent of teens had gambled on instant or on-line lottery games. About 10 percent had gambled on these games within the past year. It is not known where or on what games these teens had gambled. Only about one-fifth of those who said they had gambled on lottery games in the past year said that they had gambled out of state within that year. The others may have gambled on out-of-state lotteries by mail or else have gambled on more informal lottery-like games, perhaps at charitable benefits.

Most teens who had played lottery games had also gambled on other activities. The mean number of activities played by teens who had bet on lotteries was 4.5. Only 5 percent of lottery players had only bet on lotteries and nothing else.

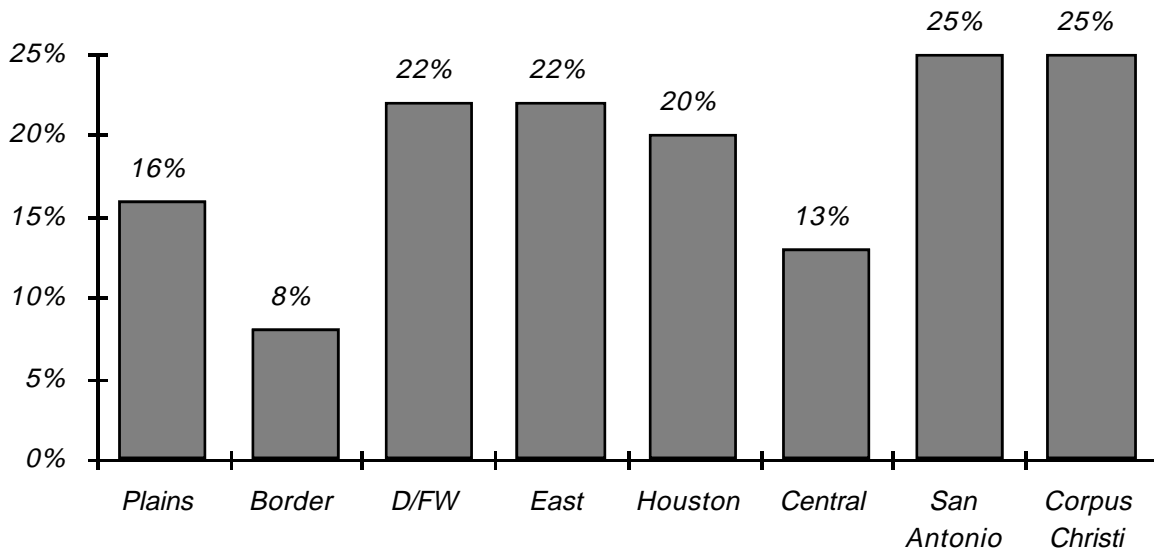
Males and females, younger and older teens, whites, blacks and Hispanics, and youth from most regions of

**FIG 8 PERCENT OF TEXAS TEENS WHO INTEND TO BUY LOTTERY TICKETS, BY GAMBLING HISTORY: 1992**



the state said equally that they had gambled on lottery games at some time during their lives. Teens from the Border and the Central region were the least likely to have ever bet on lottery games (despite the presence of a lottery in Mexico, which neighbors the Border region) (Figure 9).

**FIG 9 PERCENT OF TEENS IN EACH REGION WHO HAD EVER PLAYED A LOTTERY, PRIOR TO TEXAS LOTTERY: 1992**



## CHAPTER 5: PROBLEM GAMBLING

### Assessing Problem Gambling

Existing studies of problem gambling in teens have used a variety of methods to assess the prevalence of problem gambling. The South Oaks Gambling Screen (SOGS) is the method most widely used to assess problem and pathological gambling in adult studies. The SOGS asks a series of questions about problematic gambling behaviors and about the number of different sources used to obtain money to gamble or to pay gambling debts. The SOGS instrument has proven reliability and validity among adults, and was used in the recent study by TCADA of adult gambling in Texas (Wallisch, 1993).

A measure called the “multifactor method” was used in determining the prevalence of adolescent problem gambling in the present study (see Appendix C for a full description of the development of the multifactor method). The multifactor method utilizes the SOGS, but treats the behavioral and borrowing dimensions of the SOGS separately, and also incorporates measures of the frequency and intensity of gambling (see Appendix D for the original SOGS and modifications used in the adolescent survey).

Using the multifactor method, teens were classified into three categories: non-problem gamblers, at-risk gamblers and problem gamblers. An individual was scored on three dimensions: behavioral difficulties, borrowing difficulties, and gambling involvement (frequency of gambling and amount of money spent). Gamblers with no or few difficulties on any dimension were classified as non-problem gamblers, those who gambled weekly with no problems or less intensively but with some problems were classified as

at-risk gamblers, and those who had several behavioral and/or borrowing problems and who either gambled weekly or spent more than \$10 per month on gambling were classified as problem gamblers. More details on the methodology of classifying gamblers are given in Appendix C.

### Prevalence of Problem Gambling Among Texas Teens

In Texas before the state lottery began, 5.0 percent of Texas teens were identified as problem gamblers, another 11.7 percent were at risk of developing problems, and 83.3 percent had no apparent gambling-related problems. Based on an adolescent population of slightly over 1 million, this translates into a figure of 36,000–65,000 teens who already have problems with gambling and another 97,000–139,000 teens who show risk behaviors for developing gambling problems (the range represents a 95 percent confidence interval around the percentage estimates).

### Comparison with Other States

Except in Washington state and Minnesota, no other statewide representative surveys of adolescent teen gambling have yet been carried out. The Texas study used essentially the same multifactor methodology to classify teen gambling as the Washington study, and therefore results may be compared between the two states.

Texas has higher rates of teen problem and at-risk gambling than Washington state (Table 4; Appendix C shows differences based on both SOGS and multifactor methods). The differences are probably due in

**TABLE 4 PROBLEM GAMBLING AMONG TEXAS AND WASHINGTON STATE TEENS: 1992\***

	<b>TEXAS (N=924)</b>	<b>WASHINGTON (N=1045)**</b>
Non-Problem	83.3%	90.1%
At-Risk	11.7%	9.0%
Problem	5.0%	0.9%

\* Using multifactor method

\*\* Source: Volberg (1993)

some part to the different age and race/ethnic distributions of the two samples (the Washington study included teens aged 13, and its population has a lower proportion of minorities), as well as to actual differences in the rates of adolescent gambling. In contrast, the rate of problem and pathological gambling among adults was more similar for the two states (4.8 percent for Texas and 5.1 percent for Washington).

The Minnesota survey used a somewhat different multifactor methodology from that of the Texas and Washington surveys to assess problem gambling in teens. The sample was also different in age (15–18 years) and race/ethnic distribution (almost exclusively white) from the Texas population. Therefore, rates of problem gambling cannot be strictly compared, but they appear to be higher in Minnesota (6 percent problem and 20 percent at-risk) than in Texas.

#### Factors Associated with Problem and At-Risk Gambling

In the following analyses, the characteristics of problem, at-risk and non-problem gambling teens are compared. Teens who have never gambled are not included in the analyses, since they represent a relatively small proportion of teens, and interest is in factors associated with developing gambling prob-

lems rather than factors associated with ever having tried gambling. Among the group of non-problem gamblers, about 79 percent had gambled within the past year, while 21 percent had only gambled more than one year ago (all of the at-risk and problem gamblers had gambled within the past year).

#### Demographics of At-Risk and Problem Gamblers

Table 5 presents selected demographic characteristics of at-risk and problem gamblers, and of teens who gamble without problems. As compared to teens who have gambled without problems, at-risk and especially problem gamblers are more likely to be male, to belong to a minority group and to report a weekly income of over \$50. They were not more likely to receive an allowance nor were they more likely to work 10 or more hours per week.

The number of adults in the teen's household is associated with problem gambling differently for Hispanic than for other teens. For Hispanic teens, problem gambling is associated with living in a larger household (three or more adults), while for non-Hispanic teens, problem gambling is associated with living in a smaller household (only one adult).



**TABLE 5 DEMOGRAPHIC CHARACTERISTICS OF TEENS IN TEXAS WHO GAMBLE, BY CATEGORY OF GAMBLING: 1992**

	<b>Non-Problem Gambler (N=582)</b>	<b>At Risk Gambler (N=100)</b>	<b>Problem Gambler (N=34)</b>	
<b><u>Gender</u></b>				<b>**</b>
Male	50%	76%	95%	
Female	50%	24%	5%	
<b><u>Age</u></b>				
14 years old	23%	29%	17%	
15 years old	28%	17%	19%	
16 years old	25%	26%	37%	
17 years old	24%	28%	27%	
<b><u>Size of Household</u></b>				<b>**</b>
1 adult	9%	11%	10%	
2 adults	85%	88%	74%	
3 or more adults	6%	1%	16%	
<b><u>Race/Ethnicity</u></b>				<b>**</b>
White	53%	39%	18%	
Black	14%	12%	24%	
Hispanic	31%	46%	55%	
Other	2%	3%	3%	
<b><u>Income</u></b>				
Received allowance	53%	63%	58%	
Worked 10 or more hrs/wk	32%	33%	37%	
Had weekly income of \$50 or more	33%	42%	51%	<b>*</b>
<b>One or Both Parents Gamble</b>	34%	40%	44%	
<b><u>Region</u></b>				<b>**</b>
Plains	15%	12%	14%	
Border	10%	21%	7%	
Dallas/Fort Worth	22%	13%	11%	
East	5%	3%	13%	
Houston	24%	23%	23%	
Central	10%	14%	9%	
San Antonio	9%	5%	14%	
Corpus Christi	4%	9%	11%	

All percentages are weighted.

Percentages may not add to 100% due to rounding.

\*\*p<=.01 \* p<=.05 +p<=.10

A relatively high proportion of at-risk gamblers came from the Border region, while a relatively high proportion of problem gamblers came from the East, San Antonio and Corpus Christi regions. This is associated with the different race/ethnic populations of these regions. Problem or at-risk teens did not differ significantly from non-problem teens in age, whether their parents gambled, or in religious identification or importance of religion to them.

### Other Correlates of Problem Gambling

Table 6 shows other correlates of problem gambling. The full wording of the questions abbreviated in Table 6 are given in Appendix E.

**Recognition of One's Own Gambling Problem:** For the purposes of this study, identification of teens who had gambling problems was made based on their answers to the SOGS and their patterns and intensity of gambling behavior. However, individuals do not always recognize that they themselves may have problems. One question on the SOGS asks respondents directly if they felt that they had ever had a problem with betting money or gambling. Only 29 percent of teens identified as problem gamblers admitted directly to having a gambling problem.

**Attitudes Towards Gambling:** Adolescents who were at-risk or problem gamblers had more tolerant attitudes toward lotteries and toward gambling in general. Interestingly, at-risk gamblers were least likely to think that betting was harmful: two-thirds of at-risk gamblers said they did not think betting was harmful, as compared to only about one-half of problem gamblers and non-problem gamblers alike (Table 6).

**Emotional Experiences Associated with Gambling:** Adolescents who had ever bet were asked to agree or disagree with four statements about feelings

associated with gambling: "What I like most about gambling is the action and excitement;" "When gambling, I forget all my problems;" "When gambling, I want to feel numbness or oblivion;" "Betting money is something I usually like to do alone."

These statements reflect emotional experiences that, in their extreme, may be indicators of potential problems. Although enjoying the excitement of gambling, or gambling to temporarily put aside the stresses of daily life, are probably widespread reasons for playing and do not in themselves mean that an individual has a gambling problem, adult studies have suggested that problem gamblers excessively crave "action" or seek complete numbness from reality. A further hypothesis is that engaging in gambling as a solitary rather than a social pursuit is also a potential risk factor for developing problems. The Texas survey of adult gambling confirmed that a high proportion of adult problem gamblers say they prefer to bet alone.

Problem and at-risk teen gamblers were more likely to answer affirmatively to each of the four problem indicators. The difference between problem gamblers and non-problem gamblers was particularly evident for the questions about gambling to escape: problem gamblers were at least five times as likely as non-problem gamblers to say they desired these experiences when gambling (Figure 10).

**Expectations of Success:** Problem gamblers appeared to be more convinced that gambling is lucrative: 47 percent of them agreed with the statement "I think I could make a lot of money playing games of chance like the lottery," as compared to 37 percent of at-risk teens and to only 18 percent of teens who were not problem gamblers.

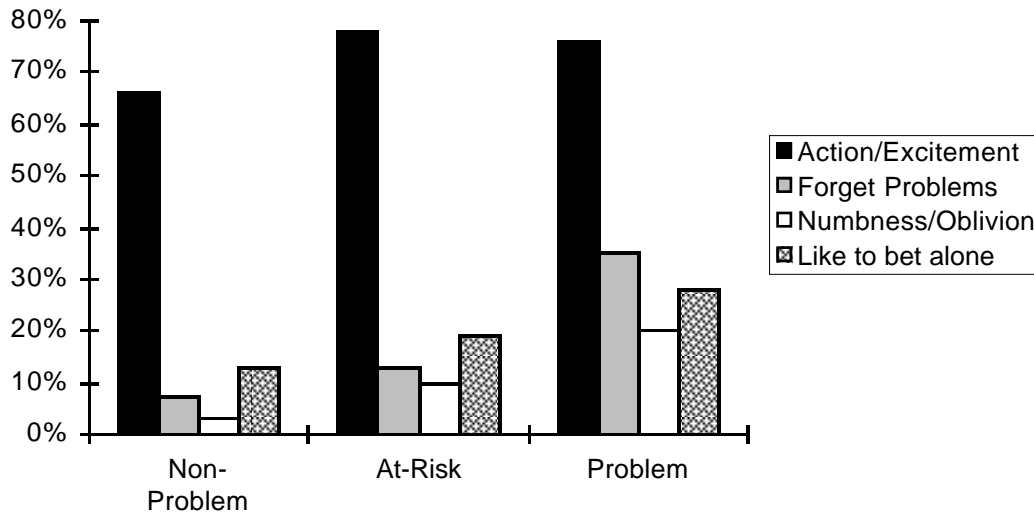
**Intensity of Gambling:** Not surprisingly, problem gamblers gambled more frequently, gambled on more

**TABLE 6 CORRELATES OF GAMBLING AMONG TEXAS TEENS: 1992**

	<b>Non-Problem Gamblers (N=582)</b>	<b>At-Risk Gamblers (N=100)</b>	<b>Problem Gamblers (N=34)</b>	
<b><u>Attitudes Towards Gambling</u></b>				
Don't think betting is harmful	50%	66%	54%	*
Lotteries serve useful purpose	70%	84%	83%	**
Wise to have age limit on lottery	79%	66%	57%	**
Teens should be able to bet	60%	79%	91%	**
Intend to buy lottery tickets	26%	37%	76%	**
Could make a lot of money betting	18%	37%	47%	**
<b><u>Feelings Associated With Gambling</u></b>				
Action/Excitement	66%	78%	76%	*
Forget problems	7%	13%	35%	**
Numbness/Oblivion	3%	10%	20%	**
Like to bet alone	13%	19%	28%	**
<b><u>Amount Spent on Gambling</u></b>				
\$1-\$49	80%	48%	14%	**
\$50-\$99	10%	13%	24%	
\$100-\$199	3%	17%	28%	
\$200 or more	2%	17%	34%	
Don't know/refused	5%	5%	0%	
<b><u>Parental Knowledge of Gambling</u></b>				
Parents know you gamble	70%	79%	67%	ns
If know: Know extent	84%	74%	47%	**
If know: Parents disapprove	16%	21%	35%	*
<b><u>Average Grades</u></b>				
A	41%	18%	24%	**
B	50%	62%	43%	
C or less	9%	19%	33%	
<b><u>General Deviance</u></b>				
Skipped school 4 or + days	8%	13%	36%	**
Sent to principal 4 or + days	3%	22%	31%	**
School called home 4 or + days	2%	3%	23%	**
Most/all friends feel close to parents	45%	43%	51%	ns
Most/all friends carry weapons	5%	5%	29%	**
Most/all friends belong to a gang	1%	3%	16%	**
Have committed illegal act	25%	35%	42%	**
Have been arrested	3%	10%	13%	**
Most/all friends care about grades	70%	66%	59%	ns
Most/all friends want to drop out	3%	3%	3%	ns
<b><u>Personal/Family Happiness</u></b>				
Somewhat/very unhappy past month	8%	8%	27%	**
Felt anxious most/all time past month	12%	10%	23%	+
Parents don't get along well (agree)	13%	13%	23%	ns
My family is very close (disagree)	12%	19%	22%	*

+ p&lt;=.10 \* p&lt;=.05 \*\* p&lt;=.01 ns = not significant at p&lt;=.10 or below

**FIG 10 PERCENT OF TEXAS TEENS CITING MOTIVATION FOR GAMBLING, BY GAMBLING CATEGORY: 1992**



activities, and spent more money on gambling than teens who did not have gambling problems. They also began their gambling careers earlier than other teens.

Weekly gambling on any activity placed a teen in the at-risk category. Some of those with additional gambling problems were further classified as problem gamblers. Problem gamblers were slightly more likely (90 percent) than at-risk gamblers (83 percent) to have gambled weekly. In contrast, only 18 percent of all past-year gamblers had gambled weekly.

On average, problem gamblers had bet on 5.4 different activities in their lifetimes, as compared to 4.1 activities for at-risk bettors and 2.0 for non-problem bettors. During the past year, problem gamblers had bet on an average of 4.6 activities, compared to 3.3 for at-risk and 1.3 for other gambling teens.

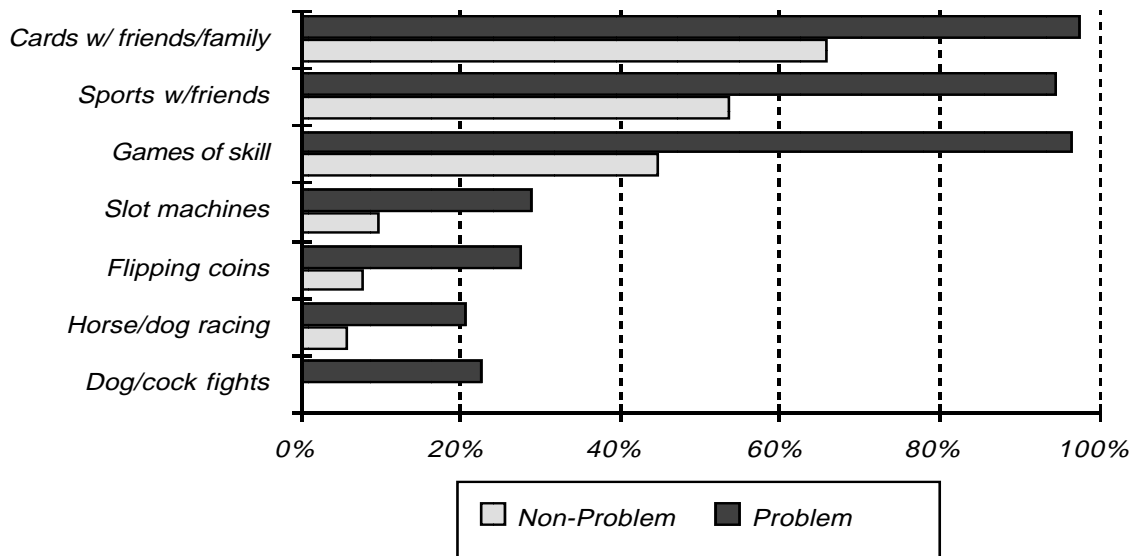
One-third of adolescent problem gamblers had spent \$200 or more on gambling during the past year, as compared to 17 percent of at-risk teens and 2 percent of non-problem gamblers (Table 6). Although borrowing for gambling purposes and spending more

than \$10 per month on gambling are symptoms used in the multifactor method to help define an at-risk or problem gambler, they only account for a small part of the definition and no respondent is classified as a problem gambler solely on the basis of the questions about borrowing or money spent.

Adult compulsive gamblers usually report having begun their gambling careers earlier than non-problem gamblers, so early onset can be a risk factor for developing problems later in life. Teen problem gamblers had made their first bet for money at the age of just under 10.5 years old, while at-risk teens had first bet at the age of 12.0 and non-problem teens at 12.5.

**Activities of Choice:** While teens were not asked which gambling activities they preferred, the past-year prevalence of gambling on various activities can be an indicator of activities of choice (within the confines of the types of activities most available). Figure 11 shows the past-year prevalence of gambling on different activities for problem and non-problem gamblers who had bet during the past year.

**FIG 11 PERCENT OF PROBLEM AND NON-PROBLEM PAST-YEAR GAMBLERS WHO BET ON DIFFERENT ACTIVITIES: 1992**



While a larger percentage of problem than non-problem gamblers had bet on each activity, the three most prevalent activities for both groups were cards/dice/board games with friends and family, sports with friends, and games of skill. In other words, teen problem gamblers do not necessarily gamble on different activities from non-problem gamblers, they just gamble on them more and experience more problems related to this betting. After those three activities, the next most prevalent activities for problem gamblers were slot machines and flipping coins, while those for non-problem gamblers were bingo and lottery games.

Although games of skill, sports with friends, and cards/dice/board games with friends and family were the most prevalent activities for both groups of gamblers, disproportionately more problem gamblers gambled on these activities than did non-problem gamblers. The problem gamblers' prevalence rate for these three activities was 30–50 percent higher than that of non-problem gamblers (these three activities

were found to be most closely associated with adolescent problem gambling in the Washington state study as well). Other activities with a large difference in prevalence rates between teen problem and non-problem gamblers in Texas were dog/cock fights (23 percent difference), flipping coins and slot machines (19-20 percent difference) and horse/greyhound races (15 percent difference). There was less than a 10 percent difference between the two groups of gamblers in the prevalence of betting on bingo, lotteries, casino games, or with a bookie.

**Behavior of Friends:** Gamblers might be expected to associate with others who are like them and to condone behavior which is similar to theirs. About 68 percent of problem gamblers, as compared to 15 percent of non-problem gamblers, said that most of their friends gambled. Teens were asked if any of their friends gambled “too much.” At-risk and problem gamblers were more likely than others to say that they had friends who gambled too much: 42 percent of problem gamblers and 23 percent of at-risk gam-

blers, as compared to 15 percent of teens without gambling problems, said they had such friends. Problem gamblers who acknowledged that they themselves had a gambling problem were especially likely to recognize problems in their friends, with 62 percent saying that they had friends who gambled too much.

About one-half of all teens who gambled, regardless of whether they had friends who gambled too much, thought that schools should have a program to help students with gambling problems. Non-problem gamblers more often than other gamblers thought that schools should have such a program.

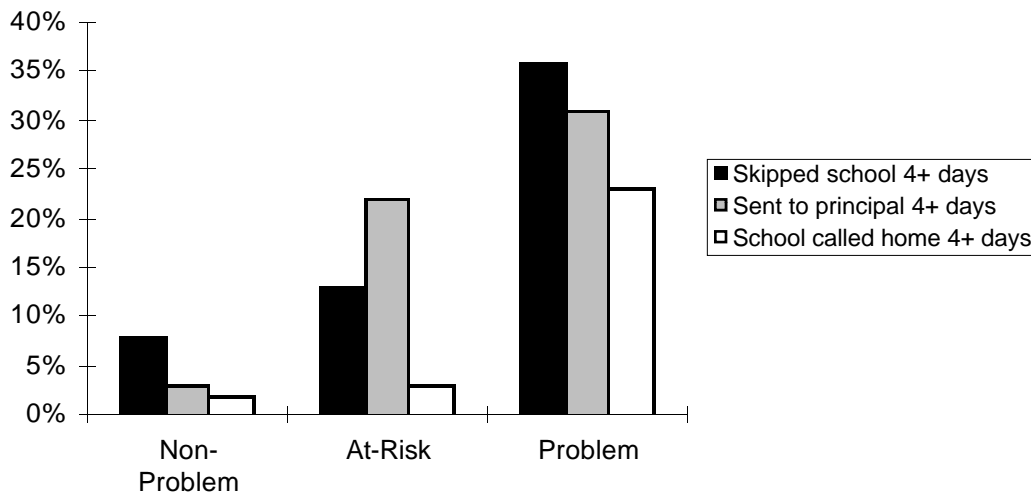
**Parental Knowledge of Teens' Gambling:** Teens who were problem gamblers were not significantly more or less likely to say that their parents knew that they gambled. Problem gamblers were, however, more likely to say that their parents did not know the extent of their gambling. They were also more likely

to say that their parents disapproved of their gambling (Table 6).

**School Performance:** At-risk or problem gamblers reported somewhat worse grades than other teens. About 33 percent of problem and 19 percent of at-risk teens reported that their average grades were Cs or less, as compared to about 9 percent of non-problem gamblers (Table 6). It is not known whether problem gambling leads to poor grades or whether poor students are more likely to become problem gamblers. Observations of adult compulsive gamblers have often found people of high intelligence with a history of good school performance, except where gambling entered the picture early and disrupted it (Custer, 1985).

**General Deviance:** Respondents were asked about their school attendance and behavior and about attitudes and behaviors of their friends. Information about friends can help describe the social context that

**FIG 12 PERCENT OF TEXAS TEENS WITH DELINQUENCY PROBLEMS, BY GAMBLING CATEGORY: 1992**



influences young people. It can also serve as a proxy for the behavior of the respondent, because people tend to be friendly with others who share their characteristics and behaviors, and find it less threatening to report others' behavior than their own.

At-risk and problem gamblers showed more signs of deviance than other teens (Figure 12). These signs included skipping school, being sent to the principal or having their home called because of their conduct, having friends who are involved with weapons or who are in gangs, having committed illegal acts and having been arrested. Having a gambling problem was not, on the other hand, associated with whether the respondents' friends cared about making good grades, wanted to drop out of school or felt close to their parents.

***Personal and Family Happiness:*** Problem gamblers also said more frequently than other gamblers that they had felt unhappy and anxious during the past month, and that their family was not close. There was no significant difference between problem gamblers and others in the percentage who said that their parents did not get along well (Table 6). Interestingly, though, teens who said that one or the other of their parents had a gambling problem were much more likely than teens whose parents did not have a gambling problem to say that their parents did not get along well.

## CHAPTER 6: SUBSTANCE USE AND GAMBLING

### Background

As part of the survey on gambling, teens were also asked about their use of alcohol and other drugs and about problems associated with this use. Individuals who have addictive problems in one area are generally at higher risk for problems in another area. Studies have found that about 15–20 percent of adults in treatment for substance abuse also have a gambling problem. Conversely, up to 50 percent of pathological gamblers in treatment may also have a substance abuse problem (Lesieur & Blume, 1991; Lesieur et al., 1986; Ramirez et al., 1984; Rosenthal & Lorenz, 1992).

Few studies have been done on comorbidity among adolescents. A study of young substance abusers (13–18 years old) in a therapeutic community found that 8 percent showed signs of pathological gambling (Lesieur & Heineman, 1988). Volberg (1993) found

that 22 percent of teen problem gamblers in Washington state had experienced alcohol-related problems, and 11 percent had experienced drug-related problems, compared to 1 percent of non-problem gamblers.

### Prevalence of Alcohol and Drug Use

The prevalence rates of alcohol and drug use reported in this survey are shown in Table 7. Slightly over one-half of all teens said that they had drunk alcohol in their lifetimes, and 30 percent of all teens had drunk alcohol as recently as the past month. Some 39 percent of all teens had smoked tobacco in their lives, and almost 20 percent had done so during the past month. Almost 6 percent of adolescents had ever used inhalants.

Marijuana was the most common illicit drug reported, with almost 11 percent of teens saying they

**TABLE 7 PREVALENCE AND RECENCY OF DRUG USE AMONG TEXAS TEENS: 1992**

	<u>Ever Used</u>	<u>Past Year**</u>	<u>Past Month</u>
Alcohol	56.5%	47.3%	30.0%
Tobacco	39.0%	26.7%	18.7%
Marijuana	10.6%	6.6%	3.6%
Inhalants	5.8%	2.9%	1.1%
Hallucinogens	4.1%	3.6%	0.9%
Uppers	2.4%	1.6%	0.8%
Downers	1.7%	1.1%	0.0%
Ecstasy	1.7%	1.2%	0.4%
Cocaine/Crack	1.5%	0.9%	0.6%
ANY ILLICIT DRUG *	13.2%	9.3%	4.9%

\*Marijuana, Hallucinogens, Uppers, Downers, Ecstasy, Cocaine/Crack.

\*\*Past year includes past month.

All percentages are weighted.



had ever used it in their lifetimes, and 4 percent within the past month. About 4 percent of adolescents had ever used hallucinogens, and about 2 percent each had used uppers, downers, Ecstasy and cocaine or crack. In all, 13 percent of all teens said that they had ever used an illicit drug (excluding inhalants). Lifetime and past year use of alcohol, tobacco and other drugs generally increased with age and grade in school.

The rates of substance use reported by teens in this survey are lower than those reported in the 1992 Texas School Survey of Substance Abuse: Grades 7–12 (Liu and Fredlund, 1993). There are several reasons that might explain the differences in reported rates found in the two surveys. The school survey was a self-administered fill-in type, while the gambling survey was done by telephone. It is possible that, despite assurances of confidentiality, respondents were more reluctant to admit to substance use over the telephone than when filling in a paper-and-pencil form. In addition, other persons, particularly parents, may have been within earshot during the telephone interview. Finally, the telephone survey focused on gambling and asked the substance questions later in the interview, while the school survey was primarily concerned with substance use. A focus on substance use in the school survey may have resulted in respondents being more open about their use. While the Texas School Survey represented in-school teens only and the gambling survey represented all teens, there were in actual fact few drop-outs among respondents to the gambling survey, so school attendance would not help explain the differences in reported substance use between the two samples. As a point of comparison, the substance use reported by adults in the adult gambling survey carried out at the same time

was also substantially lower than substance use reported in the 1993 survey of substance use in the general adult population (based on unpublished preliminary data gathered by TCADA).

### Problems Associated with Substance Use

Teens who had used alcohol or illicit drugs within the past year were also asked about any problems they may have had that were associated with their substance use. A small percentage of adolescents who had used alcohol in the past year indicated that they had gotten into difficulties with friends one or more times because of their drinking in the past year (8 percent), driven a car while intoxicated (13 percent), been criticized by a date because of their drinking (13 percent) or been in trouble with the police because of drinking (6 percent). Among adolescents who had used drugs other than alcohol within the past year, the reported incidence of problems was higher: 20 percent had gotten into trouble with their friends because of their drug use, 18 percent had driven under the influence of drugs, 17 percent had been criticized by a date because of their drug use, and 7 percent had been in trouble with the police because of their drug use. When looking at all teens, regardless of past year substance use, prevalence for these substance-related problems was between 1 and 6 percent.

Teens who had ever used alcohol or illicit drugs were asked if they had ever sought help, other than from family or friends, for problems in any way connected with their use of substances and if they had ever been in a treatment program or tried to get treatment. Among respondents who had ever used alcohol or illicit drugs, about 6 percent had ever sought help for substance-related problems, and about 2 percent had been in a treatment program.

About 10 percent of all teens said that at least one of their parents had experienced problems because of drinking or using drugs.

### Multiple Risky Behaviors

Adolescents often exhibit more than one risky behavior. Lesieur et al. (1985) write that “alcoholism and drug abuse and pathological gambling have commonalities. All involve states of arousal which heighten or depress one’s state of awareness.” Multiple problems are frequently seen among individuals in treatment for substance abuse or gambling problems.

A risky behavior was defined as any gambling or any use of alcohol or other drugs. While an individual may gamble or use substances without reporting associated problems, any gambling or any substance use may be a potential risk for young people, either from a health, psychological or legal point of view.

Only 16 percent of Texas teens reported none of the above-mentioned risky behaviors, whereas 52 percent had both gambled and used substances (alcohol or other drugs) in their lifetimes (Table 8). A substan-

tial proportion (14 percent) had engaged in all three behaviors (gambling, drinking, and using other drugs).

### Substance Use Among Teens Who Gamble

Table 9 shows the percentage of adolescents who have used alcohol or other drugs or who have had substance-related problems, according to their recency and frequency of gambling.

Among teens who had ever gambled, the more recently and frequently they gambled, the more likely they were to have also used tobacco, alcohol and other drugs and to have had problems related to their substance use. For instance, 34 percent of weekly gamblers—compared to 17 percent of past-year but not weekly gamblers and 9 percent of not-past-year gamblers—had ever used drugs other than alcohol. Similarly, 14 percent of weekly gamblers, compared to less than 5 percent of less frequent gamblers, reported drug-related problems.

Problem gamblers were the most likely to have used alcohol and other drugs, and to have had prob-

**TABLE 8 RISKY BEHAVIOR AMONG TEXAS TEENS (GAMBLING, DRINKING, AND DRUG USE): 1992**

None	15.8%
Single Behavior	31.8%
Gambling Only	26.8%
Alcohol Only	4.6%
Drugs Only	0.4%
Dual Behavior	38.2%
Gambling and Alcohol	37.0%
Gambling and Drugs	0.6%
Alcohol and Drugs	0.6%
Triple Behavior	14.2%

**TABLE 9 GAMBLING AND SUBSTANCE USE AMONG TEXAS TEENS WHO HAVE EVER GAMBLED, BY FREQUENCY OF GAMBLING: 1992**

	<b>Gambled, Not Past Year (N=119)</b>	<b>Gambled Past Year (N=487)</b>	<b>Gambled Weekly (N=110)</b>	
Tobacco Use	25%	46%	60%	**
Alcohol Use	38%	69%	78%	**
Drug Use				**
<i>None</i>	91%	83%	66%	
<i>1 - 2</i>	7%	14%	21%	
<i>3 or more</i>	2%	3%	13%	
In trouble due to alcohol	6%	14%	28%	**
In trouble due to drug use	1%	4%	14%	**

\*\*p<=.01

Tobacco and alcohol use = ever used in lifetime

Drug use = number of different drugs (of 7 asked about) used in lifetime

In trouble = answered "yes" to 1 or more of 4 questions about problems associated with alcohol/drug use (questions listed in Table 11).

lems related to their use. For instance, Table 10 shows that 50 percent of problem gamblers had ever used drugs in their lifetimes, as compared to 26 percent of at-risk gamblers and 15 percent of non-problem gamblers. Similarly, 24 percent of problem gamblers, as compared to less than 10 percent of other gamblers, had experienced problems related to their drug use.

After alcohol and tobacco, marijuana was the most popular drug among all gamblers who had ever used drugs, as it was among all drug-using teens regardless of gambling status. Hallucinogens were the only other drugs used within the past year by more than 20 percent of non-problem gamblers who had ever used drugs. At-risk and problem gamblers had used a wider variety of drugs in the past year, with at-risk teens favoring inhalants, hallucinogens and uppers and problem gamblers preferring downers, hallucinogens, and inhalants.

### Problems Associated with Substance Use and Gambling

Table 11 shows the percentage of substance-using gamblers who had experienced each substance-related problem one or more times.

A higher percentage of problem gamblers reported having most of the substance problems than non-problem gamblers. The only exception was that non-problem gamblers who had used drugs had gotten into difficulties with their friends over their drug use at about the same rate as problem gamblers did. At-risk teens reported some problems about as frequently as problem gamblers and some others about as infrequently as non-problem gamblers.

Although they were more likely to have had substance-related problems, problem gamblers were no more likely than other gamblers to have had treatment for substance problems.

**TABLE 10 GAMBLING AND SUBSTANCE USE AMONG TEXAS TEENS WHO GAMBLE, BY CATEGORY OF GAMBLING: 1992**

	<b>Non-Problem Gamblers (N=582)</b>	<b>At-Risk Gamblers (N=100)</b>	<b>Problem Gamblers (N=34)</b>	
Tobacco Use	42%	55%	64%	**
Alcohol Use	62%	72%	85%	**
Drug Use				**
None	85%	74%	50%	
1 - 2	12%	16%	35%	
3 or more	3%	10%	15%	
In trouble due to alcohol	12%	23%	39%	**
In trouble due to drug use	3%	8%	24%	**

\*\*p<=.01

Tobacco and alcohol use = ever used in lifetime

Drug use = number of different drugs (of 7 asked about) used in lifetime

In trouble = answered "yes" to 1 or more of 4 questions about problems associated with alcohol/drug use (questions listed in Table 11).

**TABLE 11 SUBSTANCE PROBLEMS REPORTED BY TEXAS TEENS (ONE OR MORE TIMES): 1992**

	<b>Non-Problem Gamblers</b>	<b>At-Risk Gamblers</b>	<b>Problem Gamblers</b>	
<b><u>Among teens who had drunk alcohol</u></b>				
Difficulties with friends re alcohol use	6%	9%	20%	*
Driven while under influence of alcohol	11%	19%	21%	+
Criticized by date for alcohol use	12%	9%	31%	**
Trouble with police re alcohol use	4%	12%	18%	**
<b><u>Among teens who had used drugs</u></b>				
Difficulties with friends re drug use	23%	7%	25%	
Driven while under influence of drugs	7%	35%	36%	**
Criticized by date for drug use	16%	0%	40%	**
Trouble with police re drug use	6%	4%	18%	

\*\*p<=.01    \*p<=.05    +p<=0.10

Parents' substance abuse had a substantial effect on a teen's own behavior: if a teen's parent had a substance problem, the teen was about 2.5 times more likely to have a substance problem him- or herself (and four times as likely to be a problem gambler) than teens whose parents did not have a problem. However, if a parent had a gambling problem, the teen was no more likely than other teens to have either a substance or a gambling problem him- or herself.

## CHAPTER 7: COMPARISONS BETWEEN ADOLESCENT AND ADULT GAMBLERS

The TCADA survey of adult gambling behavior was carried out at the same time as the adolescent survey (Wallisch, 1993). Although the questions asked were not always strictly comparable, adolescents and adults can be compared on several dimensions of gambling.

### Prevalence of Different Gambling Activities

Table 12 (and Figure 4) show the percentage of adolescents and of adults under 30 and over 30 who have ever gambled on various activities.

The percentage of adolescents, younger adults and older adults who have ever gambled on any activity is almost identical (79 percent among adolescents, 78 percent among adults younger than 30 and 75 percent among older adults). On most of the specific activities that were asked comparably in both surveys, a higher percentage of adults than adolescents had gambled. Adolescents had gambled more than adults, however, on games of skill, and they had gambled about as much as the younger adults on sports events with friends. In addition, a large percentage of adolescents had gambled on cards/dice/board games with family and friends, which was a category not asked about in the adult survey.

Among the activities that were asked comparably on the two surveys, the most prevalent for adolescents, younger and older adults alike was gambling on sports or other events with friends or co-workers. For adolescents, the second most prevalent activity was playing and gambling on games of skill. For young adults, the second most prevalent activities were bingo and instant lotteries. For older adults, gambling on slot machines was equally as prevalent

as gambling on sports, and the second most prevalent activities were bingo and horse/greyhound racing.

The propensity of adolescents, younger adults, and older adults to gamble on different activities probably reflects as much the availability of each activity and amount of disposable income as well as legitimately different gambling preferences.

### Problem Gambling

The adult survey used the SOGS for assessing problem gambling, while the adolescent survey used a multifactor method. However, a SOGS score for adolescents can also be derived for stricter comparison with the adults. Using the SOGS, it was estimated that 1.3 percent of Texas adults were lifetime probable pathological gamblers and another 3.5 percent were lifetime problem gamblers. Using the SOGS, 3.7 percent of adolescents would be classified as probable pathological gamblers and another 8.7 percent as lifetime problem gamblers.

**Gender, Region, and Race/Ethnicity:** Table 13 compares the gender, region of residence, and race/ethnicity of adult and adolescent problem or pathological gamblers. For this comparison, both adult and adolescent problem and pathological gamblers are defined using the SOGS (problem and pathological gamblers are combined). Adolescents who have gambling problems are more likely than adults to be male and more likely to be Hispanic. They are more likely to live in the Plains region of the state, and less likely to live in Dallas/Fort Worth or Houston.

**Gambling as a Social Activity:** As Table 14 shows, adolescents are more likely than adults to have friends

**TABLE 12 PERCENT WHO HAVE EVER GAMBLED ON DIFFERENT ACTIVITIES, TEXAS TEENS AND ADULTS: 1992**

	<b>Teens</b> (N=924)	<b>Adults &lt; 30</b> (N=1458)	<b>Adults 30 +</b> (N=4749)
Instant Lottery	17%	33%	29%
Video Lottery	4%	10%	8%
Casinos or card parlors	3%	22%	28%
Slot Machines	17%	22%	36%
Bingo	23%	33%	33%
Horse/greyhound racing	10%	25%	33%
Games of skill	41%	29%	17%
Sports with friends	49%	47%	37%
Dog/cock fights	2%	3%	3%
Sports through bookie	1%	4%	4%
Any gambling activity	79%	78%	75%

Adult sample was weighted to have same gender and ethnic distribution as adolescents.

Some of the activities asked about were worded slightly differently for adults and adolescents:

Casinos: Adults—Gambled on either "Cards or dice games at a casino" or "Card or dice games, mah-jongg or dominoes, but not at casino and not with close friends" (i.e., at a card parlor).

Adolescents—Gambled at "Commercial card parlors or betting establishments, including casinos or riverboats"

Slot machines: Adults—"Slot machines or video poker machines at a casino"

Adolescents—"Slot machines or video poker or other gambling machines"

Sports with friends: Adults—"Outcome of sports or some other event with friends or coworkers"

Adolescents—"Outcome of sports events among school or work friends, without using a bookie"

Sports through bookie: Adults—"Sports with a bookie"

Adolescents—"Bet with a bookie or bookmaker"

who themselves gamble. Among individuals who think they have a gambling problem, adolescents are less likely than adults to prefer betting alone. This suggests that gambling may be more of a way of socializing for adolescents than for adults.

**Substance Use and Gambling:** With both adolescents and adults, problem gamblers were more likely than other gamblers to have used drugs in the past year. However, adult problem gamblers were equally as likely as other adults to have used alcohol in the past year, while among adolescents, problem gamblers were more likely than other teens to have drunk

alcohol. For adults and adolescents alike, problem gamblers were more likely than non-problem gamblers to report substance-related problems.

**TABLE 13 CHARACTERISTICS OF TEEN AND ADULT PROBLEM/PATHOLOGICAL GAMBLERS: 1992**

<u>Gender</u>	<u>Teens</u>	<u>Adults</u>
Male	74%	62%
Female	26%	38%
<b><u>Race/Ethnicity</u></b>		
White	28%	46%
Black	25%	21%
Hispanic	45%	30%
Other	2%	3%
<b><u>Region</u></b>		
Plains	26%	8%
Border	11%	8%
Dallas/Fort Worth	15%	26%
East	9%	6%
Houston	19%	30%
Central	5%	10%
San Antonio	10%	9%
Corpus Christi	5%	3%

**TABLE 14 GAMBLING AS A SOCIAL ACTIVITY, TEXAS TEENS AND ADULTS: 1992**

<b>How many of your friends bet money?</b>	<u>Teens</u>	<u>Adults</u>
None	9%	55%
Some	68%	36%
Most	22%	8%
<b>Betting money is something I usually like to do alone*</b>	26%	44%

\*This question was only asked of gamblers who thought they might have a problem with gambling.



## CHAPTER 8: CONCLUSION & TREATMENT ESTIMATES

More than three-fourths of all Texas teens have gambled in their lifetimes. Most people who gamble do so for entertainment or to socialize; however, a small percentage experience problems related to their gambling. The percentage of serious problem or pathological gamblers is higher for teens (4 to 5 percent, depending on the method used) than for adults (about 1 percent). Another 9 to 12 percent of teens are at risk of developing serious gambling problems, compared to about 3.5 percent of adults.

What might explain the higher rate of problem gambling among adolescents? The teens are years of experimentation and risk-taking. While some youth who experiment with substances or gambling will go on to become substance abusers or problem gamblers, most will probably grow out of their risky behavior. Yet adult pathological gamblers, as do adult substance abusers, generally report an early age of onset of the behavior which eventually becomes an addiction with them. Since it is not known which individual or social factors may protect adolescents with problems from carrying these over into adulthood, it is wisest to consider all teens who currently exhibit problem behavior to be at risk for having continued problems if no intervention occurs.

Teens may be more vulnerable to developing problems from risky behavior because they have not yet learned certain adult skills. Furthermore, many forms of gambling are illegal for youth under 18 years old, so participation in them is problematic if only because it is against the law.

The impact of new gambling opportunities such as state-run lotteries on the prevalence of overall gambling and, particularly, of problem gambling among teens and adults is not known. By establishing this baseline measure of gambling prevalence before the introduction of a state lottery, TCADA hopes to assess the Lottery's impact in a follow-up study scheduled for 1995.

While the public's awareness of substance use among teenagers has increased, gambling and problem gambling among teenagers has received little attention. In light of the relatively high rates of at-risk and problem gambling found among adolescents, prevention, education and treatment efforts are needed. The following recommendations are offered:

- School-sponsored education programs should include discussion of risks associated with gambling, and counseling should be available for students experiencing gambling problems, as part of education and counseling for other risky behaviors such as alcohol and drug use.
- Intake assessments in addiction treatment centers, juvenile justice institutions and correctional facilities should include screening for gambling-related problems.
- Gambling-specific education, prevention and treatment elements should be included in programs that currently serve adolescents for substance abuse.
- Information about gambling problems and where to seek help should be disseminated. TCADA has established a 24-hour toll-free HelpLine that pro-

vides crisis intervention, counseling and treatment referral. The number is 1-800-742-0443.

- Efforts should be made to minimize the attraction, availability and accessibility of gambling products and services to adolescents.

### Treatment Estimates

This study estimates that currently 5 percent of Texas teens (ages 14–17, pop. 1,001,978 ) have serious gambling problems. Among them, about 29 percent acknowledge that they have ever had a problem with betting money or gambling. A high-end estimate of treatment demand for adolescents assumes that 29 percent of teens who have a gambling problem would seek treatment if it were available, resulting in an estimated 1.4 percent of Texas teens who would enter treatment for gambling problems if it were available. A low-end estimate uses the treatment demand finding from the previous adult survey in which 8 percent said they would seek treatment if they needed it, and yields an estimation of 0.4 percent of Texas teens in need of treatment. It is not known what percentage of these teens would be eligible for publicly funded treatment programs, such as those funded by TCADA. Even if they have private medical insurance, most coverage does not currently include treatment for compulsive gambling, so a large proportion of people in need of gambling treatment would probably seek some form of public assistance for it. Assuming that about 30 percent<sup>1</sup> of teens who would seek treatment for a gambling problem would be eligible for public

programs, between 0.1 and 0.4 percent of Texas teens aged 14-17, or between 1,000 and 4,500 youth, would be appropriately served in publicly funded gambling treatment programs.

In addition, there are 117,000 teens at risk of developing serious gambling problems who should be the special target of prevention and education programs.

The significant incidence of multiple problem behavior also needs to be addressed. Table 15 shows the percentage of teens who reported gambling and/or substance problems in this survey.<sup>2</sup> About one-fifth of all Texas teens had a problem with gambling, alcohol, and/or other drugs individually. About 6 percent had dual or triple problems. These problems may be concurrent or sequential, but problems in one area place the teen at higher risk for having or developing problems in another. Information about the relationship between gambling and other risky behaviors should be made available to health practitioners, mental health counselors, substance abuse treatment professionals, school counselors, family therapists and juvenile justice system personnel.

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<sup>1</sup> This figure is estimated from the fact that, among adult pathological gamblers, 30 percent had household incomes of less than \$20,000; that 34 percent of substance abusers in Texas do not have medical insurance; and that a large proportion of problem gamblers come from minority groups which are less likely to have high incomes or medical insurance.

<sup>2</sup> Gambling problems were defined as being classified as at-risk or problem gamblers by the multifactor method, while alcohol and drug problems were defined as having reported one or more problems associated with use of alcohol or drugs.

**TABLE 15 LIFETIME GAMBLING, ALCOHOL,  
AND DRUG PROBLEMS, TEXAS TEENS: 1992**

None	74.3%
Single Problem	19.6%
Gambling Only	11.7%
Alcohol Only	7.0%
Drugs Only	0.9%
Dual Problem	4.4%
Gambling and Alcohol	2.9%
Gambling and Drugs	0.4%
Alcohol and Drugs	1.1%
Triple Problem	1.7%

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# APPENDIX A: PREVALENCE TABLES

**TABLE A1 PREVALENCE AND REGENCY OF GAMBLING BY AGE GROUP  
ALL YOUTH - SPRING 1992**

	Ever Bet On	Past Year Regularly	Past Year Not regularly	Not Past Year	Never Bet On
<b>INSTANT LOTTERY</b>	16.9%	**	8.6%	8.0%	83.1%
Youth age 14	15.6%	**	9.5%	5.8%	84.4%
Youth age 15	17.4%	**	6.6%	10.8%	82.6%
Youth age 16	18.5%	**	8.2%	10.1%	81.5%
Youth age 17	16.1%	0.6%	10.2%	5.2%	83.9%
<b>VIDEO LOTTERY</b>	3.5%	**	2.3%	1.1%	96.5%
Youth age 14	2.7%	**	0.9%	1.5%	97.3%
Youth age 15	2.2%	**	1.1%	1.0%	97.8%
Youth age 16	5.3%	**	4.6%	0.6%	94.7%
Youth age 17	4.1%	**	2.6%	1.5%	95.9%
<b>CARDS/DICE W FAM/FRDS</b>	58.7%	6.5%	41.0%	11.2%	41.3%
Youth age 14	55.8%	5.4%	36.3%	14.0%	44.2%
Youth age 15	61.6%	2.9%	45.9%	12.8%	38.4%
Youth age 16	61.3%	9.6%	44.4%	7.2%	38.7%
Youth age 17	56.2%	8.1%	37.3%	10.8%	43.8%
<b>CASINOS/CARD PARLORS</b>	2.9%	**	1.4%	1.5%	97.1%
Youth age 14	2.2%	**	1.6%	0.6%	97.8%
Youth age 15	0.9%	**	**	0.9%	99.1%
Youth age 16	3.3%	**	0.9%	2.3%	96.7%
Youth age 17	5.3%	**	3.2%	2.1%	94.7%
<b>SLOTS/VIDEOPOKER</b>	17.1%	**	7.9%	9.0%	82.9%
Youth age 14	15.5%	0.9%	6.8%	7.9%	84.5%
Youth age 15	13.0%	**	7.2%	5.8%	87.0%
Youth age 16	20.0%	**	6.9%	13.1%	80.0%
Youth age 17	19.8%	**	10.6%	9.2%	80.2%
<b>SPORTS W FRIENDS</b>	49.1%	5.1%	34.8%	9.2%	50.9%
Youth age 14	45.0%	4.2%	31.0%	9.7%	55.0%
Youth age 15	49.1%	4.0%	33.7%	11.4%	50.9%
Youth age 16	49.1%	6.8%	36.7%	5.5%	50.9%
Youth age 17	53.1%	5.3%	37.4%	10.3%	46.9%
<b>BINGO</b>	22.9%	1.1%	10.4%	11.4%	77.1%
Youth age 14	20.8%	1.8%	9.4%	9.7%	79.2%
Youth age 15	19.3%	1.8%	9.2%	8.3%	80.7%
Youth age 16	21.3%	**	10.1%	10.9%	78.7%
Youth age 17	30.1%	0.7%	12.9%	16.5%	69.9%
<b>HORSE/DOG RACING</b>	9.7%	**	5.3%	4.1%	90.3%
Youth age 14	8.5%	0.9%	4.1%	3.6%	91.5%
Youth age 15	9.3%	**	6.6%	2.4%	90.7%
Youth age 16	13.2%	**	4.8%	8.4%	86.8%
Youth age 17	7.6%	**	5.5%	2.1%	92.4%

**TABLE A1 PREVALENCE AND REGENCY (CONT'D)**

	Ever Bet On	Past Year Regularly	Past Year Not regularly	Not Past Year	Never Bet On
<b>GAMES OF SKILL</b>	41.4%	7.3%	27.2%	6.8%	58.6%
Youth age 14	37.1%	5.4%	22.3%	9.4%	62.9%
Youth age 15	41.3%	4.2%	26.9%	10.3%	58.7%
Youth age 16	46.2%	13.0%	27.9%	5.2%	53.8%
Youth age 17	40.7%	6.6%	31.7%	2.5%	59.3%
<b>DOG/COCK FIGHTS</b>	2.4%	**	1.1%	0.9%	97.6%
Youth age 14	1.7%	**	**	1.4%	98.3%
Youth age 15	**	**	**	**	99.9%
Youth age 16	4.8%	**	4.0%	0.8%	95.2%
Youth age 17	3.0%	1.6%	**	1.3%	97.0%
<b>BOOKIE</b>	1.1%	**	0.9%	**	98.9%
Youth age 14	**	**	**	**	99.7%
Youth age 15	1.0%	**	0.6%	**	99.0%
Youth age 16	0.6%	**	0.6%	**	99.4%
Youth age 17	2.5%	**	2.2%	**	97.5%
<b>FLIPPING COINS</b>	12.4%	1.5%	6.7%	4.2%	87.6%
Youth age 14	9.9%	3.1%	3.9%	3.0%	90.1%
Youth age 15	12.0%	1.0%	7.0%	4.1%	88.0%
Youth age 16	18.4%	1.4%	8.8%	8.2%	81.6%
Youth age 17	9.2%	0.6%	6.9%	1.7%	90.8%
<b>OTHER</b>	4.5%	**	2.8%	1.5%	95.5%
Youth age 14	7.2%	0.8%	4.7%	1.7%	92.8%
Youth age 15	4.1%	**	3.2%	0.9%	95.9%
Youth age 16	2.0%	**	1.3%	**	98.0%
Youth age 17	4.8%	**	1.9%	2.9%	95.2%
<b>ANY ACTIVITY</b>	78.6%	14.2%	51.3%	13.0%	21.4%
Youth age 14	75.0%	12.2%	47.4%	15.4%	25.0%
Youth age 15	79.9%	10.2%	57.5%	12.2%	20.1%
Youth age 16	81.5%	17.7%	50.6%	13.2%	18.5%
Youth age 17	77.8%	16.8%	49.8%	11.2%	22.2%

\*\* Less than 0.5%

Sample size: age 14 (n=267), age 15 (n=208), age 16 (n=194), age 17 (n=255); Total (n=924)

Results have been standardized to sex, age and race/ethnic distributions in the general population.

Percentages are weighted; sample totals are not.

Maximum 95% confidence interval for all youth  $\pm 4.1\%$

Maximum 95% confidence interval for age 14  $\pm 7.1\%$

Maximum 95% confidence interval for age 15  $\pm 8.4\%$

Maximum 95% confidence interval for age 16  $\pm 8.7\%$

Maximum 95% confidence interval for age 17  $\pm 7.8\%$

**TABLE A2 PREVALENCE AND REGENCY OF GAMBLING BY GENDER  
ALL YOUTH - SPRING 1992**

	Ever Bet On	Past Year Regularly	Past Year Not regularly	Not Past Year	Never Bet On
<b>INSTANT LOTTERY</b>	16.9%	**	8.6%	8.0%	83.1%
Males	18.0%	0.5%	8.6%	8.8%	82.0%
Females	15.8%	**	8.6%	7.2%	84.2%
<b>VIDEO LOTTERY</b>	3.5%	**	2.3%	1.1%	96.5%
Males	5.4%	**	3.2%	2.1%	94.6%
Females	1.6%	**	1.3%	**	98.4%
<b>CARDS/DICE W FAM/FRDS</b>	58.7%	6.5%	41.0%	11.2%	41.3%
Males	69.3%	11.2%	49.4%	8.6%	30.7%
Females	47.5%	1.5%	32.1%	14.0%	52.5%
<b>CASINOS/CARD PARLORS</b>	2.9%	**	1.4%	1.5%	97.1%
Males	2.9%	**	1.6%	1.3%	97.1%
Females	3.0%	**	1.3%	1.7%	97.0%
<b>SLOTS/VIDEOPOKER</b>	17.1%	**	7.9%	9.0%	82.9%
Males	17.9%	**	9.7%	7.8%	82.1%
Females	16.2%	**	6.0%	10.3%	83.8%
<b>SPORTS W FRIENDS</b>	49.1%	5.1%	34.8%	9.2%	50.9%
Males	64.7%	9.4%	43.0%	12.3%	35.3%
Females	32.6%	0.6%	26.0%	6.0%	67.4%
<b>BINGO</b>	22.9%	1.1%	10.4%	11.4%	77.1%
Males	21.6%	1.3%	9.4%	10.9%	78.4%
Females	24.3%	0.9%	11.5%	11.9%	75.7%
<b>HORSE/DOG RACING</b>	9.7%	**	5.3%	4.1%	90.3%
Males	11.1%	0.6%	6.4%	4.1%	88.9%
Females	8.1%	**	4.0%	4.1%	91.9%
<b>GAMES OF SKILL</b>	41.4%	7.3%	27.2%	6.8%	58.6%
Males	54.0%	11.0%	35.9%	7.1%	46.0%
Females	28.0%	3.4%	18.1%	6.5%	72.0%
<b>DOG/COCK FIGHTS</b>	2.4%	**	1.1%	0.9%	97.6%
Males	4.1%	0.7%	2.1%	1.4%	95.9%
Females	0.6%	**	**	**	99.4%
<b>BOOKIE</b>	1.1%	**	0.9%	**	98.9%
Males	2.0%	**	1.7%	**	98.0%
Females	**	**	**	**	99.9%
<b>FLIPPING COINS</b>	12.4%	1.5%	6.7%	4.2%	87.6%
Males	17.4%	2.0%	10.0%	5.4%	82.6%
Females	7.1%	1.0%	3.1%	3.0%	92.9%
<b>OTHER</b>	4.5%	**	2.8%	1.5%	95.5%
Males	5.2%	**	3.2%	1.7%	94.8%
Females	3.8%	**	2.4%	1.3%	96.2%
<b>ANY ACTIVITY</b>	78.6%	14.2%	51.3%	13.0%	21.4%
Males	86.1%	22.5%	55.4%	8.2%	13.9%
Females	78.6%	14.2%	51.3%	13.0%	21.4%

\*\* Less than 0.5%

Sample size: males (n=494), females (n=430); Total=924

Results have been standardized to sex, age and race/ethnic distributions in the general population.

Percentages are weighted; sample totals are not.

Maximum 95 % confidence interval for males and females  $\pm 5.8\%$

**TABLE A3 PREVALENCE AND REGENCY OF GAMBLING BY RACE/ETHNICITY  
ALL YOUTH - SPRING 1992**

	Ever Bet On	Past Year Regularly	Past Year Not regularly	Not Past Year	Never Bet On
<b>INSTANT LOTTERY</b>	16.9%	**	8.6%	8.0%	83.1%
White	19.7%	**	10.9%	8.7%	80.3%
Black	9.1%	1.1%	6.2%	1.8%	90.9%
Hispanic	15.8%	**	6.2%	9.6%	84.2%
Other	17.4%	2.2%	7.5%	7.7%	82.6%
<b>VIDEO LOTTERY</b>	3.5%	**	2.3%	1.1%	96.5%
White	2.9%	**	1.3%	1.4%	97.1%
Black	3.8%	**	2.7%	1.1%	96.2%
Hispanic	4.6%	**	3.7%	0.8%	95.4%
Other	2.1%	1.1%	**	1.0%	97.9%
<b>CARDS/DICE W FAM/FRDS</b>	58.7%	6.5%	41.0%	11.2%	41.3%
White	55.4%	3.7%	40.2%	11.5%	44.6%
Black	54.9%	7.6%	33.8%	13.6%	45.1%
Hispanic	65.8%	9.9%	45.9%	10.0%	34.2%
Other	51.3%	12.4%	29.6%	9.3%	48.7%
<b>CASINOS/CARD PARLORS</b>	2.9%	**	1.4%	1.5%	97.1%
White	4.4%	**	2.3%	2.1%	95.6%
Black	3.9%	**	1.7%	2.3%	96.1%
Hispanic	**	**	**	**	100.0%
Other	7.8%	**	3.0%	4.8%	92.2%
<b>SLOTS/VIDEOPOKER</b>	17.1%	**	7.9%	9.0%	82.9%
White	19.1%	**	8.6%	10.4%	80.9%
Black	13.2%	**	6.9%	6.4%	86.8%
Hispanic	16.0%	**	7.6%	8.0%	84.0%
Other	10.7%	**	2.9%	7.8%	89.3%
<b>SPORTS W FRIENDS</b>	49.1%	5.1%	34.8%	9.2%	50.9%
White	48.2%	2.6%	37.6%	8.0%	51.8%
Black	51.6%	5.2%	34.0%	12.5%	48.4%
Hispanic	49.8%	8.6%	31.6%	9.6%	50.2%
Other	43.0%	8.7%	24.1%	10.1%	57.0%
<b>BINGO</b>	22.9%	1.1%	10.4%	11.4%	77.1%
White	17.6%	**	8.8%	8.5%	82.4%
Black	22.0%	**	9.4%	12.6%	78.0%
Hispanic	31.6%	2.7%	13.4%	15.5%	68.4%
Other	16.5%	2.2%	8.1%	6.2%	83.5%
<b>HORSE/DOG RACING</b>	9.7%	**	5.3%	4.1%	90.3%
White	9.4%	**	4.8%	4.3%	90.6%
Black	6.1%	**	3.9%	2.1%	93.9%
Hispanic	11.6%	**	6.6%	4.6%	88.4%
Other	8.3%	**	4.2%	4.1%	91.7%



**TABLE A3 PREVALENCE AND REGENCY (CONT'D)**

	Ever Bet On	Past Year Regularly	Past Year Not regularly	Not Past Year	Never Bet On
<b>GAMES OF SKILL</b>	41.4%	7.3%	27.2%	6.8%	58.6%
White	37.7%	4.1%	26.4%	7.2%	62.3%
Black	48.8%	9.6%	30.2%	9.0%	51.2%
Hispanic	44.4%	11.2%	27.5%	5.6%	55.6%
Other	33.2%	6.3%	23.5%	3.3%	66.8%
<b>DOG/COCK FIGHTS</b>	2.4%	**	1.1%	0.9%	97.6%
White	**	**	**	**	99.6%
Black	**	**	**	**	100.0%
Hispanic	6.4%	1.0%	3.0%	2.5%	93.6%
Other	1.5%	**	**	1.5%	98.5%
<b>BOOKIE</b>	1.1%	**	0.9%	**	98.9%
White	1.5%	**	1.1%	**	98.5%
Black	**	**	**	**	100.0%
Hispanic	1.0%	**	1.0%	**	99.0%
Other	**	**	**	**	100.0%
<b>FLIPPING COINS</b>	12.4%	1.5%	6.7%	4.2%	87.6%
White	12.3%	1.2%	7.2%	3.9%	87.7%
Black	20.2%	3.0%	8.8%	8.4%	79.8%
Hispanic	9.8%	1.3%	5.2%	3.2%	90.2%
Other	7.9%	2.2%	3.8%	1.8%	92.1%
<b>OTHER</b>	4.5%	**	2.8%	1.5%	95.5%
White	3.8%	**	1.8%	1.6%	96.2%
Black	2.2%	0.7%	0.7%	0.7%	97.8%
Hispanic	6.8%	**	5.2%	1.5%	93.2%
Other	2.3%	0.8%	**	1.5%	97.7%
<b>ANY ACTIVITY</b>	78.6%	14.2%	51.3%	13.0%	21.4%
White	75.7%	8.8%	54.7%	12.1%	24.3%
Black	83.7%	14.7%	48.0%	21.0%	16.3%
Hispanic	81.3%	21.9%	48.6%	10.8%	18.7%
Other	72.1%	17.3%	38.5%	16.3%	27.9%

\*\* Less than 0.5%

Sample size: white (n=624), black (n=63), Hispanic (n=157), other (n=80); Total (n=924)

Results have been standardized to sex, age and race/ethnic distributions in the general population.

Percentages are weighted; sample totals are not.

Maximum 95 % confidence interval for whites  $\pm 4.2\%$

Maximum 95 % confidence interval for blacks  $\pm 14.9\%$

Maximum 95 % confidence interval for Hispanics  $\pm 8.7\%$

Maximum 95 % confidence interval for other  $\pm 15.9\%$

# APPENDIX B: TEXAS SURVEY REGION INFORMATION

## REGION 1—PLAINS

ANDREWS	COMANCHE	GARZA	KIMBLE	NOLAN	STONEWALL
ARCHER	CONCHO	GLASSCOCK	KING	OCHILTREE	SUTTON
ARMSTRONG	COTTLE	GRAY	KNOX	OLDHAM	SWISHER
BAILEY	CRANE	HALE	LAMB	PARMER	TAYLOR
BAYLOR	CROCKETT	HALL	LIPSCOMB	PECOS	TERRELL
BORDEN	CROSBY	HANSFORD	LOVING	POTTER	TERRY
BRISCOE	DALLAM	HARDEMAN	LUBBOCK	RANDALL	THROCKMORTON
BROWN	DAWSON	HARTLEY	LYNN	REAGAN	TOM GREEN
CALLAHAN	DEAF SMITH	HASKELL	MC CULLOCH	REEVES	UPTON
CARSON	DICKENS	HEMPHILL	MARTIN	ROBERTS	WARD
CASTRO	DONLEY	HOCKLEY	MASON	RUNNELS	WHEELER
CHILDRESS	EASTLAND	HOWARD	MENARD	SCHLEICHER	WICHITA
CLAY	ECTOR	HUTCHINSON	MIDLAND	SCURRY	WILBARGER
COCHRAN	FISHER	IRION	MITCHELL	SHACKELFORD	WINKLER
COKE	FLOYD	JACK	MONTAGUE	SHERMAN	YOAKUM
COLEMAN	FOARD	JONES	MOORE	STEPHENS	YOUNG
COLLINGSWORTH	GAINES	KENT	MOTLEY	STERLING	

## REGION 2—BORDER

BREWSTER	JEFF DAVIS	UVALDE
CAMERON	JIM HOGG	VAL VERDE
CULBERSON	KINNEY	WEBB
DIMMIT	LA SALLE	WILLACY
EDWARDS	MAVERICK	ZAPATA
EL PASO	PRESIDIO	ZAVALA
HIDALGO	REAL	
HUDSPETH	STARR	

## REGION 3—DALLAS/FORT WORTH

COLLIN	HOOD	SOMERVELL
COOKE	HUNT	TARRANT
DALLAS	JOHNSON	WISE
DENTON	KAUFMAN	
ELLIS	NAVARRO	
ERATH	PALO PINTO	
FANNIN	PARKER	
GRAYSON	ROCKWALL	

## REGION 4—EAST

ANDERSON	HOUSTON	TRINITY
ANGELINA	JASPER	TYLER
BOWIE	LAMAR	UPSHUR
CAMP	MARION	VAN ZANDT
CASS	MORRIS	WOOD
CHEROKEE	NACOGDOCHES	NEWTON
DELTA	SABINE	PANOLA
FRANKLIN	SAN AUGUSTINE	POLK
GREGG	SAN JACINTO	RAINS
HARRISON	SHELBY	RED RIVER
HENDERSON	SMITH	RUSK
HOPKINS	TITUS	

## REGION 5—HOUSTON

AUSTIN	HARDIN	ORANGE
BRAZORIA	HARRIS	WALKER
CHAMBERS	JEFFERSON	WALLER
COLORADO	LIBERTY	WHARTON
FORT BEND	MATAGORDA	
GALVESTON	MONTGOMERY	

## REGION 7—SAN ANTONIO

ATASCOSA	FRIO	KENDALL
BANDERA	GILLESPIE	KERR
BEXAR	GUADALUPE	MEDINA
COMAL	KARNES	WILSON

## REGION 6—CENTRAL

BASTROP	FAYETTE	LLANO
BELL	FREESTONE	MC LENNAN
BLANCO	GRIMES	MADISON
BOSQUE	HAMILTON	MILAM
BRAZOS	HAYS	MILLS
BURLESON	HILL	ROBERTSON
BURNET	LAMPASAS	SAN SABA
CALDWELL	LEE	TRAVIS
CORYELL	LEON	WASHINGTON
FALLS	LIMESTONE	WILLIAMSON

## REGION 8—CORPUS CHRISTI

ARANSAS	GONZALES	MC MULLEN
BEE	JACKSON	NUECES
BROOKS	JIM WELLS	REFUGIO
CALHOUN	KENEDY	SAN PATRICIO
DE WITT	KLEBERG	VICTORIA
DUVAL	LAVACA	
GOLIAD	LIVE OAK	

## APPENDIX C: DEVELOPMENT OF THE MULTIFACTOR METHOD

### **Assessing Problem Gambling in Teens**

In a recent report to the Washington State Lottery, Volberg (1993) extensively reviews the history and development of methods to identify problem gambling involvement among adolescents. The handful of existing studies of problem gambling in teens have used a variety of methods, most of which were developed for use with adults and whose validity and reliability in identifying problematic gambling among teens is unknown.

In adult studies of gambling in the general population, the method most widely used to assess problem and pathological gambling is the South Oaks Gambling Screen (SOGS). The SOGS is a 20-item scale based on the diagnostic criteria for pathological gambling established by the American Psychiatric Association (1980, 1987). It is composed of a series of questions asking about problematic gambling behaviors and the number of different sources used to obtain money to gamble or to pay gambling debts. The number of problem gambling behaviors and number of sources of debt are added together to get a score, which can range from 0 to 20. A score of 3 or 4 on the SOGS identifies an adult respondent as a "problem gambler" while a score of 5 or more identifies an adult respondent as a "probable pathological gambler." A score below 3 indicates an individual who does not appear to have gambling problems. The SOGS instrument has proven reliability and validity among adults and has been used to assess problem and pathological gambling in a large number of surveys both of the general adult population and among clinical populations in treatment. Following other state surveys of adults carried out over the last

few years, the recent TCADA study of adult gambling in Texas (Wallisch, 1993) employed this instrument to assess problem and pathological gambling in the adult population.

The SOGS, with minor modification of wording and a different list of debt sources, was also part of the adolescent survey instrument (see Appendix D for the original SOGS and modifications used in the adolescent survey). When this study was planned, it was intended to use the SOGS in the same way as for adults to assess problem and pathological gambling among teens in Texas. However, recent studies have suggested that factors other than those measured explicitly by the SOGS may enter into an assessment of problem gambling in teens. The Washington state study proposes a new measure that treats the behavioral and borrowing dimensions of the SOGS separately and also incorporates measures of the frequency and intensity of gambling. It is suggested that this approach may be more valid for teens and better able to discriminate between true problem gamblers and teens who gamble without problems. This measure also allows identification of a category of teens who may be at greater risk than average of developing gambling problems although they do not yet have a serious problem. This method, loosely termed the "multifactor method," was used in the present study.

With the new method also comes new terminology. The SOGS classifies individuals into three categories: non-problem gamblers, problem gamblers and probable pathological gamblers. The multifactor method also classifies teens into three categories, which are termed non-problem gamblers, at-risk gamblers and problem gamblers. While "problem gam-

blers” identified by the multifactor method have as severe a gambling problem as “pathological” gamblers identified by the SOGS method, it may be a more suitable term. Volberg (1993) suggests that problem gambling among teens is best viewed as a vulnerability to developing the full clinical disorder of pathological gambling in adulthood. It may be premature to label teens with problems as “pathological,” since the probability of becoming a pathological gambler in adulthood can be affected by a variety of risk factors and the offsetting influence of prevention and treatment efforts.

### ***Classifying Individuals Using Multifactor Method***

Following the methodology proposed by Volberg (1993), teens were classified as non-problem, at-risk and problem gamblers in the following manner:

1. Scores were first computed separately for the behavioral dimension and the borrowing dimension of the South Oaks Gambling Screen. The behavioral dimension includes questions 4 through 15 of the SOGS (see Appendix D), and the borrowing dimension uses question 16 and counts sources a, c–g, j–o (see Appendix D, Revisions to the SOGS). The score for each dimension was the total number of questions answered affirmatively. Question 14 (“Have you ever borrowed from someone...”) was included in each dimension, since it taps both behavioral and borrowing aspects of gambling-related problems.

2. The distribution of scores on each dimension was then divided into three parts. A majority of the teens (81.6 percent) scored 0 or 1 points on the behavioral questions (=non-problem), 13.5 percent scored 2 or 3 points (=at-risk) and 4.9 percent scored 4 or more points (=problem) on these items. Teens reported fewer borrowing difficulties, with 98.6 per-

cent scoring 0 to 2 points (=non-problem) and 1.4 percent scoring 3 or 4 points (=at-risk). No respondent scored more than 4 points on the borrowing dimension.

3. The ranking of an individual on each of these dimensions was combined with information about the frequency of that individual’s gambling (weekly, past-year but not weekly, not past year) and the amount of money spent (less than \$10 per month, \$10 per month or more) to produce the following classification:

- a. Non-problem gamblers:
  - i. Gamble less than weekly and score as non-problem on both dimensions, or
  - ii. Gamble less than weekly and score as at-risk on one dimension and non-problem on the other.
- b. At-Risk gamblers:
  - i. Gamble weekly and score as non-problem or at-risk on both dimensions, or
  - ii. Have not gambled in past year but score as problem on one or both dimensions, or
  - iii. Have gambled in past year and score as at-risk on both dimensions, or
  - iv. Have gambled in past year and score as problem on one or both dimensions but spend less than \$10 per month on gambling.
- c. Problem gamblers:
  - i. Gamble weekly and score as problem on one or both dimensions, or
  - ii. Score as problem on either dimension and gamble less than weekly but spend \$10 per month or more on gambling.

**Prevalence of Problem Gambling Among Texas Teens**

Using the multifactor method, in Texas before the state lottery began, 5.0 percent of Texas teens were identified as problem gamblers, another 11.7 percent were at risk of developing problems, and 83.3 percent had no apparent gambling-related problems.

For comparison, using the SOGS method, some 3.7 percent of Texas teens would be classified as probable pathological gamblers, 8.7 percent as problem gamblers, and the other 87.6 percent as not having gambling problems. The table below compares the classification of respondents using the two methods for both Texas and Washington state.

Since the multifactor method is based heavily on the SOGS, it is not surprising that there is considerable overlap between the two methods of scoring. If one considers that the three groups of one method correspond in order of severity to the three groups of the other method, then 86 percent of the Texas teen respondents would have been classified in the same group regardless of which method was chosen. Of the 14 percent who would have been classified differently by the two methods, 10 percent were classified into a more severe category by the multifactor method while 4 percent would have been classified into a

higher category by the SOGS method.

While the SOGS method would have produced a slightly more conservative estimate of the extent of teen problematic gambling (compared to Washington state, where the multifactor method produced the more conservative estimate), the multifactor method was considered to be more sensitive to the full range of factors that together may serve to indicate current or potential gambling problems in teens. Therefore, the present report has used the multifactor method for examining the concomitants of problem gambling among adolescents in Texas (unless otherwise noted).

**TWO METHODS FOR ASSESSING PROBLEM GAMBLING  
TEXAS AND WASHINGTON TEENS: 1992**

	<b>SOGS Method</b>		<b>Multifactor Method</b>	
	<b>Texas (N=924)</b>	<b>Washington (N=1045)</b>	<b>Texas (N=924)</b>	<b>Washington (N=1045)</b>
No problem	88%	92%	83%	90%
Problem	9%	7%	12%	9%
Pathological	4%	2%	5%	1%

## APPENDIX D: THE SOUTH OAKS GAMBLING SCREEN

1. Please indicate which of the following types of gambling you have done in your lifetime. For each type, mark one answer: "not at all," "less than once a week," or "once a week or more."
- |    | Not<br>at<br>all         | Less<br>than<br>once<br>a<br>week | Once<br>a<br>week<br>or<br>more |  |
|----|--------------------------|-----------------------------------|---------------------------------|--|
| a. | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/>        | played cards for money   |
| b. | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/>        | bet on horses, dogs, or other animals (in off-track betting, at the track, or with a bookie) |
| c. | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/>        | bet on sports (parlay cards, with a bookie, or at jai alai)                                  |
| d. | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/>        | played dice games (including craps, over and under, or other dice games) for money           |
| e. | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/>        | gambled in a casino (legal or otherwise)   |
| f. | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/>        | played the numbers or bet on lotteries   |
| g. | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/>        | played bingo for money   |
| h. | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/>        | played the stock and/or commodities market   |
| i. | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/>        | played slot machines, poker machines, or other gambling machines                             |
| j. | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/>        | bowled, shot pool, played golf, or played some other game of skill for money                 |
| k. | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/>        | played pull tabs or "paper" games other than lotteries                                       |
| l. | <input type="checkbox"/> | <input type="checkbox"/>          | <input type="checkbox"/>        | bet on some form of gambling not listed above (please specify)                               |
2. What is the largest amount of money you have ever gambled with on any one day?
- |                          |                            |                          |                                  |
|--------------------------|----------------------------|--------------------------|----------------------------------|
| <input type="checkbox"/> | never have gambled         | <input type="checkbox"/> | more than \$100 up to \$1,000    |
| <input type="checkbox"/> | \$1 or less                | <input type="checkbox"/> | more than \$1,000 up to \$10,000 |
| <input type="checkbox"/> | more than \$1 up to \$10   | <input type="checkbox"/> | more than \$10,000               |
| <input type="checkbox"/> | more than \$10 up to \$100 |                          |                                  |
3. Do (did) your parents have a gambling problem?
- |                          |  |
|--------------------------|--|
| <input type="checkbox"/> | both my father and mother gamble (or gambled) too much |
| <input type="checkbox"/> | my father gambles (or gambled) too much                |
| <input type="checkbox"/> | my mother gambles (or gambled) too much                |
| <input type="checkbox"/> | neither one gambles (or gambled) too much              |
4. When you gamble, how often do you go back another day to win back money you lost?
- |                          |  |
|--------------------------|--|
| <input type="checkbox"/> | never  |
| <input type="checkbox"/> | some of the time (less than half of the time) I lost |
| <input type="checkbox"/> | most of the time I lost                              |
| <input type="checkbox"/> | every time I lost                                    |
5. Have you ever claimed to be winning money gambling but weren't really? In fact, you lost?
- |                          |                                     |
|--------------------------|-------------------------------------|
| <input type="checkbox"/> | never (or never gamble)             |
| <input type="checkbox"/> | yes, less than half the time I lost |
| <input type="checkbox"/> | yes, most of the time               |
6. Do you feel you have ever had a problem with gambling?
- |                          |                               |
|--------------------------|-------------------------------|
| <input type="checkbox"/> | no                            |
| <input type="checkbox"/> | yes, in the past, but not now |
| <input type="checkbox"/> | yes                           |
7. Did you ever gamble more than you intended to?
- |                          |     |                          |    |
|--------------------------|-----|--------------------------|----|
| <input type="checkbox"/> | yes | <input type="checkbox"/> | no |
|--------------------------|-----|--------------------------|----|
8. Have people criticized your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?
- |                          |     |                          |    |
|--------------------------|-----|--------------------------|----|
| <input type="checkbox"/> | yes | <input type="checkbox"/> | no |
|--------------------------|-----|--------------------------|----|

9. Have you ever felt guilty about the way you gamble or what happens when you gamble?  
\_\_ yes \_\_ no
10. Have you ever felt like you would like to stop betting money or gambling but didn't think you could?  
\_\_ yes \_\_ no
11. Have you ever hidden betting slips, lottery tickets, gambling money, IOUs, or other signs of betting or gambling from your spouse, children, or other important people in your life?  
\_\_ yes \_\_ no
12. Have you ever argued with people you live with over how you handle money?  
\_\_ yes \_\_ no
13. (If you answered yes to question 12): Have money arguments ever centered on your gambling?  
\_\_ yes \_\_ no
14. Have you ever borrowed from someone and not paid them back as a result of your gambling?  
\_\_ yes \_\_ no
15. Have you ever lost time from work (or school) due to betting money or gambling?  
\_\_ yes \_\_ no
16. If you borrowed money to gamble or to pay gambling debts, who or where did you borrow from? (check "yes" or "no" for each)
- a. from household money  
\_\_ yes \_\_ no
  - b. from your spouse  
\_\_ yes \_\_ no
  - c. from other relatives or in-laws  
\_\_ yes \_\_ no
  - d. from banks, loan companies, or credit unions  
\_\_ yes \_\_ no
  - e. from credit cards  
\_\_ yes \_\_ no
  - f. from loan sharks (Shylocks)  
\_\_ yes \_\_ no
  - g. you cashed in stocks, bonds, or other securities  
\_\_ yes \_\_ no
  - h. you sold personal or family property  
\_\_ yes \_\_ no
  - i. you borrowed on your checking account (passed bad checks)  
\_\_ yes \_\_ no
  - j. you have (had) a credit line with a bookie  
\_\_ yes \_\_ no
  - k. you have (had) a credit line with a casino  
\_\_ yes \_\_ no

*Scoring*

Scores on the South Oaks Gambling Screen itself are determined by adding up the number of questions that show an "at risk" response:

Questions 1, 2, and 3 are not counted.

\_\_\_ Question 4: most or every time I lost

\_\_\_ Question 5: less than half or most of the time I lost

\_\_\_ Question 6: yes, in the past or yes

\_\_\_ Question 7-11: yes

Question 12 not counted

\_\_\_ Question 13-16i: yes

Questions 16j and 16k not counted

Total = \_\_\_\_\_ (20 questions are counted)

0 = no problem

1-4 = some problem

5 or more = probable pathological gambler

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## Revisions to the SOGS Used in the Texas Survey

1. Question 1 on the types of gambling in which the respondent has participated in his or her lifetime was modified to include activities that adolescents were more likely to gamble on. Questions about gambling were asked in terms of lifetime, past year and weekly participation. Question 2 (largest amount of money ever gambled with on one day) was not asked. These preliminary questions are not scored as part of the SOGS.
2. The items designed to assess problem gambling were expanded to ask about both lifetime and past-year gambling.
3. The sources of money for gambling or to pay gambling debts were modified to be more appropriate to teens. The sources asked about in the Adolescent Survey were the following:
  - a. Borrowed from household money
  - b. Won it gambling
  - c. Took it from someone who lives with me without their knowing
  - d. Bought and sold stolen property
  - e. Borrowed from a loan company or loan shark
  - f. Worked for a bookmaker, a numbers writer or sold parlay cards or other type of gambling to get money
  - g. Stole in some other way
  - h. Allowance
  - i. Worked for money
  - j. Sold drugs
  - k. Took money/property from someone else without their knowing it
  - l. Sold personal property to pawn shop or sold to others
  - m. Borrowed money from friends or

acquaintances

- n. Shoplifted
- o. Worked as a prostitute or helper for prostitute

The sources counted towards a SOGS score (i.e., indicative of a possible gambling problem) were a, c, d, e, f, g, j, k, l, m, n, and o.



## APPENDIX E: CORRELATES OF PROBLEM GAMBLING

### *Full wording of questions listed in Table 6*

#### **Attitudes Towards Gambling**

Now I would like you to tell me the extent that you agree or disagree with the following statements. Please answer according to whether you “strongly disagree,” “disagree,” “agree,” or “strongly agree” to each statement.

I do not think betting for money is harmful.

I think I could make a lot of money playing games of chance like the lottery.

If teenagers want to bet money they should be able to.

#### **Attitudes Towards the Lottery**

As you may know, Texas will begin its lottery early this summer with an instant scratch ticket game and will begin a computerized lottery game with large weekly prizes later in the year. You must be at least 18 years old to play the lottery.

Do you think it is wise to have this age limit on who can play? (Yes/No/Not sure)

Do you think you will try to purchase any lottery tickets? (Yes/No/Not sure)

Some people say that lotteries are a good idea because they help raise money for state programs that can benefit people. Others say lotteries are a bad idea because they encourage people to waste their money on something that is a long shot. Which statement best reflects your view of lotteries?

Lotteries are a bad idea.

Lotteries serve a useful purpose.

#### **Emotional Experiences Associated with Gambling**

I would like you to think back to all the times that you

have bet money. I want to know how much you agree or disagree with the statements that I will read.

What I like most about gambling is the action and excitement.

When gambling, I forget all my problems.

When gambling, I want to feel numbness or oblivion.

Betting money is something I usually like to do alone.

#### **Amount Spent on Gambling**

If you think about all the times you have bet money in the past 12 months, how much total money would you estimate you have bet during that time? (\$0/\$1–9/\$10–19/\$20–49/\$50–99/\$100–199/\$200 or +)

#### **Parental Knowledge of Gambling**

Do your parents know that you gamble?

(Yes/No/Not sure)

Do your parents know the extent of your gambling? (Yes/No/Not sure)

What do they think of your gambling?

(Disapprove/Approve/Don't care)

#### **Average Grades**

On average, what grades do you get? (A/B/C/D/F or incomplete/Don't get letter grades)

#### **General Deviance**

Since school began in September, on how many days have you:

Missed a whole day of school because you “skipped” or “cut”?

Been sent by a teacher to the Principal, Dean or

Guidance Counselor because of your conduct or attitude?

Had someone from your home called to school because of your conduct or attitude? (none/1 day/2–3 days/4–9 days/10 or + days)

How many of your friends would you say:

Feel close to their parents?

Sometimes carry weapons like a knife or gun?

Care about making good grades?

Belong to a gang or are interested in becoming a gang member?

Wish they could drop out of school?

(None/A few/Some/Most/All)

Have you ever participated in any illegal activities? (Yes/No)

Have you ever been arrested for something besides a traffic violation? (Yes/No)

### ***Personal/Family Happiness***

How happy or satisfied have you been with your personal life during the past month? (Very happy/Somewhat happy/Somewhat unhappy/Very unhappy)

How often have you felt anxious, worried, or upset during the past month? (Most or all or the time/Some of the time/A little or none of the time)

How much do you agree with this statement: My parents don't get along well with each other. (Strongly disagree/Disagree/Agree/Strongly agree)

How much do you agree with this statement: My family is very close. (Strongly disagree/Disagree/Agree/Strongly agree)