
GAMBLING AND PROBLEM GAMBLING
AMONG ADOLESCENTS IN WASHINGTON STATE:
A REPLICATION STUDY, 1993 TO 1999

Report to the Washington State Lottery

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EXECUTIVE SUMMARY

This report presents the results of a replication survey of adolescent gambling and problem gambling in Washington State. The main purpose of this study was to examine changes in gambling participation and the prevalence of gambling-related problems among adolescents in Washington State between 1993 and 1999. Another purpose of this study was to identify the types of gambling causing the greatest difficulties for the youth of Washington State. A sample of Washington State residents aged 13 to 17 (N=1,000) were interviewed in January and February, 1999, about the types of gambling they have tried, the amounts of money they spend on gambling and about gambling-related difficulties. The results of this study are intended to assist in refining the services available to youth with gambling problems as well as their families in Washington State.

Findings

- While participation in all forms of gambling is illegal for individuals under the age of 18 in Washington State, 78% of the Washington State adolescent respondents said that they had bet on one or more types of gambling at some time, 65% had gambled in the past year and 8% bet on one or more types of gambling once a week or more often. Favorite types of gambling among adolescents are wagering on card, dice or board games with friends or family, games of personal skill and sports.
- Older, male adolescents are substantially more likely to gamble regularly than females or younger adolescents. Gambling involvement is strongly associated with adolescent employment and income. Adolescents who work 10 or more hours per week and those who earn \$50 or more per week are substantially more likely to gamble weekly than adolescents who work fewer hours and/or earn less money.
- Adolescents in Washington State report spending approximately 40% as much as Washington State adults report spending on all types of gambling. Wagering on games of skill, card, dice and board games with friends or family and sports accounts for the majority of reported monthly expenditures on gambling among Washington State adolescents.
- Washington State adolescents are most likely to have started gambling with friends or parents on card, board or dice games, games of personal skill, sports and charitable games.
- There is concern that lottery gambling may be an experience that encourages young people to engage in other, less broadly sanctioned types of gambling as well as in other risk-taking behaviors, such as illicit drug use. A significant increase in lottery play by age was identified among Washington State adolescents. While 6% of 13-year-olds in the Washington State sample have purchased lottery tickets in the past year, 21% of 17-year-olds have done so. The increase in lottery play is correlated with increased participation in other types of gambling and in use of alcohol, tobacco and marijuana.
- In Washington State, 0.9% ($\pm 0.58\%$) of the total sample of adolescent respondents were classified as problem gamblers, the most serious classification of gambling-related difficulties among youth. Another 7.5% ($\pm 1.63\%$) of the total sample of adolescent respondents were classified as gamblers at risk for developing gambling problems.
- Based on these figures, it is estimated that there are between 1,330 and 6,100 adolescents in Washington State who have experienced severe problems related to their gambling and another 24,400 to 37,900 whose gambling has caused them difficulties in the past or places them at risk for developing gambling difficulties in the future.

Gambling and Problem Gambling Among Adolescents in Washington State

- The methods used to classify adolescents and adults as problem gamblers are not identical. However, while adolescents represent approximately 7% of the total population of Washington State, they represent approximately 12% to 18% of Washington State residents who are experiencing severe difficulties related to their gambling.
- The prevalence of at-risk and problem gambling is highest among adolescents who have wagered on arcade or video games and among those who have purchased instant lottery tickets. Prevalence rates are also high among adolescents who have wagered on card, dice or board games with friends and family, games of personal skill, sports and flipping coins.
- At-risk and problem gamblers in Washington State are most likely to be male. At-risk and problem gamblers in Washington State are more likely than non-problem gamblers to earn \$50 and to have parents who gamble than adolescents who gamble without problems. At-risk gamblers are more likely than either non-problem or problem gamblers to work 10 hours or more per week.
- At-risk and problem gamblers are most likely to wager regularly on games of personal skill, card, dice or board games with friends and family, sports and arcade or video games. At-risk gamblers are more likely than problem gamblers to have purchased instant lottery tickets and pulltabs and to have wagered on games of personal skill and horse or dog races.
- The average age at which adolescent problem gamblers in Washington State report starting to gamble is 10 years old compared to 12 years old for at-risk and non-problem gamblers. Adolescents who gamble are most likely to do so with friends and acquaintances although non-problem gamblers are somewhat more likely than at-risk and problem gamblers to gamble with family members. At-risk and problem gamblers spend more time gambling than non-problem gamblers and are more likely to have ever lost \$50 or more in a single gambling session.
- Gambling involvement among adolescents in Washington State is correlated with the use of alcohol, tobacco, marijuana and illicit drugs. Weekly gamblers are more likely than less frequent gamblers to have used alcohol, tobacco, marijuana and other drugs in the past year and to have gotten into trouble in the past year because of their alcohol or drug use.
- Gambling problems are even more closely correlated with the use of alcohol and drugs. At-risk and problem gamblers are more likely than non-problem gamblers to have used alcohol and drugs in the past year, to have gotten into trouble in the past year because of their alcohol or drug use and to have sought help for an alcohol or drug problem.
- As with the Washington State adults, there has been a substantial decrease in the proportion of adolescents who report gambling weekly on one or more activities between 1993 and 1999 although lifetime participation in wagering on games of personal skill and on arcade or video games has increased among adolescents in this period.
- As with the Washington State adults, the prevalence of gambling-related problems among adolescents has remained stable between 1993 and 1999. There have been no significant changes in the demographic characteristics of adolescents with gambling-related difficulties in Washington State in this period.
- Comparison of adolescent and adult gambling patterns in Washington State shows that although adolescents are less likely than adults to have ever tried most types of gambling, their participation in telephone or computer wagering is higher than among adults.

Future Directions

In considering how to improve services for Washington State adolescents who experience gambling difficulties and their families, policymakers may wish to give consideration to developing a variety of activities. These include establishment of a statewide prevention program as well as cooperative endeavors to discourage and minimize underage gambling and problem gambling in Washington State, development and refinement of public education, prevention services and educational curricula targeted toward at-risk individuals and their families, encouraging parents and adults to be attentive to the types of gambling they may be engaging in with underage persons, providing additional training opportunities to those who work with troubled adolescents, funding for treatment services for adolescent problem gamblers and family members, evaluation of services that are established and continued monitoring of gambling and problem gambling to assess the impacts of the introduction of new types of gambling on youth and to evaluate the effectiveness of prevention and treatment services.

INTRODUCTION

In the United States and other industrialized nations, adolescence is a life stage when individuals make the transition from childhood to adulthood. Like sexual experimentation and the use of alcohol and drugs, gambling may be a behavioral expression of adolescents' efforts to establish coherent, consistent identities (Erikson 1963). The majority of adolescents who gamble do so recreationally and in order to socialize. As with adults, however, a small but significant number of adolescents experience difficulties related to their involvement in gambling.

In 1993, the Washington State Lottery funded one of the first surveys of gambling and problem gambling among adolescents in the general population. This survey was also one of the first efforts to compare gambling and problem gambling among adults and adolescents from the same jurisdiction (Volberg 1993a). Six years later, the Washington State Lottery funded **replication** studies of both adults and adolescents in the general population. Like the adult survey (Volberg & Moore 1999b), the main purpose of the adolescent replication survey is to examine changes in gambling participation and the prevalence of gambling-related problems among adolescents in Washington State between 1993 and 1999. An additional purpose of this study is to identify the types of gambling causing the greatest difficulties for the youth of Washington State. The results of this study are intended to assist in refining the services available to youth and adults with gambling problems as well as their families in Washington State.

This report is organized into several sections for clarity of presentation. The **Introduction** includes a definition of the terms used in the report as well as a discussion of existing research on adolescent gambling and gambling problems. The **Methods** section addresses the details of conducting the survey. The next four sections detail findings from the survey, with a focus on:

- gambling involvement among adolescents in Washington State
- the prevalence of problem gambling among adolescents in Washington State
- differences between non-problem, at-risk and problem gamblers
- relationships between gambling, alcohol and drug use among adolescents in Washington State

These sections are followed by two sections comparing Washington State adolescents with those from other states as well as with adults from Washington State. There is also a section comparing the two methods used to assess problem gambling among Washington State adolescents. The report concludes with a summary as well as with recommendations for the further development of gambling-related services for adolescents in Washington State.

Research on Adolescent Gambling

The research literature on pre-adult gambling falls into three general areas. These include studies of gambling as play (Smith & Abt 1984), studies of gambling as part of the economic socialization of children (Furnham 1986; Strauss 1952; Tan & Stacey 1981) and studies of gambling and gambling problems among adolescents in school or in the general population.

Surveys of high school students have been carried out in a number of North American jurisdictions (Arcuri, Lester & Smith 1985; Jacobs 1989; Ladouceur & Mireault 1988; Lesieur & Klein 1987; Steinberg 1997; Westphal, Rush & Stevens 1997; Wittman, Fuller & Taber 1988). While using different methods to identify respondents as problem or pathological gamblers, all of these studies found that a majority of adolescents gamble. In general, between 40% and 90% of high school students have gambled for money at some time in their lives. Telephone surveys of adolescents in

the general population have also found that a majority of respondents gamble, even in jurisdictions where few types of gambling are legal (Volberg 1993a, 1996a, 1998; Wallisch 1993, 1996; Winters & Stinchfield 1993).

Studies of gambling among high school students show that wagering on card games, sports events and games of personal skill are the most common forms of adolescent gambling (Jacobs 1989; Ladouceur & Mireault 1988). All of the available research shows that children begin gambling well before high school and that gambling is far more common among males than among females (Ide-Smith & Lea 1988; Wolfgang 1988). Interestingly, many of these studies show that most young people who gamble are introduced to gambling by their parents or other adults close to them (Jacobs 1989; Lesieur & Klein 1987).

Defining Problem Gambling Among Adolescents

A variety of terms have been used in the gambling research literature to refer to difficulties caused by an individual's gambling. The most widely used term is ***problem gambling*** although it has been used in different ways in the literature (Lesieur & Rosenthal 1991; Rosecrance 1988). The term ***pathological gambling*** is generally limited to the psychiatric disorder first recognized by the medical profession in 1980 and most recently revised in 1994 (American Psychiatric Association 1980, 1994).

Research on adult gambling problems suggests that pathological gambling has strong antecedents in youthful gambling involvement (Custer & Milt 1985; Volberg 1994). However, since pathological gambling is defined as a progressive condition which takes some years to develop, we concur with other researchers who argue that problem gambling among adolescents is best viewed as a pre-clinical state (Winters, Stinchfield & Fulkerson 1993b). Adolescent gamblers are a particularly vulnerable group in terms of the future development of pathological gambling. Their propensity to display the full clinical disorder is likely to be affected by a variety of risk factors and by the offsetting influence of prevention and treatment efforts. A related concern is that gambling may be an important but often ignored component in the development of other adolescent problems such as alcohol and drug abuse and suicide.

The National Council on Problem Gambling uses the term ***problem gambling*** to indicate ***all of the patterns of gambling behavior that compromise, disrupt or damage personal, family or vocational pursuits*** (Cox, Lesieur, Rosenthal & Volberg 1997). Since this definition is equally applicable to adults and adolescents, this is the meaning intended by the term throughout this report. In discussing the results of the survey, ***problem gambling*** refers to the most serious classification of adolescent gamblers; those who show the clearest evidence of gambling involvement that has compromised, disrupted or damaged other important areas in their lives.

Assessing Problem Gambling Among Adolescents

The survey of adolescent gambling in Washington State builds on work carried out in other parts of the United States as well as internationally. Although there are now well-accepted methods for identifying pathological gambling in the adult population (Lesieur & Blume 1987; Volberg & Banks 1990), there are several reasons that the same criteria cannot be applied to adolescents. The psychiatric criteria for identifying pathological gambling among adults were developed on the basis of adult life and gambling experiences. Younger individuals have not had time to develop the same depth of life experience. In addition, these criteria have never been clinically tested among adolescents and there is little information about their validity or reliability in identifying pathological gambling among adolescents.

The most widely used method to assess problem and pathological gambling in the adult population is the South Oaks Gambling Screen (SOGS) (Lesieur & Blume 1987). The SOGS is a 20-item

scale based on the diagnostic criteria for pathological gambling (American Psychiatric Association 1980). Weighted items on the SOGS include hiding evidence of gambling, spending more time or money gambling than intended, arguing with family members over gambling and borrowing money to gamble or to pay gambling debts. In developing the SOGS, specific items as well as the entire screen were tested for reliability and validity with a variety of groups, including hospital workers, university students, prison inmates and inpatients in alcohol and substance abuse treatment programs (Lesieur & Blume 1987; Lesieur, Blume & Zoppa 1986; Lesieur & Klein 1985). Studies of adolescents based on the South Oaks Gambling Screen have been carried out in high schools in Connecticut, Louisiana, New Jersey and Quebec (Ladouceur & Mireault 1988; Lesieur & Klein 1987; Steinberg 1997; Westphal, Rush & Stevens 1997).

Recently, researchers have begun to develop new methods to identify problem and pathological gambling among adolescents. In Great Britain, efforts have focused on adapting the DSM-IV criteria for use with adolescents. In a pilot study, a sample of 11- to 16-year-old adolescents from a single secondary school were administered the DSM-IV-J (Juvenile) scale (Fisher 1992). Involvement in fruit machine play and affirmative answers to 4 of the 12 DSM-IV-J items were used to identify respondents as probable pathological gamblers. According to these criteria, 5.6% of the total sample scored as probable pathological gamblers.

A more recent and much larger study of 9,774 12- to 15-year-old adolescents drawn from 114 schools was recently completed in England and Wales (Fisher 1998). The DSM-IV-J was revised for this study to include lessons learned from the earlier work. The DSM-IV-J-R consists of nine items with four response options for each question. All of the items discriminate effectively between problem gamblers and social gamblers. The internal consistency of the DSM-IV-J-R is good and the scale appears to have good construct validity.

In Massachusetts, a team of researchers is working to develop the Massachusetts Gambling Screen (MAGS), based on the Minnesota Alcohol Screening Test (MAST). Although the MAGS is a 7-item screen intended to provide researchers and treatment professionals with a brief method to identify individuals with gambling difficulties, the screen has always been administered along with a 12-item version of the DSM-IV criteria. In essence, this means that the MAGS is a 19-item screen that provides two separate estimates of problem gambling prevalence. The MAGS has been administered to the entire student body of an all-male private high school in the Boston area as well as to 856 students at three suburban high schools in the Boston area (Shaffer 1993; Shaffer, LaBrie, Scanlan & Cummings 1994). The MAGS classifies respondents as non-problem, in-transition or pathological gamblers using a relative item weighting scheme derived from discriminant function analysis. In the suburban high school study, the MAGS classified 8.5% of the students who gambled as pathological gamblers and another 13.9% as in-transition gamblers (moving toward or away from pathological gambling patterns). According to the DSM-IV criteria also used in this study, 6.4% of the students were classified as pathological gamblers.

In Minnesota, researchers adapted both the SOGS items and the SOGS scoring method for use with adolescents (Winters, Stinchfield & Fulkerson 1993a). In adapting the SOGS items, the researchers modified the borrowing items originally developed for adults. They found that the modified SOGS, known as the SOGS-RA (Revised Adolescent) had moderate internal reliability and high content and construct validity among male adolescents (Winters, Stinchfield & Fulkerson 1993b). Since clinical assessments of adolescent respondents who scored as problem gamblers were not conducted, the overall reliability of the SOGS-RA could not be determined.

Like Fisher in Great Britain, the Minnesota researchers adopted an approach from the adolescent substance abuse literature in modifying the scoring method for the SOGS. Adolescent gamblers were classified separately on the basis of their gambling frequency and their SOGS scores. Low, intermediate and high scores for each dimension were determined by examination of the distribution of scores. Finally, groups of non-problem, at-risk and problem gamblers were identified on the basis of their scores on these two dimensions. Using this method, the Minnesota researchers identified 8.8% of their male respondents as problem gamblers.

In Georgia, New York and Texas as well as in the baseline adolescent survey in Washington State, the approach used in Minnesota was changed slightly (Volberg 1993a, 1996a, 1998; Wallisch 1993, 1996). Rather than treating the modified SOGS items as a single dimension, behavioral difficulties and borrowing difficulties were assessed separately. The reason for adopting this somewhat more stringent, three-dimension approach to identifying problem gambling among adolescents stemmed from concern about the sensitivity and specificity of the adult SOGS measures with adolescents.

One other approach to using the South Oaks Gambling Screen was taken in a survey of adolescents in Alberta (Wynne, Smith & Jacobs 1996). In this survey, the South Oaks Gambling Screen items were used although some of the borrowing items were re-worded slightly to correspond to adolescent life experiences. In classifying their adolescent respondents, the Alberta researchers used the same cut-off criteria as are used with adults although the labels were changed. Thus, adolescents were classified as non-problem gamblers if they scored two points or less on the South Oaks Gambling Screen, as at-risk gamblers if they scored three or four points and as problem gamblers if they scored five or more points. Among the sample of 972 adolescent respondents in the Alberta survey, 7.9% were classified as problem gamblers and an additional 15.2% were classified as at-risk gamblers.

METHODS

In this section, the methods used to conduct the survey of gambling and problem gambling among adolescents in Washington are described. This section addresses the overall structure of the study with specific attention to the development of the questionnaire and the sample design, including the response rate for the study as well as the need for weighting of the sample.

The adolescent survey in Washington State was carried out by the same team that conducted the Washington State adult survey and in similar stages (Volberg & Moore 1999b). In the first stage of the project, staff from Gemini Research, Ltd. conferred by telephone with representatives of the Washington State Lottery and the Washington State Council on Problem Gambling regarding the final design of the questionnaire. In the second stage of the project, staff from Gilmore Research Group completed telephone interviews with a sample of 1,000 adolescents aged 13 to 17 years old residing in Washington State. The interviews were completed between January 8, 1999 and February 25, 1999. Parental consent as well as consent of the adolescent respondent was obtained for each interview. The average length of these interviews was 14 minutes. Gilmore Research Group then provided Gemini Research with the data for the third stage of the project which included analysis of the data and preparation of this report.

Questionnaire

The questionnaire for the adolescent survey in Washington State was composed of six major sections (see **Appendix A** for a copy of the questionnaire). The first section included questions about 17 different types of gambling. For each type of gambling, respondents were asked whether they had ever tried this type of gambling, whether they had tried it in the past year and whether they participated once a week or more in this type of gambling. Respondents were also asked to estimate their monthly expenditures on the types of gambling that they had tried in the past year.

To assess gambling-related difficulties among Washington State adolescents, we used two different screens. The second section of the questionnaire was composed of the lifetime and current South Oaks Gambling Screen items (Revised Adolescent version) (SOGS-RA). The third section of the questionnaire consisted of the Fisher DSM-IV Screen (Fisher 1996) which is closely based on the current diagnostic criteria for pathological gambling (American Psychiatric Association 1994). The fourth section of the questionnaire included several questions about respondents' life experiences with gambling and the fifth section included questions about respondents' alcohol and drug use. The final section of the questionnaire included questions about the demographic characteristics of each respondent.

In developing the questionnaire for the adolescent survey in Washington State, one important goal was to maintain comparability with both the earlier adolescent survey in Washington State as well as the recent adult replication survey (Volberg 1993a; Volberg & Moore 1999b). Changes were made to the first section of the questionnaire on gambling involvement to reflect differences in the gambling activities of adolescents and adults as well as changes in the mix of gambling activities in Washington State since 1993. Three separate sets of questions assessing sports betting in 1993 collapsed to one set of questions in 1999. This was because of the amount of overlap among participants in these activities in 1993. Questions about casino gambling were added to the 1999 questionnaire because of the increase in the number of casinos in Washington State since 1993. Finally, a set of questions assessing telephone or computer wagering were added to the 1999 questionnaire to assess this behavior among adolescents for the first time.

For comparability, we elected to use the adult version of the Fisher DSM-IV Screen with the adolescent respondents in Washington State rather than the adolescent version developed by Fisher (1992, 1998).

Sample Design

The focus of this study was adolescents aged 13 to 17, a group that represents only a small proportion of the population in any state. Since the group of eligible respondents is so small, it is common to use targeted samples to conduct research on adolescents in the general population. The numbers in a targeted sample are not randomly generated but are based on comparisons of telephone lists, drivers license applications and voter registration lists. Voter registration lists are used because a new voter in a household is likely to have siblings. This increases the potential that the household will include an eligible respondent.

While targeted samples do not include households with unlisted telephone numbers, this approach does yield telephone numbers of residences with a higher-than-usual likelihood of containing an individual in the desired age range. The targeted sample for the Washington State adolescent survey was purchased from Survey Sampling, Inc. of Fairfield, Connecticut, which also provided the targeted samples for adolescent gambling surveys in Georgia, Minnesota, New York and Texas as well as the baseline adolescent survey in Washington State (Volberg 1993a, 1996a, 1998; Wallisch 1993, 1996; Winters, Stinchfield & Fulkerson 1993b).

Adolescents aged 12 to 17 represent 16% of the general population in the United States. The targeted sample purchased for this survey increased the incidence of households with an eligible respondent to 39 percent. Since age-targeted samples purchased from the same company were used in all of the surveys of gambling and problem gambling among adolescents in the general population, this approach also maintained continuity with surveys of adolescents in other states.

If more than one adolescent resided in the household, the eligible respondent with the next birthday was selected. Informed consent was initially obtained from a parent or legal guardian. Interviewers read an introduction to the responsible adult explaining the purpose of the study, assuring the parent of the confidentiality and anonymity of the respondent's answers and explaining the respondent's right to refuse to answer any of the questions. Once the parent or guardian agreed to his/her child's participation, informed consent was obtained from the adolescent. Again, interviewers read an introduction explaining the purpose of the study, assured the eligible respondent of the anonymity and confidentiality of his/her responses and stressed that the respondent had the right to refuse to answer any question that caused him/her discomfort.

Response Rate

Survey professionals in general are finding that response rates for telephone surveys have declined in recent years. These declines are related to the proliferation of fax machines, answering machines and other telecommunications technology, such as "caller ID," that make it more difficult to identify and recruit eligible individuals. These declines are also related to the amount of political polling and market research that is now done by telephone and to the higher likelihood that eligible households will refuse to participate in any survey.

The response rate among adolescents in Washington State in 1993 was 66% of the known qualified households. The response rate among adolescents in the 1999 survey was 62% of the known qualified households. These response rates were calculated using the same CASRO approach that was used for the adult surveys in Washington State. The refusal rate for the adolescent survey in 1993 was 25% while the refusal rate for the 1999 survey was 34%; these refusal rates include parental refusals as well as refusals by adolescents.

Weighting the Sample

Although the sample that results from a targeted survey is not a random selection of eligible respondents in the population, it is still important to understand the degree to which the sample

matches the characteristics of the population of interest. To determine how well the sample of adolescents from Washington State matched the larger population of adolescents in the state, we compared the demographic characteristics of the respondents to the known characteristics of the population in Washington State. This comparison showed that the sample matched the characteristics of the Washington State population well in terms of gender and age. Although Blacks were under-represented in the sample, this group represents such a small proportion of the population in Washington State that the impact of weighting for ethnicity was negligible.

Potential Biases in Telephone Surveys

One issue in conducting telephone surveys with adults or adolescents is the validity of this method of data collection compared with mail surveys or face-to-face interviews. Some researchers have suggested that significant bias is introduced in telephone surveys of gambling because of the likelihood that some other person in the household may be listening to the interview (Lesieur 1994). This assumes that the other person is listening in on a telephone extension or, alternatively, that the questions in the interview can be easily inferred from the respondent's answers to specific items.

There is good evidence supporting the validity of telephone interview methods in general population surveys (Sabin & Godley 1987). Further, research on the differences in disclosure rates for sensitive items in surveys of depression and personal health practices does not support the notion that significant bias is introduced in telephone surveys on sensitive topics (Hochstim 1967; Wells, Burnham, Leake & Robins 1988).

There is concrete evidence for the validity of telephone interview methods in surveys of gambling and problem gambling among adolescents. In Minnesota, researchers compared results from two surveys of adolescents by telephone and paper-and-pencil questionnaire in high schools for differences in disclosure rates for tobacco, alcohol and marijuana use, school grades, life satisfaction, physical health, psychological distress, eating disorders and family closeness. No significant differences were found on any of these dimensions although the telephone respondents had slightly lower disclosure rates of illegal activities than the adolescents surveyed in school (Winters, Stinchfield & Fulkerson 1993a).

Data Analysis and Reporting

For easier comparisons of data from this survey with results from similar adolescent surveys and from the adult survey in Washington State, detailed demographic data on household size, weekly income and weekly hours worked were collapsed to have fewer values. Household size was collapsed into three groups ("One Adult," "Two Adults" and "Three or More Adults"). Weekly hours worked was collapsed from five groups into two groups ("Less than 10 Hours" and "10 Hours or More") and weekly income from all sources was collapsed into two groups ("Less than \$50" and "\$50 or More").

In the Washington State adolescent survey, as with the adult survey, race and ethnicity were determined separately. Respondents were first asked whether they considered themselves Hispanic and then asked about their racial or ethnic affiliation. As expected, the majority of the adolescents who identified themselves as Hispanic considered themselves White or Caucasian. For purposes of analysis, these adolescents were placed in a separate group after the Ethnicity category was collapsed from five groups ("White/Caucasian," "Black," "Native American," "Asian" and "Other") into three groups ("White," "Black" and "Other").

Chi-square analysis and analyses of variance were used to test for statistical significance.

It is important to note that some groups analyzed in this report are quite small. Results based on these groups should be interpreted with caution due to the large margin of error based on small

cell sizes. Despite this caveat, we believe that the results of this survey can be used to draw meaningful conclusions about the prevalence and characteristics of problem gambling among adolescents in Washington State.

GAMBLING AMONG ADOLESCENTS IN WASHINGTON STATE

This section examines gambling participation by adolescents in the general population in Washington State. To assess the full range of gambling activities available to Washington State residents, including adolescents, the questionnaire for the survey collected information about 17 different wagering activities. It is important to note that participation in all forms of gambling is illegal for individuals under the age of 18 in Washington State, regardless of whether or not these activities are legal for adult residents of the state. Adolescent respondents were asked about their participation in the following activities:

- instant or scratch off lottery games
- Daily Game or Daily Keno
- Lotto, Quinto or Lucky for Life
- raffles, fund-raising events or Reno Nights
- bingo
- pulltabs
- flipping coins
- games of personal skill such as bowling, pool or golf
- card, dice or board games with friends or family
- card games in card rooms or mini-casinos
- arcade or video games
- slot machines, poker machines or other gaming machines
- sports events with friends or acquaintances, in formal sports pools or with a bookmaker
- horses or dog races
- casino
- telephone or computer wagering
- any other type of gambling

Gambling Participation

As expected, a majority of the respondents from the Washington State adolescent gambling study said that they had tried one or more types of gambling at some time, despite the fact that all such participation is illegal. Three-quarters (78%) of the Washington State adolescent respondents said that they had bet on one or more types of gambling included in the questionnaire and 65% of the respondents said that they had bet on one or more types of gambling in the past year. Only 8% of these adolescent respondents said that they bet on one or more types of gambling on a weekly basis. All of these participation figures are significantly lower than participation rates among Washington State adults (Volberg & Moore 1999b).

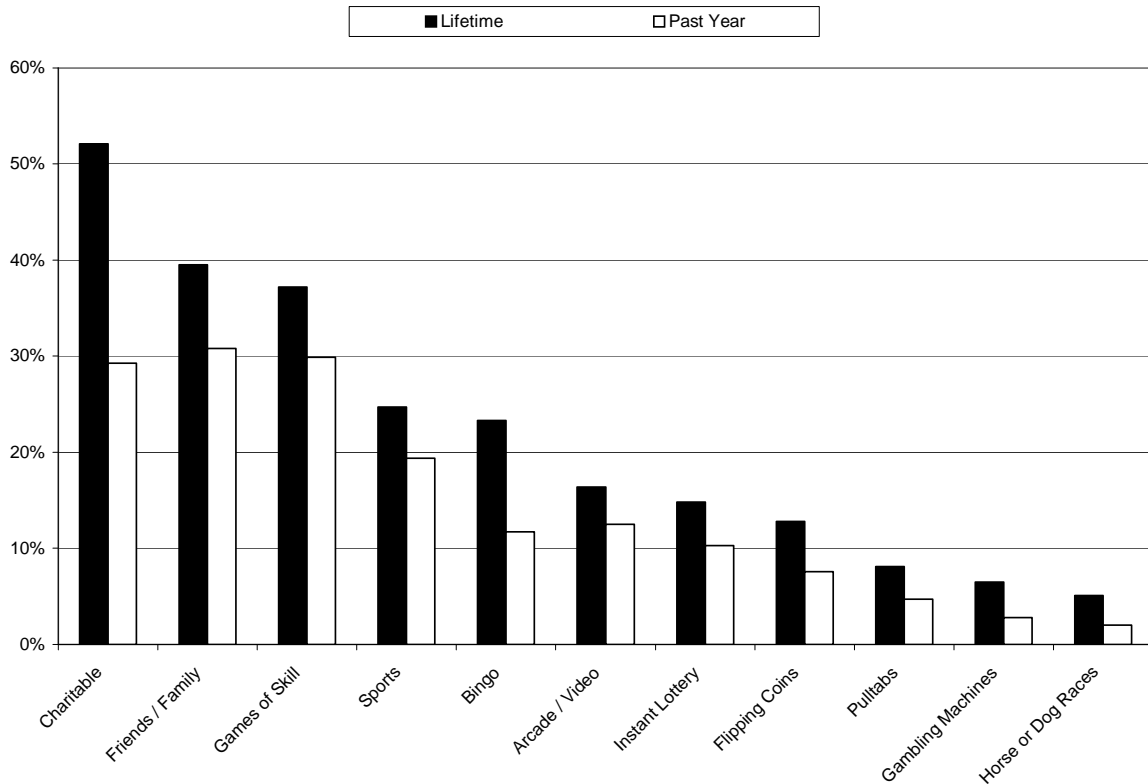
Most adolescents who gamble have wagered on more than one activity. For adolescents in Washington State who have only done one type of gambling (N=180), the type of gambling they are most likely to have tried is wagering on raffles and charitable events (46%). Another 16% of these respondents have wagered on games of personal skill and another 14% have wagered on card, dice or board games with friends or family members.

Figure 1 on the following page shows lifetime and past year participation for different types of gambling among adolescents in Washington State. Only those types of gambling where lifetime participation is 5% or higher are shown. Lifetime participation is highest for wagering on raffles and charitable games and for card, dice or board games with friends or family members. Lifetime

Gambling and Problem Gambling Among Adolescents in Washington State

participation is also substantial for wagering on games of personal skill¹, sports and bingo. Past year participation is highest for charitable wagering and for wagering with friends and family.

Figure 1: Lifetime and Past Year Participation Among Washington State Adolescents



In addition to questions about participation, adolescents were asked to identify their favorite type of gambling. Among adolescents who have ever gambled, the favorite types of gambling are card, dice or board games with friends or family (28%), games of personal skill (21%) and sports events (18%). Preferences for all other types of gambling were much lower.

As with adults, it is helpful to examine the demographic characteristics of adolescent respondents who wager at increasing levels of frequency. To analyze levels of gambling participation, we divided the adolescent respondents into four groups:

- **non-gamblers** who have never participated in any type of gambling (22% of the total sample);
- **infrequent gamblers** who have participated in one or more types of gambling but not in the past year (13% of the total sample);
- **past-year gamblers** who have participated in one or more types of gambling in the past year but not on a weekly basis (57% of the total sample); and

¹ Wagering on games of personal skill involves betting on one's own performance in an activity such as basketball, pool or bowling.

Gambling and Problem Gambling Among Adolescents in Washington State

- **weekly gamblers** who participate in one or more types of gambling on a weekly basis (8% of the total sample).

Table 1 shows differences in the demographic characteristics of non-gamblers, infrequent gamblers, past year gamblers and weekly gamblers among adolescents in Washington State as well as differences in the mean age and the mean number of gambling activities these groups have ever tried.

Table 1: Demographics of Adolescent Gamblers in Washington State

		Non-Gamblers % (224)	Infrequent Gamblers % (125)	Past Year Gamblers % (574)	Weekly Gamblers % (77)	Sig.
Gender						***
	Male	50.0	48.0	51.4	80.5	
	Female	50.0	52.0	48.6	19.5	
Age						NS
	13	21.5	16.0	16.0	13.0	
	14	21.1	24.0	17.2	19.5	
	15	26.0	24.0	24.2	22.1	
	16	15.2	22.4	24.2	22.1	
	17	16.1	13.6	18.3	23.4	
Ethnicity						NS
	White	88.7	90.3	87.9	79.2	
	Black	---	1.6	1.4	3.9	
	Hispanic	5.0	2.4	3.9	5.2	
	Other	6.3	5.6	6.8	11.7	
Size of HH [√]						**
	1 Adult	11.2	15.2	8.5	10.4	
	2 Adults	87.9	81.6	88.7	83.1	
	3+ Adults	0.9	3.2	2.8	6.5	
Receive allowance		40.4	48.0	48.4	53.9	NS
Work 10+ hrs/week		13.8	15.3	20.8	41.6	***
Earn \$50+ per week		14.0	18.1	23.3	43.5	***
Mean Age		14.8	14.9	15.1	15.2	*
Mean Gambling Activities		---	1.5	3.3	5.5	***

Pearson Chi-Square * p < .05 ** p < .01 *** p < .001

√ One respondent indicated that, although he was only 13 years old, attended school and received an allowance, he lived in a household without any adults. For this analysis, we have assumed that this was a coding error and he has been included in the group living with 2 adults in the household.

Table 1 shows that, as in other studies, gender is strongly associated with gambling involvement among adolescents in Washington State with males significantly more likely than females to gamble weekly. As with gender, age and ethnicity are also correlated with gambling involvement although these differences do not achieve statistical significance because of the small size of the group that gambles weekly. Adolescents aged 16 and 17 are more likely to have gambled than younger adolescents. Adolescents who identify themselves as Black or Other are more likely than White or Hispanic adolescents to gamble weekly.

Finally, this table shows that adolescent gambling involvement is strongly associated with employment and income. Adolescents who work 10 or more hours per week and those who earn \$50 or more per week are significantly more likely to gamble and to gamble weekly than adolescents who work fewer hours and/or earn less money. **Table 1** shows that past year and weekly gamblers are significantly older than non-gamblers and infrequent gamblers. **Table 1** also shows that the **number** of gambling activities that respondents have ever tried increases significantly with increased participation.

Starting to Gamble

Adolescent respondents who gambled were asked at what age they started gambling and what types of gambling they did when they started. While the age when adolescents reported starting to gamble ranged from 4 to 17 years old, the mean age at which adolescent respondents in Washington State reported starting to gamble was 12.2 years old. This is slightly lower than the age at which adolescents in Georgia, Texas and Washington State acknowledge starting to gamble and the same as the age at which adolescents in New York State acknowledge starting to gamble.

In Washington State, adolescents who gambled and reported the age at which they started (N=719) were most likely to have started gambling on card, board or dice games with friends or family (29%). Another 18% of these respondents reported that they started wagering on games of personal skill, 16% on sports events and 13% on charitable games. These adolescents were most likely to have started gambling with friends (45%) or with a parent (28%). Another 13% of these respondents reported that they started gambling with a sibling.

Expenditures on Gambling

Reported estimates of gambling expenditures obtained in surveys are based on recollection and self-report. There are fundamental uncertainties about the tacit definitions that people use when they are asked to estimate “spending” on different types of gambling (Blaszczynski, Dumlao & Lange 1997). There are also questions about the impact that the social acceptability of different types of gambling may have on reports of expenditures. Finally, there are methodological issues related to sampling small groups of heavy users in general population surveys. These challenges are common to a variety of disciplines, including market research as well as research on alcohol misuse and sexual behavior (Baldrige, Moore, Sylvester & Volberg 1999; Volberg, Moore, Christiansen, Cummings & Banks 1998). ***For these reasons, data on reported expenditures are best suited for analyzing the relative importance of different types of gambling among a jurisdiction's residents rather than for ascertaining absolute spending levels on different types of wagering.***

Adolescents who had done any kind of gambling in the past year were asked to indicate how much money they spend on each gambling activity in a typical month. If an adolescent reported past year participation in a type of gambling but gave no information about expenditures, their response was recorded as zero. This same conservative approach was taken in the analysis of similar data from Georgia and New York as well as with the baseline survey of adolescents in Washington State. Expenditure data for the adolescent surveys in Minnesota and Texas are reported in categories and cannot be analyzed in the same way as the expenditure data from Georgia, New York and Washington State.

As with the results of the adult survey, the reported **total monthly expenditure** for each gambling activity is calculated by summing the amount of money reported by each respondent on each gambling activity. The total amount spent in a typical month by all respondents on all gambling activities is then calculated by dividing the amount spent on each activity by the total. The total monthly expenditure on all gambling activities is divided by the total number of respondents in the survey to obtain an average amount spent per respondent.

Total Expenditures

Using the method outlined above, adolescent respondents in Washington State (N=1,000) report spending an average of \$16 per month on all gambling activities. This is an increase over the average of \$10 per month reported by adolescents in Washington State in 1993 but is substantially lower than the average of \$34 per month reported by adolescents surveyed in New York State (Volberg 1998). Among adults in Washington State in 1998, the average expenditure on gambling was \$39 per month (Volberg & Moore 1999b).

Table 2 shows total reported monthly expenditures on different types of gambling among adolescents in Washington State as well as the proportion that each type of expenditure represents of total adjusted monthly expenditures on gambling among adolescents. Analysis shows that wagering on games of skill, card, dice and board games with friends or family and sports events accounts for 57% of reported monthly expenditures on gambling among Washington State adolescents.

Table 2: Reported Monthly Expenditures on Gambling

	Monthly Expenditures \$	% of Total
	(1000)	
Games of Skill	4,385	27.1
Friends / Family	2,458	15.2
Sports	2,341	14.5
Charitable	1,468	9.1
Other	1,083	6.7
Bingo	1,074	6.6
Arcade / Video Games	930	5.7
Horse or Dog Races	460	2.8
Instant Lottery	342	2.1
Flipping Coins	340	2.1
Telephone or Computer	292	1.8
Gambling Machines	287	1.8
Pulltabs	240	1.5
Casino	225	1.4
Total Expenditures	16,165	100.0

Variations in Expenditures

Table 3 on the following page shows mean monthly expenditures on all types of gambling by Washington State adolescents. As in other states, male adolescents in Washington State report spending significantly more than females, older adolescents spend significantly more than younger adolescents and adolescents from non-traditional households spend significantly more than adolescents from two-parent households. Although not shown in the table, adolescents who work 10 or more hours a week and those who earn \$50 or more per week spend significantly more on gambling than those who work fewer hours or who earn less per week.

Table 3: Monthly Expenditures on Gambling by Washington State Adolescents

		Mean Monthly Expenditure \$ (1000)	Median Monthly Expenditure [√] \$ (1000)	Sig.
Gender				
	Male	20.26	3.72	**
	Female	11.56	1.32	
Age				
	13	10.45	.91	**
	14	11.50	1.19	
	15	15.03	2.39	
	16	21.60	4.59	
	17	21.68	2.87	
Ethnicity				
	White	11.90	2.12	NS
	Black	39.00	6.50	
	Hispanic	31.50	1.25	
	Other	57.42	4.12	
Size of HH				
	1 Adult	31.15	1.57	*
	2 Adults	13.29	2.14	
	3+ Adults	52.93	9.33	

Kruskal-Wallis Test * p < .05 ** p < .01 *** p < .001

[√] Grouped median. Significance test is on median rather than on mean.

As with adults, the majority of adolescents in Washington State report spending rather small amounts on gambling in a typical month. Two-thirds of the adolescent respondents (68%) report spending less than \$10 on gambling in a typical month. Another 25% of the adolescent respondents report spending between \$10 and \$49 in a typical month. Seven percent of the adolescent respondents report spending \$50 or more on gambling in a typical month. However, this small group accounts for 61% of reported monthly expenditures on gambling among adolescents in Washington State. Respondents in this highest spending group are significantly more likely than other respondents to be male, to live in non-traditional households, to work 10 or more hours per week and to have weekly incomes over \$50.

Gambling on the Lottery

Contemporary high school students represent a unique group in the history of the United States: they are the only constituency that has experienced state-sponsored and culturally approved gambling throughout their entire lives (Shaffer & Hall 1996). As legal gambling has proliferated, policy makers, researchers and clinicians have become increasingly concerned about the impact of legal gambling on adolescents (North American Think Tank on Youth Gambling 1995).

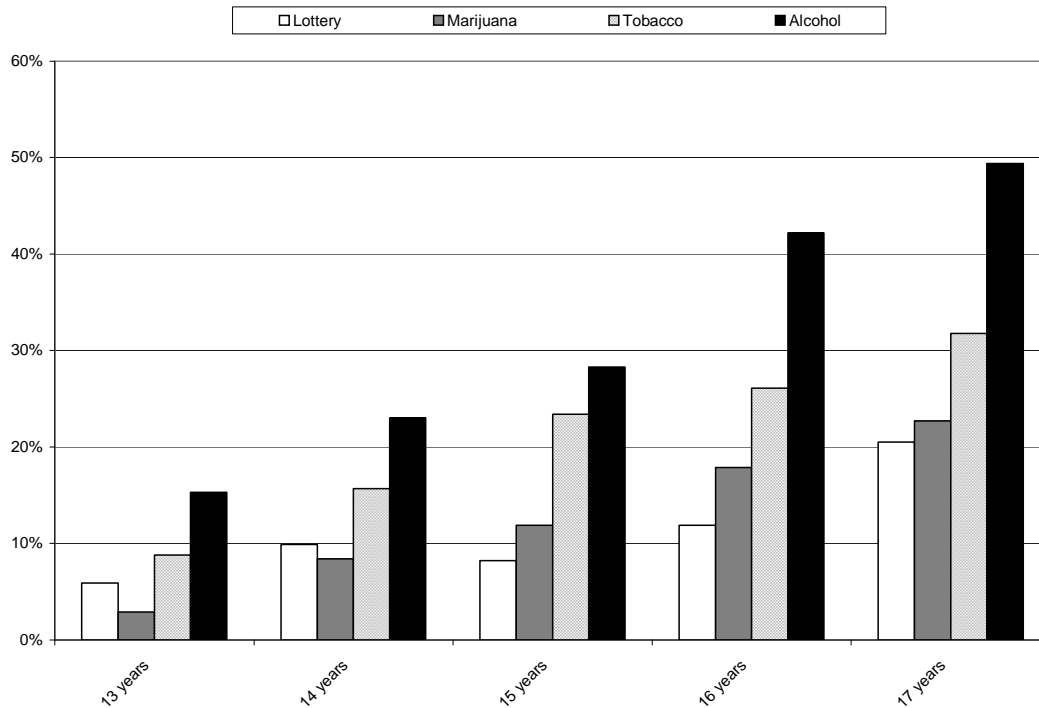
Epidemiologists have long considered certain drugs (e.g. cigarettes) as **gateways** to more pervasive illicit drug-using patterns (Kandel 1993). As a socially endorsed risk-taking behavior, some researchers and clinicians fear that lottery gambling, in particular, may be an experience that encourages young people to engage in other, less broadly sanctioned types of gambling, such as sports betting. Researchers and clinicians also fear that gambling may lead adolescents to engage in other risk-taking behaviors, such as illicit drug use. Researchers have begun to consider and test the hypothesis that lottery play may act as a gateway to other risk-taking behaviors among adolescents (Shaffer 1993; Shaffer & Hall 1996).

Gambling and Problem Gambling Among Adolescents in Washington State

To test the notion that lottery play may be a gateway to other types of gambling among adolescents in Washington State, we examined lottery play by age as well as looking at the relationship between lottery play and other types of gambling. This analysis shows that there is a significant increase in lottery play by age. While 6% of 13-year-olds in the Washington State sample have purchased lottery products (mostly instant lottery tickets) in the past year, 21% of 17-year-olds have done so. Past year participation in several other types of gambling, including pulltabs and games of skill as well as at casinos, also increases significantly with age.

To test the notion that lottery play acts as a gateway to other risk-taking behaviors, we examined past year use of alcohol, tobacco and marijuana as well as lottery play. **Figure 2** shows that, even more than lottery play, there are significant increases in Washington State adolescents' past year use of tobacco, alcohol and marijuana with age. It is interesting that for adolescents aged 13 and 14, past year lottery play is higher than marijuana use. Among older adolescents, past year lottery play is lower than the other risky activities analyzed here.

Figure 2: Lottery Play and Other Risk-Taking Activities by Washington State Adolescents



Since these are not longitudinal data, we cannot prove the hypothesis that lottery play is a gateway to other types of gambling and to other risky behaviors. However, these data do show that increases in lottery play are correlated with increases in other types of gambling and with the use of alcohol, tobacco and marijuana. Given increased access to gambling in general, and to state lotteries in particular, it will be important in the future to attend to the impact of legal gambling, and of lottery games, on adolescents in Washington State.

ADOLESCENT PROBLEM GAMBLING IN WASHINGTON STATE

Methods to assess problem and pathological gambling among adolescents are less well-developed than methods to assess problem and pathological gambling among adults. In the survey of adolescents in Washington State, two different screens were used to identify respondents as problem gamblers. These included the South Oaks Gambling Screen as revised for adolescents (SOGS-RA) and the Fisher DSM-IV Screen. In this section, we present the results of the approach based on the SOGS-RA to identifying non-problem, at-risk and problem gamblers. Results based on the Fisher DSM-IV Screen are presented separately (see *Comparing Problem Gambling Screens for Adolescents* on Page 40).

As described in the section *Defining Problem Gambling Among Adolescents* on Page 2, we use a multi-factor method to assess problem gambling among adolescents in Washington State. The multi-factor method utilizes the South Oaks Gambling Screen items but treats the behavioral and borrowing dimensions of the screen separately as well as incorporating measures of gambling involvement. While conservative, this approach is intended to focus as clearly as possible on those adolescents who show *incontrovertible* signs of problematic involvement with gambling. It is worth reminding readers once again that, in this report, the term **problem gambler** (rather than the term “probable pathological gambler”) refers to the most severe classification of adolescent gamblers; those who show the clearest evidence of gambling involvement that has compromised, disrupted or damaged other important areas in their lives.

Using the multi-factor method, the adolescent respondents from Washington State were classified into four categories:

- **non-gamblers** who did not acknowledge participation in any of the gambling activities included in the survey (22.4% of the total sample);
- **non-problem gamblers** who gambled with few or no difficulties on any dimension (69.2% of the total sample);
- **at-risk gamblers** who gambled weekly with no problems or less intensively but with some problems (7.5% of the total sample); and
- **problem gamblers** who had four or more behavioral problems or six or more borrowing problems and who either gambled weekly or spent more than \$10 on gambling in a typical month (0.9% of the total sample).

In considering at-risk and problem gamblers among adolescents in Washington State, it is important to note that the majority of the at-risk gamblers (96%) gamble once a week or more often on one or more activities. Over a quarter of these respondents (28%) also have some behavioral difficulties associated with their gambling involvement. In contrast, only 56% of the problem gamblers (56%) gamble once a week or more often. However, all of them acknowledge at least four behavioral difficulties associated with their gambling and the majority (78%) also acknowledge three or more difficulties related to borrowing money to gamble or pay gambling debts.

Prevalence Rates

In Washington State, 0.9% ($\pm 0.58\%$) of the total sample of adolescent respondents were classified as problem gamblers. Based on the most recent population estimates from the United States Bureau of the Census (1999), there are 414,871 individuals between 13 and 17 in Washington State. Based on this figure, we estimate that there are between 1,330 (0.32%) and

6,100 (1.48%) adolescents in Washington State who have experienced severe problems with their gambling.

An additional 7.5% ($\pm 1.63\%$) of the total sample of adolescent respondents were classified as gamblers at risk for developing gambling problems. Based on this figure, we estimate that there are between 24,400 (5.87%) and 37,900 (9.13%) adolescents in Washington State whose gambling involvement has caused them difficulties in the past or, more likely, places them at risk for developing gambling-related difficulties in the future.

Prevalence by Type of Gambling

Another approach to understanding the relationship between gambling activities and gambling-related problems is to examine the prevalence of gambling problems among adolescent respondents who have participated in specific types of gambling. **Table 4** shows the combined prevalence of at-risk and problem gambling for the entire adolescent sample, for adolescents who have ever gambled and among those respondents who have tried different types of gambling. Several types of gambling were not included in this table because the number of adolescent respondents who had ever participated in these activities was too small to yield meaningful results.

Table 4: Prevalence by Type of Gambling

Gambling Activities	Group Size	At Risk & Problem Gamblers %	Conf.
Total Sample	1000	8.4	± 1.7
Gamblers	776	10.8	± 2.2
Charitable	518	11.8	± 2.8
Bingo	233	12.4	± 4.2
Family / Friends	394	17.0	± 3.7
Games of Skill	371	18.6	± 4.0
Sports	247	19.0	± 4.9
Flipping Coins	128	21.1	± 7.1
Instant Lottery	148	21.6	± 6.6
Arcade / Video	164	25.6	± 6.7

Table 4 shows that the prevalence of at-risk and problem gambling among adolescents who have wagered on charitable games and among those who have ever played bingo is only slightly higher than the prevalence rate among adolescents who have ever gambled. The prevalence of at-risk and problem gambling among adolescents who have wagered on several other activities is substantially higher than among adolescents in general or among those who have ever gambled. Prevalence rates are highest among adolescents who have ever wagered on arcade or video games and among those who have purchased instant lottery tickets. Prevalence rates are also high among adolescents who have ever wagered on card, dice or board games with friends and family, games of personal skill, sports or flipping coins.

While the small size of some of these groups suggests caution in interpreting these numbers, this analysis points to the importance of targeting public education and prevention efforts at adolescents themselves and their families. Such efforts could also be targeted at video arcades where adolescents congregate and at retailers where adolescents are able to purchase instant lottery tickets.

COMPARING AT-RISK GAMBLERS IN WASHINGTON STATE

In considering the development of policies and programs to address adolescent gambling, it is important to direct these efforts in an effective and efficient way. The most effective efforts at prevention, outreach and treatment are targeted at individuals who are at greatest risk of experiencing gambling-related difficulties. Since the purpose of this section is to examine individuals at risk, our focus will be on differences between adolescents who gamble, with and without problems, rather than on the entire sample of adolescents.

In considering the results presented in this section, it is important to note the small size of the group of problem gamblers (N=9). Results based on this group should be interpreted with caution because of the small size of this group and the large confidence intervals associated with small groups in statistical analysis. Despite this caveat, we believe that the results of this survey can be used to draw meaningful conclusions about the characteristics of problem gambling among adolescents in Washington State. Again, we remind readers that, in this report, the term **problem gambler** (rather than the term “probable pathological gambler”) refers to the most severe classification of adolescent gamblers; those who show the clearest evidence of gambling involvement that has compromised, disrupted or damaged other important areas in their lives.

Demographics

Table 5 presents information on the demographic characteristics of adolescents in Washington State who gamble without problems compared to those at risk of developing gambling problems and those with severe problems.

Table 5: Demographic Characteristics of At Risk Gamblers in Washington State

		Non-Problem %	At Risk %	Problem %	Sig.
		(692)	(75)	(9)	
Gender					***
	Male	50.7	78.7	77.8	
	Female	49.3	21.3	22.2	
Age					NS
	13	15.6	13.3	44.4	
	14	18.6	20.0	0.0	
	15	24.1	22.7	22.2	
	16	24.0	22.7	11.1	
	17	17.6	21.3	22.2	
Ethnicity					NS
	White	88.4	78.7	88.9	
	Black	1.5	4.0	0.0	
	Hispanic	3.5	6.7	0.0	
	Other	6.7	10.7	11.1	
Size of HH					***
	1 Adult	9.8	10.7	0.0	
	2 Adults	87.4	84.0	77.8	
	3+ Adults	2.7	5.3	22.2	

Pearson Chi-Square * p < .05 ** p < .01 *** p < .001

Table 5 (cont'd): Demographic Characteristics of At Risk Gamblers in Washington State

		Non-Problem %	At Risk %	Problem %	Sig.
		(692)	(75)	(9)	
Income					
	Receive allowance	48.1	54.1	66.7	NS
	Work 10+ hrs/week	20.0	40.0	22.2	***
	Earn \$50+ per week	22.3	43.3	33.3	**
One or both parents gamble		45.6	63.0	77.8	**

Pearson Chi-Square * p < .05 ** p < .01 *** p < .001

Table 5 shows that at-risk and problem gamblers in Washington State are significantly more likely to be male compared to adolescents who have gambled without problems. Over three-quarters of both the at-risk and problem gamblers in Washington State are male. At-risk and problem gamblers in Washington State are significantly more likely than non-problem gamblers to earn \$50 or more per week while at-risk gamblers are significantly more likely than either non-problem or problem gamblers to work 10 or more hours per week. Finally, at-risk and problem gamblers are significantly more likely than non-problem gamblers to have parents who gamble.

Gambling Participation

In considering the relationship between gambling involvement and gambling problems, it is helpful to look at differences in the gambling activities of non-problem, at-risk and problem gamblers in Washington State. Our focus is on lifetime gambling because past year and weekly gambling form one dimension in the multi-factor method used to classify adolescent respondents as problem or at-risk gamblers and because adolescents have had more limited life experiences than adults.

Table 6 on the following page shows that there are significant differences in the types of gambling that non-problem, at-risk and problem gamblers have ever tried. The only types of gambling for which differences among these groups are **not** significant are raffles and charitable games, bingo and casinos. While problem gamblers are the most likely to have ever participated in most types of gambling, at-risk gamblers more likely than problem gamblers to have purchased instant lottery tickets and pulltabs and to have wagered on games of personal skill and horse or dog races. **Table 6** also shows that there is a significant difference in the number of types of gambling that non-problem, at-risk and problem gamblers have ever tried. Patterns of **past year** gambling participation are similar to patterns of lifetime participation among adolescents in Washington State.

Table 6: Lifetime Gambling by At Risk Groups in Washington State

	Non-Problem Gamblers %	At Risk Gamblers %	Problem Gamblers %	Sig.
	(692)	(75)	(9)	
Games of Skill	43.8	82.7	77.8	***
Friends / Family	47.3	77.3	100.0	***
Sports	28.9	56.0	55.6	***
Arcade / Video	17.6	46.7	77.8	***
Horse or Dog Races	5.8	40.7	33.3	**
Instant Lottery	16.8	38.7	33.3	***
Flipping Coins	14.6	28.0	66.7	***
Pulltabs	9.4	18.7	11.1	*
Gambling Machines	7.4	16.0	22.2	*
Other	4.9	14.7	22.2	***
Lotto, Quinto, or Lucky for Life	3.8	10.7	11.1	*
Card Rooms / Minicasin	1.7	9.3	11.1	***
Telephone or Computer Wager	2.6	8.0	44.4	***
Daily Games or Daily Keno	1.9	6.7	0.0	*
Mean Number of Activities	0.0	1.5	3.0	***

Pearson Chi-Square * p < .05 ** p < .01 *** p < .001

Since, by definition, the non-problem gambling group among the adolescents surveyed in Washington State does not gamble on a weekly basis, it is not possible to make statistical comparisons of weekly gambling involvement between this group and the at-risk and problem gamblers. **Weekly** gambling participation does differ between the at-risk and problem gambling groups although it is difficult to establish statistical significance because of the small size of these groups. Both at-risk and problem gamblers are most likely to wager regularly on games of personal skill, card, dice or board games with friends and family, sports and arcade or video games.

Gambling Expenditures

Given the known correlation between gambling problems and heavy spending on gambling among adults, it is useful to examine differences in expenditures on gambling of non-problem, at-risk and problem gamblers among adolescents in Washington State. **Table 7** on the following page shows mean monthly expenditures on different types of gambling. Only those types of gambling for which problem gamblers reported spending more than \$1 in a typical month are shown

Table 7: Mean Monthly Expenditures by At Risk Groups in Washington State

	Non-Problem Gamblers %	At Risk Gamblers %	Problem Gamblers %	Sig.
	(692)	(75)	(9)	
Other	0.01	10.60	25.56	***
Sports	1.90	11.60	17.44	***
Games of Skill	4.39	16.61	10.89	***
Friends / Family	2.24	10.97	9.44	***
Arcade / Video Games	0.79	4.53	5.11	***
Charitable	1.73	3.27	3.00	
Flipping Coins	0.29	1.49	2.67	***
Bingo	1.03	4.55	2.44	
Telephone or Computer	0.20	1.80	2.33	***
Instant Lottery	0.32	1.41	1.44	***
Total Expenditures	14.4	73.03	80.33	***

Kruskal-Wallis Test * p < .05 ** p < .01 *** p < .001

Table 7 shows that adolescent at-risk and problem gamblers in Washington State spend significantly more money in a typical month than non-problem gamblers on sports, games of personal skill, and on card, dice or board games with friends and family. These respondents also spend significantly more money in a typical month gambling on arcade and video games, on telephone or computer games and on instant lottery tickets. **Table 7** also shows that reported expenditures on gambling increase significantly with increased gambling-related difficulties among adolescents in Washington State.

In our discussion of gambling expenditures among the entire adolescent sample, we identified a small group of respondents (7%) who reported spending \$50 or more on different gambling activities in a typical month (see the discussion of *Variations in Expenditures* on Page 13). This group accounted for 61% of reported monthly expenditures among adolescents in Washington State. In considering risk factors associated with problem gambling among adolescents in Washington State, it is worth noting that 33% of the problem gamblers and 39% of the at-risk gamblers in this sample fall into this heavy-spending group compared to 4% of the non-problem gamblers.

Other Significant Differences

In addition to gambling involvement and gambling expenditures, there are other significant differences between adolescent non-problem, at-risk and problem gamblers in Washington State. These include differences in adolescents' perceptions of their gambling involvement, the amount of time they usually gamble and the largest amount they report losing in a single day. There are also significant differences in the types of borrowing that adolescent non-problem, at-risk and problem gamblers have done to get money to gamble or to pay gambling debts.

Problem gamblers report starting to gamble at a lower average age (10.3 years old) than at-risk or non-problem gamblers (12.0 years old and 12.2 years old respectively). Non-problem, at-risk and problem gamblers are most likely to have started gambling on card, dice or board games with friends and family, games of personal skill or sports.

Table 8 shows other significant differences between non-problem, at-risk and problem gamblers among Washington State adolescents. Problem gamblers are significantly more likely to gamble alone than non-problem or at-risk gamblers. All three groups of adolescent gamblers are most likely to gamble with friends and acquaintances although non-problem gamblers are more likely than at-risk and problem gamblers to gamble with family members. At-risk and problem gamblers spend significantly more time gambling than non-problem gamblers and are significantly more likely to have ever lost \$50 or more in a single gambling session.

Table 8: Correlates of At Risk Gambling in Washington State

	Non-Problem Gamblers %	At Risk Gamblers %	Problem Gamblers %	Sig.
	(692)	(75)	(9)	
Usually Gamble With:				
Alone	2.8	1.3	11.1	***
Family Members	37.0	16.0	0.0	
Friends, Acquaintances	60.2	82.7	88.9	
Time Spent Gambling				
Less Than 1 Hour	58.9	34.7	11.1	***
1 - 2 Hours	33.8	42.7	33.3	
3 or More Hours	7.3	22.7	55.6	
Largest Amount Ever Gambled				
Less Than \$10	76.1	32.0	22.2	***
\$10 - \$49	21.4	44.0	22.2	
\$50 or More	2.4	24.0	55.6	
Parent ever had a gambling problem	2.0	4.0	22.2	***
Feel you have ever had a gambling problem	0.6	4.0	55.6	***
Ever felt nervous about your gambling	7.7	33.3	44.4	***

Pearson Chi-Square * p < .05 ** p < .01 *** p < .001

Table 8 also shows that adolescent problem gamblers in Washington State are significantly more likely than at-risk or non-problem gamblers to feel that a parent has had a gambling problem and to feel that they have had a problem with their gambling. At-risk and problem gamblers are significantly more likely than non-problem gamblers to have felt nervous about their gambling.

GAMBLING, ALCOHOL AND DRUG USE

Research shows that problem gambling among adults is often complicated by involvement with drugs and/or alcohol (Adkins, Rugle & Taber 1985; Brown 1987; Lesieur & Heineman 1988; Linden, Pope & Jonas 1986). Two studies of adult problem gamblers in the general population support this finding from the treatment literature. In New Zealand, 60% of the “at large” pathological gamblers in the general population were found to be engaged in hazardous or harmful alcohol use (Abbott & Volberg 1996). In Alberta, all of the “at large” pathological gamblers in the general population were smokers; all of these individuals were classified as dangerously heavy alcohol consumers; and half of them had at some time used illicit drugs on a regular basis (Smith, Volberg & Wynne 1994).

Alcohol and Drug Use Among Adolescents

As in other states, alcohol, tobacco and marijuana are the substances most often used by adolescents in Washington State. **Table 9** shows that while a substantial proportion of the adolescents in the sample acknowledged using alcohol, tobacco and marijuana in the past year, only a small proportion of the respondents acknowledged using other, illicit drugs in the past year and even fewer acknowledged that they used these substances in the past month.

Table 9: Past Year Alcohol and Drug Use Among Adolescents in Washington State

	Within the past year	Within the past month
	%	%
	(1000)	(1000)
Alcohol	31.8	16.9
Tobacco	21.5	12.6
Marijuana	12.9	6.9
Other Drugs	3.8	1.5

In addition to assessing alcohol and drug use, adolescent respondents in Washington State were asked several questions to determine whether they were experiencing problems related to their use of alcohol or drugs. Small but significant proportions of the total sample of adolescents (N=1,000) indicated that they had gotten into difficulties with friends one or more times because of their drinking in the past year (4.1%), been criticized by someone they were dating because of their drinking (2.8%) or been in trouble with the police because of drinking (1.6%).

Respondents were asked similar questions about difficulties they may have had with their use of drugs. Again, small proportions of the total sample indicated that they had gotten into difficulties with friends one or more times because of their drug use in the past year (2.4%), been criticized by someone they were dating because of their drug use (3.1%) or been in trouble with the police because of drug use (1.2%).

Gambling, Alcohol and Drug Use

Based on research with adolescents in other states, we hypothesized that gambling would be significantly related to Washington State adolescents' use of alcohol and other drugs. **Table 10** shows that frequency of gambling is significantly related to alcohol, tobacco, marijuana and illicit drug use as well as to problems due to alcohol and drugs. Weekly gamblers are significantly

Gambling and Problem Gambling Among Adolescents in Washington State

more likely than infrequent or past year gamblers to have used alcohol, tobacco, marijuana and other drugs in the past year. Weekly gamblers are significantly more likely than infrequent or past year gamblers to acknowledge that they have gotten into trouble in the past year because of their alcohol or drug use. Trouble includes a positive response to any one of the questions about criticisms from friends or dates or having gotten into trouble with the police. As in other jurisdictions, weekly adolescent gamblers are not significantly more likely than infrequent and past year gamblers to have sought help for an alcohol or drug problem.

Table 10: Past Year Alcohol and Drug Use Among Adolescent Gamblers in Washington State

	Infrequent Gamblers	Past Year Gamblers	Weekly Gamblers	Sig.
	%	%	%	
	(125)	(574)	(77)	
Alcohol	20.8	36.3	62.0	***
Tobacco	16.1	24.0	50.6	***
Marijuana	6.5	143.5	33.8	***
Drugs	2.4	4.4	10.5	*
Trouble due to alcohol	1.6	4.9	16.9	***
Trouble due to drugs	3.2	5.1	20.8	***
Sought help for alcohol/drugs	7.7	9.3	16.0	NS

Pearson Chi-Square * p < .05 ** p < .01 *** p < .001

Even more than gambling frequency, gambling problems among adolescents are correlated with the use of alcohol and drugs. **Table 11** shows that at-risk and problem gamblers are significantly more likely than non-problem gamblers to have used alcohol, tobacco, marijuana and illicit drugs in the past year. Problem gamblers are even more likely than weekly gamblers to have used alcohol, tobacco, marijuana and other, illicit drugs in the past year. At-risk and problem gamblers are also significantly more likely than non-problem gamblers to have gotten into trouble in the past year because of their use of alcohol or drugs and to have sought help for an alcohol or drug use problem.

Table 11: Past Year Alcohol and Drug Use Among At Risk Groups in Washington State

	Non-Problem Gamblers	At Risk Gamblers	Problem Gamblers	Sig.
	%	%	%	
	(692)	(75)	(9)	
Alcohol	33.6	57.3	77.8	***
Tobacco	22.1	49.3	77.8	***
Marijuana	13.0	29.3	55.6	***
Drugs	3.9	6.8	44.4	***
Trouble due to alcohol	4.3	13.3	33.3	***
Trouble due to drugs	4.8	16.0	44.4	***
Sought help alcohol/drugs	8.5	12.8	57.1	***

Pearson Chi-Square * p < .05 ** p < .01 *** p < .001

COMPARING THE 1993 AND 1999 ADOLESCENT SURVEYS

A critical purpose of replication studies is to determine whether gambling participation and problem gambling prevalence rates have changed over time in a given jurisdiction. Since 1993, a growing number of surveys that replicate baseline studies of gambling and problem gambling have been carried out in the United States. In this section, we examine changes in gambling involvement and gambling-related problems among adolescents in Washington State to determine whether enough statistical evidence exists to conclude that gambling involvement and gambling-related problems among adolescents have increased significantly in Washington State between 1993 and 1999. In examining the evidence, we employ a general procedure called *hypothesis testing*.

As in the adult report (Volberg & Moore 1999b), the tables in this section present several comparisons of the data from the two adolescent gambling surveys in Washington State. These include comparisons of the samples, of gambling involvement, of problem gambling prevalence rates and of adolescent problem gamblers. Again, as in the adult report, we have adopted the convention of presenting the descriptive data for each sample, then the direction of any statistically significant change with the *alpha* value set relatively high at a 90% confidence interval (rather than the more conventional 95% confidence interval) and then the specific results of a one-tail test of significance. The one-tail test is used because of our interest in testing for *increases* or *decreases* in gambling involvement and prevalence rather than simply for *change*.

Comparing the Adolescent Surveys in Washington State

The baseline adolescent survey in Washington State was carried out in January and February of 1993 by Gemini Research and the Gilmore Research Group, the same team responsible for the present study as well as for the baseline and replication studies of adults in Washington State (Volberg 1993a, 1993b; Volberg & Moore 1999b). A random sample of 1,045 adolescents residing in Washington State were interviewed over the telephone about their involvement in gambling, about their gambling-related problems and about their demographic characteristics.

Comparing the Questionnaires

In the *Methods* section, we noted that the questionnaire for the adolescent replication study survey included six major sections: gambling involvement, the South Oaks Gambling Screen (Revised Adolescent version), the Fisher DSM-IV Screen, questions about life experiences related to gambling, questions about tobacco, alcohol and drug use and questions about demographic characteristics. The 1993 adolescent survey was composed of four major sections, including questions about gambling involvement, the adolescent version of the South Oaks Gambling Screen, demographic questions and questions about alcohol and drug use.

As in the adult replication study in Washington State, care was taken in finalizing the 1999 adolescent questionnaire to ensure that gambling participation could be compared with the earlier survey. There were several differences in the types of gambling included in the 1993 and 1999 surveys. **Table 12** on the following page shows the differences between the 1993 and 1999 surveys in the first section of the questionnaire about gambling involvement. As noted above (see *Questionnaire* on Page 5), questions about sports betting were abbreviated in the 1999 questionnaire and questions about casino gambling and telephone or computer wagering were added to the 1999 questionnaire. As with the adult questionnaire, changes were made to the wording of several questions to reflect changes in these products.

Table 12: Comparing Types of Gambling in 1993 and 1999

1993	1999
Instant or scratch off lottery games	Instant or scratch off lottery games
Daily Game	Daily Game or Daily Keno
Lotto or Quinto	Lotto, Quinto or Lucky for Life
Pulltabs or punchboards	Pulltabs
Raffles	Raffles, FREs or Reno Nights
Bingo	Bingo
Flipping coins	Flipping coins
Games of skill	Games of personal skill
Card, dice or board games w/friends/family	Card, dice or board games w/friends/family
Card games in card rooms	Card games in card rooms or mini-casinos
Arcade or video games	Arcade or video games
Slot machines	Slot machines, video poker or other gaming machines
Sports w/friends/family Formal sports pools Sports w/bookie	Sports (w/friends/family, pools, w/bookie)
Horse or dog races	Horse or dog races
	Casino
	Telephone or computer wagering
Other	Other

The same problem gambling screen was used in the 1993 and 1999 adolescent surveys. As noted above, a second problem gambling screen was included in the 1999 questionnaire which matches the second problem gambling screen used in the replication study of Washington State adults. As with the adult replication study, two questions were used to assess race and ethnicity among adolescents in 1999 compared with the one question used in 1993. Finally, the order of the sections of questions on demographics and on alcohol and drug use was switched in the 1999 adolescent survey.

Comparing the Samples

Since 1993, there has been a substantial increase in the population of Washington State. Given this change in the population, it is helpful to compare the characteristics of the samples from the two adolescent surveys to identify any differences. **Table 13** compares the demographic characteristics of the 1993 and 1999 adolescent samples in Washington State.

Table 13: Comparing Demographics of Adolescent Samples

		1993 %	1999 %	Direction (p≤.10)	p-value (1-tail)
		(1045)	(1000)		
Gender					
	Male	49.6	52.9	+	.066
	Female	50.4	47.1	-	.066
Age					
	13	18.5	17.0		.192
	14	23.8	19.1	-	.005
	15	22.0	24.4	+	.100
	16	19.7	21.8		.122
	17	16.0	17.6		.164

Table 13 (cont'd): Comparing Demographics of Adolescent Samples

		1993 %	1999 %	Direction (p≤.10)	p-value (1-tail)
		(1045)	(1000)		
Ethnicity					
	White	91.1	87.7	-	.014
	Black	1.7	1.3		.217
	Hispanic	2.1	4.0	+	.006
	Other	5.0	6.9	+	.032
Size of HH					
	1 Adult	9.2	10.1		.242
	2 Adults	87.7	87.2		.378
	3+ Adults	3.2	2.7		.270
Income					
	Receive allowance	47.7	47.0		.383
	Work 10+ hrs/week	20.8	20.2		.459
	Earn \$50+ per week	21.1	22.1	+	.044

Table 13 shows several differences in the two adolescent samples. There is a significantly larger proportion of male adolescents in the 1999 survey when compared with the earlier study. There is a significantly larger proportion of Hispanic and “Other” respondents in the 1999 survey when compared with the earlier study, although some of this may be due to differences in the way that ethnicity was determined in the two surveys. Finally, there is a significantly higher proportion of adolescents in the 1999 sample who have \$50 or more per week to spend, through allowances and employment.

Changes in Gambling Participation

As in the adult survey in Washington State, there have been substantial changes in adolescent gambling participation in Washington State between 1993 and 1999. **Table 14** provides an overview of these changes. Again, as with the adults, the table clearly shows a significant increase in the proportion of adolescent respondents who deny any gambling involvement and a significant decrease in the proportion of adolescent respondents who acknowledge gambling on one or more activities once a week or more often.

Table 14: Comparing Overall Gambling Participation

	1993 %	1999 %	Direction (p≤.10)	p-value (1-tail)
	(1045)	(1000)		
Non-Gamblers	16.7	22.4	+	.001
Infrequent	14.4	12.5		.110
Past Year	59.3	57.4		.188
Weekly	9.6	7.7	-	.066

In our report on the adult replication survey in Washington State, we speculated on several possible explanations for the drop in gambling participation in Washington State. These reasons included

gambling market saturation and declining interest in some types of gambling (Volberg & Moore 1999b). The changes in gambling participation that we have identified among adolescents in Washington State mirror the changes identified among adults in Washington State. It is likely that the reasons for these changes among adolescents are similar to the reasons for declining gambling participation among adults in the same jurisdiction.

The next table provides a more detailed picture of how gambling involvement among adolescents has changed in Washington State between 1993 and 1999. **Table 15** shows changes in lifetime participation in all of the types of gambling included in the two adolescent surveys. Among adults in Washington State, the number of gambling activities where participation increased was matched by the number where participation decreased. In contrast, among adolescents, the number of gambling activities that have seen significant increases is smaller than the number of activities that have seen significant decreases.

Table 15: Comparing Lifetime Gambling Participation

	1993	1999	Direction (p≤.10)	p-value (1-tail)
	%	%		
	(1045)	(1000)		
Charitable	54.4	52.1		.216
Sports	49.8	24.7	-	.000
Friends / Family	48.2	39.5	-	.000
Games of Skill	27.7	37.2	+	.000
Bingo	25.0	23.3		.188
Instant Lottery	14.9	14.8		.468
Flipping Coins	14.6	12.8		.126
Arcade / Video Games	11.9	16.4	+	.002
Pulltabs	9.2	8.1		.212
Horse or Dog Races	8.2	5.1	-	.002
Gambling Machines	7.6	6.5		.175
Lotto / Quinto / Lucky for Life	5.4	3.5	-	.021
Other	4.0	4.9		.167
Daily Game / Daily Keno	3.4	1.8	-	.010
Card Rooms / Mini-casinos	2.6	2.0		.189

Table 15 shows that, among adolescents, lifetime participation has increased for wagering on games of personal skill and on arcade or video games. Lifetime participation has decreased for sports betting as well as wagering on card, dice or board games with friends and family. Lifetime participation by adolescents has also decreased for several legal types of gambling in Washington State. These include wagering on horse or dog races and purchasing large-jackpot and daily game lottery tickets. No comparison possible for wagering at casinos and by telephone or computer since these activities were not included in the baseline survey in 1993.

Changes in Gambling, Alcohol and Drug Use

Table 16 on the following page shows changes in gambling participation associated with alcohol and drug use among adolescents in Washington State between 1993 and 1999. National surveys have shown that alcohol and drug use has declined among American teenagers throughout the 1990s. This national trend is reflected in the data from Washington State. **Table 16** clearly shows that there has been a significant increase in the proportion of adolescents who have never gambled or used alcohol or drugs. However, there is a significant increase in the proportion of adolescents in Washington State who have gambled and used alcohol and drugs.

This polarization appears to have come about as the proportion of Washington State adolescents who have gambled and used alcohol increase the scope of their risk-taking participation to include drug use.

Table 16: Comparing Gambling, Alcohol and Drug Use

	1993 %	1999 %	Direction (p≤.10)	p-value (1-tail)
	(1045)	(1000)		
None	13.2	17.7	+	.002
Single Use				
Gambling Only	45.8	42.9	-	.091
Alcohol Only	2.7	3.0		.331
Drugs Only	0.1	0.1		.488
Dual Use				
Gambling & Alcohol	28.3	18.2	-	.000
Gambling & Drugs	0.3	0.9	+	.035
Alcohol & Drugs	0.8	1.6	+	.040
Triple Use	8.8	15.6	+	.000

Changes in Problem Gambling Prevalence

Table 17 shows that, as with adults in Washington State, the prevalence of gambling-related problems among adolescents has remained stable between 1993 and 1999. As with the adults, this stability of problem gambling prevalence supports the notion that public education and awareness activities, as well as the availability of treatment services, can effectively mitigate the development of gambling problems in the general population.

Table 17: Comparing Problem Gambling Prevalence

	1993 %	1999 %	Direction (p≤.10)	p-value (1-tail)
Non-Problem	90.1	91.6		.127
At Risk	9.0	7.5		.110
Problem	0.9	0.9		.463

Changes in At-Risk and Problem Gamblers

In examining changes in the characteristics of adolescents with gambling-related difficulties in Washington State, we have elected to combine the small group of **problem gamblers** with the substantially larger group of **at-risk** gamblers. In our analysis of these groups (see *Comparing At Risk Gamblers in Washington State* on Page 18), we established that there were similarities between these two groups when compared with adolescents who gambled without problems. Our approach here is based on this analysis and on the difficulties of establishing statistical

Gambling and Problem Gambling Among Adolescents in Washington State

significance with small cell sizes. **Table 18** shows that there have been no significant changes in the demographic characteristics of adolescents with gambling-related difficulties in Washington State in 1993 and 1999.

Table 18: Comparing Adolescent At-Risk and Problem Gamblers

		1993 %	1999 %	Direction (p≤.10)	p-value (1-tail)
		(103)	(84)		
Gender					
	Male	74.8	78.6		.270
	Female	25.2	21.4		.270
Age					
	13	14.6	16.7		.346
	14	19.4	17.9		.393
	15	27.2	22.6		.237
	16	16.5	21.4		.195
	17	22.3	21.4		.441
Ethnicity					
	White	85.4	79.8		.153
	Black	1.9	3.6		.246
	Hispanic	2.9	6.0		.153
	Other	9.7	10.7		.411
Size of HH					
	1 Adult	4.9	9.5		.106
	2 Adults	86.4	83.3		.279
	3+ Adults	8.7	7.1		.345
Income					
	Receive allowance	52.4	55.4		.375
	Work 10+ hrs/week	33.7	38.1		.235
	Earn \$50+ per week	34.8	42.1		.157

COMPARING ADOLESCENTS AND ADULTS

With the similarities in the methods used to survey adults and adolescents, it is possible to compare gambling and problem gambling across age groups from adolescence through adulthood among residents in Washington State. In considering differences between adults and adolescents in gambling participation and gambling-related difficulties, it is important to reiterate that, since the legal gambling age in Washington State is 18, all gambling participation by our adolescent respondents is illegal. It is also important to remember that adults, particularly young adults who are not raising children, have substantially greater disposable income as well as greater access to other financial resources (such as credit cards) than adolescents.

This section compares lifetime gambling, gambling expenditures and problem gambling among adolescents aged 13 to 17, adults aged 18 to 24, adults aged 25 to 34 and adults aged 35 and older in Washington State.

Gambling Participation

Since all forms of gambling are illegal for adolescents, it is not surprising that significantly more adults than adolescents in Washington State have ever gambled, have gambled in the past year and gamble weekly. While nearly a quarter of the Washington State adolescents have never gambled, 91% of adults aged 18 to 24 and 90% of adults aged 25 to 34 have ever gambled and 88% of adults aged 35 and over have done so. In contrast, while only 8% of Washington State adolescents gamble once a week or more often, 16% to 22% of the Washington State adults gamble this frequently.

Table 19: Comparing Adult and Adolescent Participation

	Adolescents 13-17 %	Young Adults 18-24 %	Young Adults 25-34 %	Older Adults 35 and Over %	Sig.
	(1000)	(151)	(318)	(1032)	
Total Ever Gambled	77.6	91.4	90.9	87.9	***
Past Year Gambled	65.1	78.8	74.2	73.8	***
Weekly Gambling	7.7	18.5	15.7	21.9	***

Pearson Chi-Square * p < .05 ** p < .01 *** p < .001

In addition to overall involvement in gambling, it is interesting to examine differences in lifetime participation in specific types of gambling. **Table 20** on the following page shows the proportion of adolescents, adults aged 18 to 24, adults aged 25 to 34 and adults aged 34 and over who have ever tried different types of gambling.

Table 20: Lifetime Gambling Among Adolescents and Adults in Washington State

	Adolescents 13-17 %	Young Adults 18-24 %	Young Adults 25-34 %	Older Adults 35 and Over %	Sig.
	(1000)	(151)	(318)	(1032)	
Charitable	52.1	21.7	54.9	58.4	*
Friends / Family†	39.5	50.3	39.6	29.0	***
Sports	24.7	32.5	30.9	29.4	*
Bingo	23.3	23.8	21.1	23.8	NS
Instant Lottery	14.8	64.2	73.6	62.9	***
Pulltabs	8.1	44.0	45.3	34.2	***
Gambling Machines	6.5	15.2	11.0	15.7	***
Horse or Dog Races	5.1	10.6	24.8	29.3	***
Lotto / Quinto / Lucky for	3.5	31.1	51.3	57.4	***
Telephone or Computer	2.8	1.3	0.6	0.3	***
Card Rooms / Mini-casinos	2.0	15.2	11.0	15.7	***
Daily Game / Daily Keno	1.8	13.9	20.8	21.5	***

† This category of gambling includes only card games for adult respondents.
 Pearson Chi-Square * p < .05 ** p < .01 *** p < .001

Table 20 shows that adolescents in Washington State are significantly less likely than older groups in the population to have ever tried many types of gambling. This includes wagering on sports events as well as all of the lottery products, pulltabs, gambling machines, horse or dog races and card rooms or mini-casinos. Wagering on raffles and charitable games is significantly lower among young adults aged 18 to 24 than among adolescents or among adults aged 25 and over. Adults aged 35 and over are the least likely to gamble on card games with friends and family; adults aged 18 to 24 are the most likely to have ever done this type of gambling. Although participation in telephone or computer wagering is very low, adolescents are significantly more likely than older individuals to have ever tried this type of gambling. There is no significant difference in the lifetime participation of adolescents and adults in bingo.

While the proportion of adolescents who have ever purchased lottery tickets is low when compared with adults, it is nevertheless notable that 15% of the adolescent respondents have been able to purchase instant lottery tickets, a product that is supposed to be age-restricted. It is also noteworthy that nearly a quarter of the adolescent respondents (23%) have been able to play bingo, 8% have been able to purchase pulltabs, 6% have been able to wager on gambling machines and 5% have been able to wager at horse or dog races despite age restrictions on these legal types of gambling.

Gambling Expenditures

Another interesting comparison between the adolescent and adult respondents in the Washington State gambling surveys is in expenditures on gambling. We noted above that while adolescent respondents in Washington State report spending an average of \$16 in a typical month on gambling activities, adults in Washington State report spending an average of \$39 in a typical month. When average expenditures are calculated by age group, young adults aged 18 to 24 report spending an average of \$36 in a typical month, young adults aged 25 to 34 report spending an average of \$30 in a typical month and adults aged 35 and over report spending an average of \$42 in a typical month on all gambling activities.

Problem Gambling

In considering the prevalence of gambling-related difficulties in the general population of Washington State, it may be helpful to note that adolescents aged 13 to 17 represent approximately 7% of the total population of the state. Adults aged 18 to 24 represent approximately 9% of the total population; those aged 25 through 34 represent approximately 15% of the total population; and adults aged 35 and over represent approximately 50% of the total population of Washington State (United States Bureau of the Census 1999).

The methods used to classify adolescent and adult respondents as problem or probable pathological gamblers are not comparable, despite the fact that the screens used with both groups are based on the South Oaks Gambling Screen. The survey among adults in Washington State established conservatively that between 6,200 and 35,300 Washington State residents aged 18 and over were currently experiencing severe difficulties related to their gambling (Volberg & Moore 1999b). The adolescent survey has established conservatively that between 1,330 and 6,100 Washington State adolescents aged 13 to 17 have experienced severe difficulties related to their gambling. In contrast to their proportion in the general population, these figures suggest that between 12% and 18% of all Washington State residents who have experienced recent, severe difficulties related to their gambling are under the age of 18.

Among adults in Washington State, analysis showed that wagering on pulltabs, at Indian casinos, at card rooms or mini-casinos and on Indian bingo present the greatest risk for the development of gambling-related difficulties (Volberg & Moore 1999b). Among adolescents in Washington State, wagering on games of personal skill, card, dice or board games with friends and family, sports and arcade or video games are the types of gambling most closely associated with gambling-related difficulties.

An important question when considering gambling problems among adolescents and adults is whether the methods used to classify adults are appropriate for use among adolescents. We argued in the *Introduction* to this report that the approach taken with adults is not entirely appropriate for adolescents. However, it is useful to look at how different age groups score according to the different methods used to assess gambling-related problems in Washington State.

Table 21 shows differences in the proportion of adolescents, young adults aged 18 to 24, young adults aged 25 to 34 and older adults who score on the multi-factor method used to classify adolescent respondents. This table also shows differences in the proportion of these groups who meet the adult criteria for classification as problem and probable pathological gamblers (lifetime and current South Oaks Gambling Screen) as well as the Fisher DSM-IV Screen.

Table 21: At Risk and Problem Gambling Among Adolescents and Adults in Washington State

	Adolescents	Young Adults	Young Adults	Older Adults	
	13-17	18-24	25 – 34	35 and over	
	%	%	%	%	
	(1000)	(151)	(318)	(1032)	
Adolescent Method					***
Non-Problem	91.6	80.8	84.0	84.3	
At Risk	7.5	17.9	15.1	15.0	
Problem	0.9	1.3	0.9	0.7	

Table 21 (cont'd): At Risk and Problem Gambling Among Adolescents and Adults in Washington State

	Adolescents 13-17 %	Young Adults 18-24 %	Young Adults 25 – 34 %	Older Adults 35 and over %	
	(1000)	(151)	(318)	(1032)	
Adult Method (Lifetime)					
Non-Problem	94.6	91.4	94.7	96.3	
Problem	3.6	6.0	4.4	2.8	
Probable Pathological	1.5	2.6	0.9	0.9	
Adult Method (Current)					**
Non-Problem	97.0	92.7	98.1	98.5	
Problem	2.2	5.3	1.3	1.3	
Probable Pathological	0.8	2.0	0.6	0.2	
DSM-IV Screen					***
Non-Problem	94.3	97.4	99.1	98.5	
Problem	4.2	2.6	0.3	0.8	
Severe Problem	1.5	0.0	0.6	0.7	

Pearson Chi-Square * p < .05 ** p < .01 *** p < .001

In contrast to other states where this comparative exercise has been possible, including Georgia, New York and Texas, the adolescent screen classifies a smaller proportion of the adult population in Washington State (15% to 18%) as at-risk gamblers. As in these other states, young adults aged 18 to 24 are more likely than adolescents or older adults to be classified as problem gamblers using the multi-factor method usually employed with adolescents.

In contrast to the multi-factor method, the method used to assess problem and probable pathological gambling among adults is based on a score across behavioral and borrowing items of the South Oaks Gambling Screen and does not include any measure of gambling involvement. **Table 21** also shows that adolescents and young adults (both groups) are most likely to score as lifetime problem gamblers. Young adults aged 18 to 24 are most likely to score as lifetime probable pathological gamblers and adolescents are the next most likely group to score in this range. On the current screen, young adults aged 18 to 24 are most likely to score as problem gamblers and as probable pathological gamblers. Finally, adolescents are most likely to score as both problem and severe problem gamblers on the Fisher DSM-IV Screen with rates declining among older respondents.

Comparing Adolescents and Young Adults

In considering the development of services to address gambling and gambling problems among youth in Washington State, it is helpful to look in detail at differences between adolescents and young adults.

We noted above that young adults are more likely to have ever gambled and to have gambled in the past year than adolescents or older adults. We have also seen that participation in wagering on pulltabs and gambling machines as well as at card rooms and mini-casinos is significantly higher among young adults than among adolescents or among older adults. We have also shown that, based on the most widely recognized methods for identifying gambling-related

difficulties, problem gambling prevalence rates are higher among young adults than among adolescents or among older adults.

Together, these findings suggest the need for education and prevention activities in primary and secondary schools as well as in colleges and universities. Issues related to gambling and gambling problems must be brought into parity with alcohol, tobacco and drug use and misuse as these issues are addressed in educational institutions.

COMPARING WASHINGTON STATE ADOLESCENTS WITH OTHER STATES

Given the similarities in the methods used to assess gambling and problem gambling among adolescents in Georgia, New York, Texas and Washington State, it is possible to compare respondents in these four states in terms of their demographics, gambling participation, gambling problems and use of alcohol and drugs. In making these comparisons, it is important to note that, in contrast to the other states, the Texas adolescent survey included adolescents aged 14 to 17. Further, the Texas adolescent survey (like the adult survey) was replicated in 1995; the data in the tables in this section are from the replication survey rather than from the baseline study of adolescents in Texas (Wallisch 1996).

Demographics

Due to features of the report on adolescent gambling in Texas, complete demographic characteristics are available only for adolescents who gamble in each state. **Table 22** shows that adolescents who gamble in all four states are equally likely to be male and to live in households with two adults. Washington State adolescents who gamble are most likely to receive an allowance while Georgia and New York adolescents who gamble are most likely to have \$50 or more in weekly income, including jobs and allowance. Data on weekly employment and income are not reported in the same way for the Texas adolescents.

The most obvious difference among adolescents who gamble in these four states is in their ethnic and racial composition. However, these differences reflect the ethnic and racial composition of the entire population in these states. Washington State adolescents who gamble are most likely to be White; in contrast, one-third of Texas adolescents who gamble are Hispanic; and one-third of Georgia adolescents who gamble are Black.

Table 22: Demographics of Adolescents Who Gamble in Four States

		New York	Georgia	Texas	Washington
		%	%	%	%
		(949)	(623)	(2483)	(776)
Gender					
	Male	53	54	52	54
	Female	47	46	48	46
Age					
	13	19	20	---	16
	14	21	21	24	19
	15	22	21	25	24
	16	20	19	25	24
	17	19	18	27	18
Ethnicity					
	White	72	62	51	87
	Black	13	33	12	2
	Other (inc. Hispanic)	15	5	37	11
Size of HH					
	1 Adult	12	13	9	10
	2 Adults	81	81	86	87
	3+ Adults	7	6	5	3

Table 22 (cont'd): Demographics of Adolescents Who Gamble in Four States

		New York	Georgia	Texas	Washington
		%	%	%	%
		(949)	(623)	(2483)	(776)
Income					
	Receive allowance	45	46	52	49
	Work 10+ hrs/week	25	25	---	22
	Earn \$50+ per week	29	31	---	25

* Since the Texas data are not provided beyond the decimal point, values for the other states have been rounded.

Gambling Participation

Table 23 shows that the pattern of gambling involvement among adolescents in Washington State is similar to the pattern of gambling involvement among adolescents in New York and Texas. Adolescents from Georgia are the least likely to have ever gambled or to have gambled in the past year although the proportion of Georgia adolescents who gamble weekly is nearly as high as the proportion of weekly adolescent gamblers in New York. The proportion of Washington State adolescents who gamble weekly is lower than in Georgia, New York or Texas.

Table 23: Gambling Participation Among Adolescents in Four States

	New York	Georgia	Texas	Washington
	%	%	%	%
	(1103)	(1007)	(3079)	(1000)
Non-Gamblers	14.0	38.1	19.4	22.4
Infrequent	10.7	9.8	15.7	12.5
Past Year	59.8	39.9	54.9	57.4
Weekly	15.5	12.2	10.0	7.7

The most common gambling activities among Texas adolescents are wagering on card, dice or board games and on sports events, playing the lottery and wagering on games of skill. In New York, adolescents are most likely to have ever gambled on raffles and charitable games, card, dice or domino games, the lottery, games of skill and sports while in Georgia, adolescents are most likely to have ever wagered on raffles, sports events, card games and games of skill. Among Washington State adolescents, the most common gambling activities are wagering on charitable events, card, dice or board games, games of skill, sports and bingo.

Problem Gambling

In contrast to the methods used to classify adolescents with gambling problems in Louisiana, Massachusetts, Minnesota and Alberta, the adolescent surveys in Georgia, New York and Texas all used the same method used in the Washington State adolescent survey to classify respondents with gambling problems. This allows us to directly compare prevalence rates of at-risk and problem gambling among adolescents in these four states. **Table 24** shows differences in the prevalence of problem and at-risk gambling among adolescents in Georgia, New York, Texas and Washington State.

Table 24: Problem Gambling Among Adolescents in Four States

	New York	Georgia	Texas	Washington
	%	%	%	%
	(1103)	(1007)	(3079)	(1000)
Non-Problem	83.6	86.8	88.2	91.6
At Risk	14.0	10.4	9.9	7.5
Problem	2.4	2.8	2.3	0.9

Table 24 shows that the prevalence of problem gambling is highest among adolescents in Georgia and lowest among adolescents in Washington State. The prevalence of at-risk gambling is highest in New York and lowest in Washington State. The relatively high rate of at-risk gambling in New York is likely due to the relatively large proportion of weekly gamblers among the adolescents in this state. Weekly gambling is one of the factors that places adolescents in the at-risk category in the multi-factor method used to identify problem and at-risk gamblers among adolescents in these states.

The adolescents classified as problem gamblers in these four states are quite distinct. For example, problem gamblers in New York are more likely to be male than problem gamblers in any of the other states. Problem gamblers in Georgia and New York are somewhat younger than problem gamblers in Texas and Washington State. Problem gamblers in Texas are most likely to be Hispanic while problem gamblers in Georgia are most likely to be Black. Finally, problem gamblers from Washington State are most likely to reside in households with three or more adults.

Gambling, Alcohol and Drug Use

Since the questionnaires in the four states all included items to assess alcohol, tobacco and drug use, it is possible to compare adolescents in Washington State with those from other states.

Table 25: Gambling, Alcohol and Drug Use by Adolescents in Four States

	New York	Georgia	Texas	Washington
	%	%	%	%
	(1103)	(1007)	(3079)	(1000)
None	11	30	25	18
Single Use	45	39	34	47
Gambling Only	43	34	28	43
Alcohol Only	2	5	5	3
Drugs Only	<1	1	1	<1
Dual Use	27	19	30	21
Gambling & Alcohol	25	14	26	18
Gambling & Drugs	2	2	1	1
Alcohol & Drugs	1	3	2	2
Triple Use	17	12	11	16

* Since the Texas data are not provided beyond the decimal point, values for the other states have been rounded.

Table 25 shows that Georgia and Texas adolescents are less likely than adolescents in New York and Washington State to have ever participated in any of these activities. Washington State adolescents are just as likely as adolescents in New York to have done one of these activities although adolescents in all four states who have only done one of these activities are most likely to have gambled. Adolescents in New York and Texas are most likely to have participated in two activities and, across all four states, the most frequent combination is gambling and alcohol. Adolescents in New York and Washington State are most likely to have participated in all three of these activities.

COMPARING THE PERFORMANCE OF ADOLESCENT PROBLEM GAMBLING SCREENS

A variety of methodological questions have been raised in recent years about research on gambling and problem gambling in the general population. One serious concern has to do with changes in the criteria used by the American Psychiatric Association for identifying adult pathological gamblers. In the *Introduction* to this report, we outlined some similar concerns that have arisen in relation to research on gambling and problem gambling among adolescents.

In this section, we examine the psychometric properties and performance of the alternate methods used in the adolescent survey in Washington State to identify individuals with gambling problems. In moving forward, it is essential that the performance of any new instrument, such as the DSM-IV-J or the Massachusetts Gambling Screen, be compared with the South Oaks Gambling Screen as well as with clinical assessments so that findings based on these new measurements can be calibrated with findings based on the South Oaks Gambling Screen. In this way, the field of gambling research can move forward in an evolutionary, rather than revolutionary, manner.

The Fisher DSM-IV Screen

In the Washington State adolescent survey, the Fisher DSM-IV Screen was used in addition to the South Oaks Gambling Screen (revised for adolescents) to identify respondents with significant gambling-related difficulties. As in the New York survey of adolescents (Volberg 1998), the adult version of the Fisher DSM-IV Screen was used in the Washington State adolescent survey.

In contrast to the 20-item South Oaks Gambling Screen, the Fisher DSM-IV Screen is a 10-item scale based on the most recent diagnostic criteria for pathological gambling (American Psychiatric Association 1994). In developing the DSM-IV criteria, 222 self-identified pathological gamblers and 104 substance abusers who gambled socially tested the individual items (Lesieur & Rosenthal 1991). Discriminant analysis was used to identify the items that best differentiated between pathological and non-pathological gamblers.

The DSM-IV criteria were adapted slightly for use in a survey of British casino patrons (Fisher 1996). This screen has been used in adult surveys in Colorado, Louisiana, New York, Oregon and Washington State (Volberg 1996b, 1997a, 1997b, Volberg & Moore 1999a, 1999b) as well as in national surveys in New Zealand and Sweden (Rönnerberg et al 1999). In developing this screen, Fisher made some minor adjustments to the wording of the DSM-IV criteria and increased the response categories from two to four. In the adult surveys in Colorado, Louisiana, New York, Oregon and Washington State, respondents received a score of one for any of the items to which they gave a positive response. Total scores were obtained by adding the positive items for each respondent.

In **Table 21**, we presented the prevalence rates of “problem” and “severe problem” gambling among Washington State adolescents based on the Fisher DSM-IV Screen as well as the prevalence rates based on the lifetime and current South Oaks Gambling Screen and the multi-factor method. Consideration of this table shows that the prevalence of the most severe category for these different measures is higher for the lifetime SOGS and the Fisher DSM-IV Screen than for the current SOGS or the multi-factor method. In contrast, the prevalence of the intermediate category for these different measures is highest for the multi-factor method and the Fisher DSM-IV Screen.

Statistical Characteristics of the Fisher DSM-IV Screen

The accuracy of any instrument is measured by looking at the reliability and validity of the instrument (Litwin 1995). The **reliability** of an instrument refers to the ability to reproduce the results of the application of the test. The **validity** of an instrument refers to the ability of the instrument to measure what it is intended to measure. In examining the psychometric properties of the Fisher DSM-IV Screen, we assess its reliability by examining the internal consistency of the screen and then analyze the individual items to determine the ability of the screen to discriminate effectively between non-problem and problem gamblers. We then examine several forms of validity for the Fisher DSM-IV Screen.

Reliability

The most widely accepted test of reliability is a measure of the internal consistency of an instrument. The usual test for internal reliability is Cronbach's alpha and a level of .70 is considered evidence of the good reliability of a screen. The internal consistency of both the SOGS-RA and the Fisher DSM-IV Screen is quite high at .80 for the SOGS-RA and .78 for the Fisher DSM-IV Screen.

Item Analysis

Endorsement of the Fisher DSM-IV Screen items among adolescents who ever gambled in Washington State ranges from a high of 29.0% (Preoccupation) to a low of 1.2% (Risky Relationship).

It is instructive to compare positive responses to specific items from the Fisher DSM-IV Screen by adolescents in Washington State to see how well the different items discriminate between non-problem and problem gamblers. For this analysis, we have used the SOGS-RA classification of non-problem, at-risk and problem gamblers to prevent confusion between the method of classifying the respondents and the items by which they were classified. **Table 26** on the following page shows that all of the Fisher DSM-IV Screen items discriminate effectively between SOGS-defined non-problem, at-risk and problem gamblers among adolescents in Washington State. The most effective discriminator among the Fisher DSM-IV Screen items is Preoccupation, with 57% of the at-risk gamblers and 89% of the problem gamblers endorsing this item compared to only 25% of the non-problem gamblers. The next best discriminator among the Fisher DSM-IV Screen items is Tolerance, with 67% of the problem gamblers, 16% of the at-risk gamblers and only 6% of the non-problem gamblers endorsing this item. **Table 26** also shows that there are significant differences in the mean scores of non-problem, at-risk and problem gamblers for the Fisher DSM-IV Screen. These findings support the notion that the Fisher DSM-IV Screen measures something similar to the SOGS-RA.

Table 26: Comparing SOGS-RA Groups on the Fisher Items

Fisher Items	Non-Problem Gamblers %	At Risk Gamblers %	Problem Gamblers %	Sig.
Preoccupation	25.2	57.3	88.9	***
Tolerance	5.6	16.0	66.7	***
Withdrawal	1.6	8.0	44.4	***
Escape	3.2	16.0	44.4	***
Chasing	13.7	50.7	66.7	***
Deception	2.3	6.7	55.6	***
Efforts to Stop	2.8	9.3	44.4	***
Beyond the Legal	0.7	2.7	44.4	***
Risked Significant Relationship	0.9	1.3	33.3	***
Bailout	1.7	4.0	22.2	***
Mean Fisher Score	0.6	1.7	5.1	***

Validity

There are several different types of validity that can be used to assess the performance of an instrument. These include content, criterion, congruent and construct validity. Content validity is a subjective measure of how appropriate the items seem to a set of reviewers who have some knowledge of the subject matter. The Fisher DSM-IV Screen has already been found to have good content validity by a variety of appropriate audiences including self-identified pathological gamblers as well as treatment professionals and survey researchers (Fisher 1996; Lesieur & Rosenthal 1991; Shaffer, LaBrie, Scanlan & Cummings 1994).

Criterion Validity

Criterion validity requires that a new instrument be judged against some other method that is acknowledged as a “gold standard” for assessing the same phenomenon. In the case of the Fisher DSM-IV Screen, we can use the SOGS-RA as the gold standard since this is the primary method that has been used to identify problem and pathological gamblers among adolescents. As a first step, we calculated the correlation coefficient between the SOGS-RA and the Fisher DSM-IV Screen among Washington State adolescents who ever gambled. The correlation coefficient between these two screens (.540) is statistically significant at the .01 level.

Congruent Validity

Since several of the items on the SOGS-RA and Fisher DSM-IV Screen are similar, it is possible to check whether respondents answered similar questions differently in various places in the interview. **Table 27** on the following page shows how the adolescent respondents who gambled answered several similar questions from the SOGS and the Fisher DSM-IV Screen.

Table 27: Comparing Scores on Similar Items

	SOGS or DSM-IV Item	% Positive
CHASING	Go back another day to win money you lost (SOGS)	3.3
	Often return another day to get even (DSM)	17.9
LYING	Claimed to win when in fact lost (SOGS)	9.9
	Hidden evidence of gambling (SOGS)	2.6
	Lies to others to conceal extent of gambling (DSM)	3.3
TOLERANCE	Spend more time or money than intended (SOGS)	21.8
	Need to gamble with increasing amounts to achieve desired excitement (DSM)	7.3
LOSS OF	Would like to stop gambling but couldn't (SOGS)	3.8
CONTROL	Made repeated unsuccessful efforts to control or stop gambling (DSM)	3.9

Table 27 shows that adolescents who have gambled in Washington State are less likely to give a positive response to the Fisher item than the SOGS-RA question assessing Tolerance and to one of the SOGS-RA questions assessing Lying. Adolescents in Washington State who have gambled are more likely to give a positive response to the Fisher item than the SOGS-RA questions assessing Chasing. Responses to questions assessing Loss of Control and to one of the questions assessing Lying are similar for the two screens. The same differences were identified in the adolescent survey in New York, suggesting that the specific wording of these items contributes to differences in acknowledgement of similar but not identical behaviors.

Construct Validity

In assessing the performance of a new instrument, it is helpful to examine differences between classified groups with respect to behaviors that are associated with problem gambling but are not included in the measurement scale. Other measures related to gambling difficulties include weekly gambling, time spent gambling per session, largest amount lost in a single day and total expenditures on gambling.

There are significant differences among Washington State adolescents who have gambled in the mean scores for non-problem, problem and severe problem gamblers as defined by the Fisher DSM-IV Screen. The mean score for non-problem gamblers is .47 compared to 3.3 for problem gamblers and 6.7 for severe problem gamblers.

Other behaviors associated with gambling difficulties support the construct validity of the Fisher DSM-IV Screen among adolescents. For example, problem and severe problem gamblers among adolescents in Washington State, as defined by the Fisher DSM-IV Screen, are significantly more likely than non-problem gamblers to gamble on one or more activities on a weekly basis, to spend three or more hours gambling in a usual session, to have lost \$50 or more in a single day of gambling and to have felt nervous about their gambling. Finally, problem and severe problem gamblers spend significantly more on gambling in a typical month than non-problem gamblers as defined by the Fisher DSM-IV Screen.

SUMMARY AND CONCLUSION

The main purpose of this study was to assess the level of problematic gambling among adolescents in Washington State in 1999. This information is vital in understanding the evolution of problem gambling among all Washington State residents as well as in refining services for adolescents who experience difficulties related to their gambling. The results of this study show that significant numbers of Washington State adolescents continue gamble, that these activities are widely accepted by adolescents and their families, and that most adolescents spend only small to moderate amounts of money on gambling. The study also shows that there continues to be a small but significant proportion of Washington State adolescents who experience severe difficulties related to their gambling.

Adolescents represent a generation for whom legal gambling has been available all their lives. However, young people are unlikely to have developed skills and strategies to manage their gambling and avoid financial and personal difficulties. While efforts to control the prevalence of gambling problems among Washington State adults and adolescents appear to be working effectively, Washington State may wish to consider implementing additional efforts to minimize the negative impacts caused by gambling among adolescents.

Summary

While participation in all forms of gambling is illegal for individuals under the age of 18 in Washington State, 78% of the Washington State adolescent respondents said that they had bet on one or more types of gambling at some time, 65% had gambled in the past year and 8% bet once a week or more often on one or more types of gambling. Despite restrictions on underage gambling in Washington State, 15% of the adolescent respondents have been able to purchase instant lottery tickets. Among adolescents who have gambled, the favorite types of gambling are wagering on card, dice or board games with friends or family, games of personal skill and sports.

Male adolescents and those who identify themselves as Black or Other are more likely than female adolescents and those who identify themselves as White or Hispanic to gamble weekly. Adolescents aged 16 and 17 are more likely to gamble weekly than younger adolescents. Gambling involvement is strongly associated with adolescent employment and income. Adolescents who work 10 or more hours per week and those who earn \$50 or more per week are more likely to gamble and to gamble weekly than adolescents who work fewer hours and/or earn less money. Washington State adolescents are most likely to have started gambling with friends or parents on card, board or dice games, games of personal skill, sports and charitable games.

While Washington State adolescents report spending less on gambling in a typical month than adults, the average amount wagered by adolescents has increased since 1993. Wagering on games of skill, card, dice and board games with friends or family and sports accounts for the majority of reported monthly expenditures on gambling among Washington State adolescents. As in other states, older male adolescents report spending substantially more than females and younger adolescents. Adolescents who work 10 or more hours a week and those who earn \$50 or more per week spend more on gambling than those who work fewer hours or who earn less per week.

In Washington State, 0.9% ($\pm 0.58\%$) of the total sample of adolescent respondents were classified as problem gamblers. Another 7.5% ($\pm 1.63\%$) of the total sample of adolescent respondents were classified as gamblers at risk for developing gambling problems. Based on these figures, we estimate that there are between 1,330 and 6,100 adolescents in Washington State who have experienced severe problems related to their gambling and another 24,400 to 37,900 whose gambling has caused them difficulties in the past or places them at risk for developing gambling difficulties in the future.

The prevalence of at-risk and problem gambling is highest among adolescents who have wagered on arcade or video games and among those who have purchased instant lottery tickets. Prevalence rates are also high among adolescents who have wagered on card, dice or board games with friends and family, games of personal skill, sports and flipping coins.

At-risk and problem gamblers in Washington State are most likely to be male. At-risk and problem gamblers in Washington State are more likely than non-problem gamblers to earn \$50 and to have parents who gamble than adolescents who gamble without problems. At-risk and problem gamblers are most likely to wager regularly on games of personal skill, card, dice or board games with friends and family, sports and arcade or video games. At-risk gamblers are more likely than problem gamblers to have purchased instant lottery tickets and pulltabs and to have wagered on games of personal skill and horse or dog races.

At-risk and problem gamblers in Washington State spend more money in a typical month than non-problem gamblers on sports, games of personal skill, and on card, dice or board games with friends and family. At-risk and problem gamblers also spend more money in a typical month than non-problem gamblers on arcade and video games, on telephone or computer games and on instant lottery tickets.

The average age at which adolescent problem gamblers in Washington State report starting to gamble is 10 years old compared to 12 years old for at-risk and non-problem gamblers. All of the adolescents who gamble are most likely to have started gambling on card, dice or board games with friends and family, games of personal skill or sports. All of these adolescents are most likely to gamble with friends and acquaintances although non-problem gamblers are somewhat more likely than more troubled adolescent gamblers to gamble with family members. At-risk and problem gamblers spend more time gambling than non-problem gamblers and are more likely to have ever lost \$50 or more in a single gambling session. Problem gamblers are more likely than other adolescent gamblers to feel that a parent has had a gambling problem or that they have had a problem with their own gambling.

Gambling involvement among adolescents in Washington State is correlated with the use of alcohol, tobacco, marijuana and illicit drugs. Weekly gamblers are more likely than less frequent gamblers to have used alcohol, tobacco, marijuana and other drugs in the past year and to have gotten into trouble in the past year because of their alcohol or drug use. Gambling problems are even more closely correlated with the use of alcohol and drugs. At-risk and problem gamblers are more likely than non-problem gamblers to have used alcohol and drugs in the past year, to have gotten into trouble in the past year because of their alcohol or drug use and to have sought help for an alcohol or drug problem.

Larger proportions of males, non-Caucasians and adolescents earning \$50 or more per week were interviewed in 1999 compared with the baseline adolescent gambling survey carried out in Washington State in 1993. As with the Washington State adults, there has been a substantial decrease in the proportion of adolescents who report gambling weekly on one or more activities. Only lifetime participation in wagering on games of personal skill and on arcade or video games has increased among adolescents in this period. As with the Washington State adults, the prevalence of gambling-related problems among adolescents has remained stable between 1993 and 1999. There have been no significant changes in the demographic characteristics of adolescents with gambling-related difficulties in Washington State in this period.

Comparison of adolescent and adult gambling patterns in Washington State shows that adolescents are less likely than adults to have ever tried most types of gambling. It is interesting that although overall participation in telephone or computer wagering is low, adolescents are more likely than adult respondents to have ever tried this type of gambling.

The methods used to classify adolescents and adults as problem gamblers are not identical. However, while adolescents represent approximately 7% of the total population of Washington State, they represent approximately 12% to 18% of Washington State residents who are experiencing severe difficulties related to their gambling.

The pattern of gambling involvement among adolescents in Washington State is similar to the pattern of gambling involvement among adolescents in other states although the proportion of Washington State adolescents who gamble weekly is lower than in Georgia, New York or Texas. The most common gambling activities among adolescents in all of these jurisdictions are wagering on card, dice or board games, games of personal skill and sports. The prevalence of at-risk and problem gambling is lower among Washington State adolescents than among adolescents in these other states.

Directions for the Future

In the wake of widespread legalization of gambling, governments are moving to address the issue of youth or under-age gambling. The State of Washington is one of the first jurisdictions to take the step of replicating an adolescent survey in order to identify changes in gambling and problem gambling rates within this vulnerable group in the population.

In the report on the adult replication survey (Volberg & Moore 1999b), we noted that consumer spending on legal forms of gambling in Washington State in 1997 was approximately \$460 million. This figure does not include American Indian gaming activities. In contrast, government spending on problem gambling activities, including prevention, outreach and treatment, was approximately \$300,000 in 1998. While this level of funding is higher than in many other jurisdictions, it represents less than one-tenth of 1% of consumer spending on legal gambling.

In considering how to improve services for Washington State adolescents who experience gambling difficulties and their families, policymakers may wish to give consideration to the following services and activities:

- establishment of a ***statewide prevention program*** targeting at-risk adolescents in Washington State with active participation by government, community-based agencies, the gambling industries, academia and other concerned parties;
- ***cooperative endeavors*** between government agencies, not-for-profit organizations and gambling operators to discourage and minimize underage gambling in Washington State; with particular attention to video arcades and retail outlets where instant lottery tickets are sold;
- development and refinement of ***public education and prevention services*** as well as ***educational curricula*** targeted toward at-risk groups among youth, particularly older male adolescents, and their families;
- efforts to ***encourage parents and adults*** to be attentive to the types of gambling activities they may be engaging in with underage persons;
- providing additional ***training opportunities*** for educators, law enforcement, criminal justice, mental health and substance abuse professionals and others who work with troubled adolescents to learn more about adolescent gambling and its impacts as well as how to screen for gambling problems and when and where to refer adolescent problem gamblers for help;

- funding for **treatment services** for adolescent problem gamblers and family members through existing problem gambling treatment providers as well as for new programs in areas of Washington State without services;
- **evaluating** services that are established for adolescent problem gamblers, based on uniform data; and
- **continued monitoring** of gambling and problem gambling among adolescents to assess the impacts of the introduction of new types of gambling on youth and to evaluate effectiveness of established prevention and treatment services.

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APPENDIX A:

Questionnaire for the Washington State Adolescent Survey

Gambling and Problem Gambling Among Adolescents in Washington State

Hello, my name is ___ and I am calling from the Gilmore Research Group. We are doing a study about some important issues regarding leisure activities of teenagers, and would like to include your household.
Is this the (male)/(female) head of the household?

IF NO, ASK TO SPEAK TO THAT PERSON.

IF NOT AVAILABLE, SAY: This study will be about teenagers. Is there someone between the ages of 13 and 17 currently living in this household?
IF YES, CODE 03

REINTRODUCE IF NEEDED, THEN SAY: Our survey is about leisure activities of teens. Is there someone between the ages of 13 and 17 currently living in this household? PRESS CODE @int02

60 NO CHILDREN BETWEEN THE AGES OF 13 AND 17..... 60 => /END

This survey has to do primarily with how young people feel about betting activities or games in which there is an element of luck or chance. This is a scientific study sponsored by the State of Washington and your household is one of 1000 being surveyed throughout the State of Washington, and your household was selected randomly.

We would like to talk to your 13 TO 17 YEAR OLD whose age is <RSEL1 >. This survey instrument contains questions of behavior, health, school and work experiences of adolescents. It also includes questions on gambling, alcohol, and drug use. All responses to the questions will be kept completely confidential.

Do we have permission to talk to your child?

IF PARENT REFUSES, SAY: This is a state sponsored study. Do you have any questions I may be able to answer?

@INT04

51 Yes, permission given

61 Did not give/Refused permission

PRESS F1 TO SCROLL AND SELECT ALL OTHER CODES

F7 FOR IF NEEDED STATEMENTS

16: **INT04**

Screen

(1/73)

Yes, continue..... 51

Arrange call-back 02 => /NAME

NO TEENAGERS BETWEEN 13 AND 17 60 => /END

61 Parent refuses to give permission 61

17: **Q3B**

RECORD PARENT'S GENDER

(1/75)

Male..... 1

Female 2

Gambling and Problem Gambling Among Adolescents in Washington State

Is (he)/(she) home at this time? IF NOT AVAILABLE, ARRANGE CALL-BACK
 WHEN ON-LINE: Hello, this is _____ and I am calling from Gilmore Research
 Group. Your (mother)/(father) gave me permission to ask you some questions.
 This survey has to do primarily with how young people feel about betting
 activities or games in which there is an element of luck or chance. This is a
 scientific study sponsored by the State of Washington. Your household is one of
 1,000 being surveyed throughout the state and your household was selected
 randomly. Before I continue, I want to assure you that all the information you
 give me will be kept in the strictest confidence. Your answers will be
 combined with those from all other teenagers in the survey for reporting
 purposes. You can refuse to answer any question you are not comfortable with.

@INT05
 51 Continue
 02 Arrange call-back
 62 Teen Refuses

PRESS F1 TO SCROLL AND SELECT ALL OTHER CODES
 F7 FOR IF NEEDED STATEMENTS

19: **INT05**
22: **XG**

\$B

People bet on many different things such as card games, sports or video arcade
 games. I am going to ask you about some activities such as these that you may
 participate in. IF PERSON NEVER GAMBLES, DOESN'T BELIEVE IN IT,
 ETC., SAY: We understand that not everyone gambles, but your opinions are still
 very important to us.

(1 / 83)

continue 1 D

23: **G1**
 Have you ever bet or spent money on instant or scratch off lottery games?
 align="right">(1 / 84)

Yes..... 1
 No..... 2 => G2
 Don't know / Refused 9 => G2

24: **G1A**
 Have you bet or spent money on instant or scratch off lottery games in the past
 year?
 align="right">(1 / 85)

Yes..... 1
 No..... 2 => G2
 Don't know / Refused 9 => G2

25: **G1B**
 Can you give me an idea of the amount that you spend on instant or scratch off
 lottery games in a typical month? IF NEEDED: I am only looking for an
 approximate amount.
 align="right">(1 / 86)

Don't know / Refused 999

Gambling and Problem Gambling Among Adolescents in Washington State

26: **G1C**

Do you gamble for money on instant or scratch off lottery games at least once per week?

(1/ 89)

- Yes..... 1
No..... 2
Don't know / Refused 9

27: **G2**

Have you ever bet or spent money on the lottery Daily Game or Daily Keno?

(1/ 90)

- Yes..... 1
No..... 2 => G3
Don't know / Refused 9 => G3

28: **G2A**

Have you bet or spent money on the lottery Daily Game or Daily Keno in the past year?

(1/ 91)

- Yes..... 1
No..... 2 => G3
Don't know / Refused 9 => G3

29: **G2B**

Can you give me an idea of the amount that you spend on the lottery Daily Game or Daily Keno in a typical month? IF NEEDED: I am only looking for an approximate amount.

(1/ 92)

- Don't know / Refused 999

30: **G2C**

Do you gamble for money on the lottery Daily Game or Daily Keno at least once per week?

(1/ 95)

- Yes..... 1
No..... 2
Don't know / Refused 9

31: **G3**

Have you ever bet or spent money on Lotto, Quinto or Lucky for Life?

(1/ 96)

- Yes..... 1
No..... 2 => G4
Don't know / Refused 9 => G4
-

Gambling and Problem Gambling Among Adolescents in Washington State

32: **G3A**
 Have you bet or spent money on Lotto, Quinto or Lucky for Life in the past year?
(1/ 97)

Yes..... 1
 No..... 2 => G4
 Don't know / Refused 9 => G4

33: **G3B**
 Can you give me an idea of the amount that you spend on Lotto, Quinto or Lucky for Life? in a typical month? IF NEEDED: I am only looking for an approximate amount.
(1/ 98)

Don't know / Refused 999

34: **G3C**
 Do you gamble for money on Lotto, Quinto or Lucky for Life at least once per week?
(1/ 101)

Yes..... 1
 No..... 2
 Don't know / Refused 9

35: **G4**
 Have you ever bet or spent money on raffles, fund-raising events or Reno Nights?
(1/ 102)

Yes..... 1
 No..... 2 => G5
 Don't know / Refused 9 => G5

36: **G4A**
 Have you bet or spent money on raffles, fund-raising events or Reno Nights in the past year?
(1/ 103)

Yes..... 1
 No..... 2 => G5
 Don't know / Refused 9 => G5

37: **G4B**
 Can you give me an idea of the amount that you spend on raffles, fund-raising events or Reno Nights? in a typical month? IF NEEDED: I am only looking for an approximate amount.
(1/ 104)

Don't know / Refused 999

38: G4C

Do you gamble for money on raffles, fund-raising events or Reno Nights at least once per week?

(1/ 107)

- Yes..... 1
- No..... 2
- Don't know / Refused 9

39: G5

Have you ever bet or spent money on Bingo?

(1/ 108)

- Yes..... 1
- No..... 2 => G6
- Don't know / Refused 9 => G6

40: G5A

Have you bet or spent money on bingo in the past year?

(1/ 109)

- Yes..... 1
- No..... 2 => G6
- Don't know / Refused 9 => G6

41: G5P

When you play bingo, do you usually play the paper game or the electronic game?

(1/ 110)

- Paper..... 1
- Electronic 2
- No preference 3
- Don't know / Refused 9

42: G5B

Can you give me an idea of the amount that you spend on bingo in a typical month? IF NEEDED: I am only looking for an approximate amount.

(1/ 111)

- Don't know / Refused 999

43: G5C

Do you gamble for money on bingo at least once per week?

(1/ 114)

- Yes..... 1
- No..... 2
- Don't know / Refused 9

Gambling and Problem Gambling Among Adolescents in Washington State

44: **G6**
 Have you ever bet or spent money on pulltabs?
(1/ 115)

Yes..... 1
 No..... 2 => G7
 Don't know / Refused 9 => G7

45: **G6A**
 Have you bet or spent money on pulltabs in the past year?
(1/ 116)

Yes..... 1
 No..... 2 => G7
 Don't know / Refused 9 => G7

46: **G6P**
 When you play pulltabs, do you usually play the paper game or with validators?
(1/ 117)

Paper..... 1
 Validator..... 2
 No preference 3
 Don't know / Refused 9

47: **G6B**
 Can you give me an idea of the amount that you spend on pulltabs in a typical month? IF NEEDED: I am only looking for an approximate amount.
(1/ 118)

Don't know / Refused 999

48: **G6C**
 Do you gamble for money on pulltabs at least once per week?
(1/ 121)

Yes..... 1
 No..... 2
 Don't know / Refused 9

49: **G7**
 Have you ever bet or spent money on flipping coins?
(1/ 122)

Yes..... 1
 No..... 2 => G8
 Don't know / Refused 9 => G8

Gambling and Problem Gambling Among Adolescents in Washington State

50: **G7A**
Have you bet or spent money on flipping coins in the past year?
(1/ 123)
Yes..... 1
No..... 2 => G8
Don't know / Refused 9 => G8

51: **G7B**
Can you give me an idea of the amount that you spend on flipping coins in a typical month? IF NEEDED: I am only looking for an approximate amount.
(1/ 124)
Don't know / Refused 999

52: **G7C**
Do you gamble for money on flipping coins at least once per week?
(1/ 127)
Yes..... 1
No..... 2
Don't know / Refused 9

53: **G8**
Have you ever bet or spent money on games of personal skill, such as bowling, pool or golf?
(1/ 128)
Yes..... 1
No..... 2 => G9
Don't know / Refused 9 => G9

54: **G8A**
Have you bet or spent money on games of personal skill in the past year?
(1/ 129)
Yes..... 1
No..... 2 => G9
Don't know / Refused 9 => G9

55: **G8B**
Can you give me an idea of the amount that you spend on games of personal skill in a typical month? IF NEEDED: I am only looking for an approximate amount.
(1/ 130)
Don't know / Refused 999

Gambling and Problem Gambling Among Adolescents in Washington State

56: **G8C**
 Do you gamble for money on games of personal skill at least once per week?
(1/ 133)

Yes..... 1
 No..... 2
 Don't know / Refused 9

57: **G9**
 Have you ever bet or spent money on card, dice or board games with friends or family?
(1/ 134)

Yes..... 1
 No..... 2 => G10
 Don't know / Refused 9 => G10

58: **G9A**
 Have you bet or spent money on card, dice or board games with friends or family in the past year?
(1/ 135)

Yes..... 1
 No..... 2 => G10
 Don't know / Refused 9 => G10

59: **G9B**
 Can you give me an idea of the amount that you spend on card, dice or board games with friends or family in a typical month? IF NEEDED: I am only looking for an approximate amount.
(1/ 136)

Don't know / Refused 999

60: **G9C**
 Do you gamble for money on card, dice or board games with friends or family at least once per week?
(1/ 139)

Yes..... 1
 No..... 2
 Don't know / Refused 9

61: **G10**
 Have you ever bet or spent money on card games in card rooms or minicasinos?
(1/ 140)

Yes..... 1
 No..... 2 => G12
 Don't know / Refused 9 => G12

62: **G10A**
 Have you bet or spent money on card games in card rooms or minicasinos? in the past year?
(1/ 141)
 Yes..... 1
 No..... 2 => G12
 Don't know / Refused 9 => G12

63: **G10B**
 Can you give me an idea of the amount that you spend on card games in card rooms or minicasinos in a typical month? IF NEEDED: I am only looking for an approximate amount.
(1/ 142)
 Don't know / Refused 999

64: **G10C**
 Do you gamble for money on card games in card rooms or minicasinos at least once per week?
(1/ 145)
 Yes..... 1
 No..... 2
 Don't know / Refused 9

65: **G12**
 Have you ever bet or spent money on slot machines, poker machines or other gambling machines, not including video and arcade games?
(1/ 146)
 Yes..... 1
 No..... 2 => G11
 Don't know / Refused 9 => G11

66: **G12A**
 Have you bet or spent money on slot machines, poker machines or other gambling machines, (not including video and arcade games) in the past year?
(1/ 147)
 Yes..... 1
 No..... 2 => G11
 Don't know / Refused 9 => G11

67: **G12B**
 Can you give me an idea of the amount that you spend on slot machines, poker machines or other gambling machines, (not including video and arcade games) in a typical month? IF NEEDED: I am only looking for an approximate amount.
(1/ 148)
 Don't know / Refused 999

Gambling and Problem Gambling Among Adolescents in Washington State

68: **G12C**

Do you gamble for money on slot machines, poker machines or other gambling machines, (not including video and arcade games) at least once per week?

(1/ 151)

- Yes..... 1
 - No..... 2
 - Don't know / Refused 9
-

69: **G11**

Have you ever bet or spent money on arcade or video games? By that I mean have you made a side bet or wager while playing arcade or video games?

(1/ 152)

- Yes..... 1
 - No..... 2 => G13
 - Don't know / Refused 9 => G13
-

70: **G11A**

Have you bet or spent money on arcade or video games? in the past year?

(1/ 153)

- Yes..... 1
 - No..... 2 => G13
 - Don't know / Refused 9 => G13
-

71: **G11B**

Can you give me an idea of the amount that you spend on arcade or video games in a typical month? IF NEEDED: I am only looking for an approximate amount.

(1/ 154)

- Don't know / Refused 999
-

72: **G11C**

Do you gamble for money on arcade or video games at least once per week?

(1/ 157)

- Yes..... 1
 - No..... 2
 - Don't know / Refused 9
-

73: **G13**

Have you ever bet or spent money on sports events with friends or acquaintances, in formal sports pools or with a bookmaker?

(1/ 158)

- Yes..... 1
 - No..... 2 => G14
 - Don't know / Refused 9 => G14
-

Gambling and Problem Gambling Among Adolescents in Washington State

74: **G13A**
Have you bet or spent money on sports events in the past year?
(1/ 159)

Yes..... 1
No..... 2 => G14
Don't know / Refused 9 => G14

75: **G13B**
Can you give me an idea of the amount that you spend on sports events in a typical month? IF NEEDED: I am only looking for an approximate amount.
(1/ 160)

Don't know / Refused 999

76: **G13C**
Do you gamble for money on sports events at least once per week?
(1/ 163)

Yes..... 1
No..... 2
Don't know / Refused 9

77: **G14**
Have you ever bet or spent money on horse or dog races on-track, off-track or with a bookmaker?
(1/ 164)

Yes..... 1
No..... 2 => G15
Don't know / Refused 9 => G15

78: **G14A**
Have you bet or spent money on horse or dog races in the past year?
(1/ 165)

Yes..... 1
No..... 2 => G15
Don't know / Refused 9 => G15

79: **G14B**
Can you give me an idea of the amount that you spend on horse or dog races in a typical month? IF NEEDED: I am only looking for an approximate amount.
(1/ 166)

Don't know / Refused 999

Gambling and Problem Gambling Among Adolescents in Washington State

80: **G14C**
 Do you gamble for money on horses or dog races at least once per week?
(1/ 169)

Yes..... 1
 No..... 2
 Don't know / Refused 9

81: **G15**
 Have you ever bet or spent money at a casino?
(1/ 170)

Yes..... 1
 No..... 2 => G16
 Don't know / Refused 9 => G16

82: **G15A**
 Have you bet or spent money at a casino in the past year?
(1/ 171)

Yes..... 1
 No..... 2 => G16
 Don't know / Refused 9 => G16

83: **G15P**
 Was that casino in Washington State or somewhere else?
(1/ 172)

Washington State..... 1
 Somewhere else..... 2
 Both Washington State and somewhere else..... 3
 Don't know / Refused 9

84: **G15B**
 Can you give me an idea of the amount that you spend at a casino in a typical month? IF NEEDED: I am only looking for an approximate amount.
(1/ 173)

Don't know / Refused 999

85: **G15C**
 Do you gamble for money at a casino at least once per week?
(1/ 176)

Yes..... 1
 No..... 2
 Don't know / Refused 9

86: **G16**

Have you ever bet or spent money on telephone or computer wagering, including the Internet or the Worldwide Web?

(1/ 177)

- Yes..... 1
 No..... 2 => G17
 Don't know / Refused 9 => G17
-

87: **G16A**

Have you bet or spent money on telephone or computer wagering in the past year?

(1/ 178)

- Yes..... 1
 No..... 2 => G17
 Don't know / Refused 9 => G17
-

88: **G16B**

Can you give me an idea of the amount that you spend on telephone or computer wagering in a typical month? IF NEEDED: I am only looking for an approximate amount.

(1/ 179)

- Don't know / Refused 999
-

89: **G16C**

Do you gamble for money on telephone or computer wagering at least once per week?

(1/ 182)

- Yes..... 1
 No..... 2
 Don't know / Refused 9
-

90: **G17**

Have you ever bet or spent money on any other type of gambling?

(1/ 183)

- Yes, specify 01 O
 No..... 02 X => XY0
 Don't know / Refused 99 X => XY0
-

91: **G17_1**

(Have you ever bet or spent money on any other type of gambling?) (Any other types?)

(1/ 185)

- Yes, specify 01 O
 No others 02 X
 Don't know / Refused 99 X
-

Gambling and Problem Gambling Among Adolescents in Washington State

92: **G17A**
 Have you bet or spent money on any other type of gambling in the past year?
(1/ 187)
 Yes..... 1
 No..... 2 => XY0
 Don't know / Refused 3 => XY0

93: **G17B**
 Can you give me an idea of the amount that you spend on any other type of gambling in a typical month? IF NEEDED: I am only looking for an approximate amount.
(1/ 188)
 Don't know / Refused 999

94: **G17C**
 Do you gamble for money on any other type of gambling at least once per week?
(1/ 191)
 Yes..... 1
 No..... 2
 Don't know / Refused 9

any other type of gambling..... 17

133: **P1**
 Thinking about these sorts of activities, which involve an element of luck or chance or which we call gambling activities, can you please tell me which is your favorite type of gambling activity?
(1/ 249)
 instant or scratch off lottery games 01
 the lottery Daily Game or Daily Keno..... 02
 Lotto, Quinto or Lucky for Life 03
 raffles, fund-raising events or Reno Nights..... 04
 bingo..... 05
 pulltabs 06
 flipping coins..... 07
 games of personal skill (bowling, pool or golf) 08
 card, dice or board games with friends or family 09
 card games in card rooms or minicasinios..... 10
 slot machines, poker machines or other gambling machines..... 11
 arcade or video games 12
 sports events 13
 horse or dog races..... 14
 at a casino 15
 telephone or computer wagering 16
 any other type of gambling (specify)..... 17 O

134:

P2

READ 1-7

When you participate in your favorite type of gambling, do you usually do so:

(1/ 251)

- Alone, 1
- with parents, 2
- with brothers or sisters, 3
- with other family members, 4
- with friends, 5
- with a date, 6
- or, with some other individual or group? 7
-
- Don't know 8
- Refused 9

135:

P3

READ 1-5,

When you participate in your favorite type of gambling, do you usually do so for:

(1/ 252)

- less than 1 hour, 1
- 1 to 2 hours, 2
- 3 to 5 hours, 3
- 6 to 12 hours, 4
- or more than 12 hours? 5
-
- Don't know 8
- Refused 9

136:

P4

In the past year, what is the largest amount of money you have ever gambled in a single day?

(1/ 253)

- \$1 or less, 1
- \$1 to \$10, 2
- \$10 to \$19, 3
- \$20 to \$49, 4
- \$50 to \$99, 5
- \$100 to \$199, or 6
- \$200 or more? 7
-
- Don't know 8
- refused 9

Gambling and Problem Gambling Among Adolescents in Washington State

The next set of questions is part of a standard measurement scale which has been used throughout the United States in surveys similar to this one. There are no right or wrong answers to the questions that follow. We want to know what your experiences have been. Please try to be as accurate as possible in your answers and remember that all this information is confidential.

IF NEEDED: We realize that these questions may not apply to everyone, but we do need answers to all of the questions. It will only take a few more minutes.

ENTER TO CONTINUE @XS1

184:

XDSM

Next, I would like to ask you some questions about how you feel about your gambling. As before, this set of questions is part of a standard measurement scale. There are no right or wrong answers to the questions that follow. We want to know what your experiences have been. Please try to be as accurate as possible in your answers and remember that all this information is confidential.

(1/ 301)

Continue 1 D

185:

DSM1

In the past year, have you often found yourself thinking about gambling? For example, thinking about past gambling experiences, planning the next time you will play or thinking of ways to get money to gamble?

Would you say it was...

(1/ 302)

- Never, 1
- Once or twice, 2
- Sometimes, 3
- or, often? 4
-
- Don't know 8
- Refused..... 9

186:

DSM2

In the past year, have you needed to gamble with more and more money to get the amount of excitement you were looking for?

Would you say it was...

(1/ 303)

- Never, 1
- Once or twice, 2
- Sometimes, 3
- or, often? 4
-
- Don't know 8
- Refused..... 9

187: **DSM3**

In the past year, have you become restless or irritable when trying to cut down or stop gambling?

Would you say it was...

(1/ 304)

- Never, 1
 - Once or twice, 2
 - Sometimes, 3
 - or, often? 4
 -
 - Don't know 8
 - Refused..... 9
-

188: **DSM4**

In the past year, have you gambled to escape from problems or when you were feeling depressed, anxious or bad about yourself?

Would you say it was...

(1/ 305)

- Never, 1
 - Once or twice, 2
 - Sometimes, 3
 - or, often? 4
 -
 - Don't know 8
 - Refused..... 9
-

189: **DSM5**

In the past year, after losing money gambling, have you returned another day in order to get even?

Would you say it was...

(1/ 306)

- Never, 1
 - Once or twice, 2
 - Sometimes, 3
 - or, often? 4
 -
 - Don't know 8
 - Refused..... 9
-

190:

DSM6

In the past year, have you lied to your family or others to hide the extent of your gambling ?

Would you say it was...

(1/ 307)

- Never, 1
- Once or twice, 2
- Sometimes, 3
- or, often? 4
-
- Don't know 8
- Refused..... 9

191:

DSM7

In the past year, have you made repeated unsuccessful attempts to control, cut back or stop gambling?

Would you say it was...

(1/ 308)

- Never, 1
- Once or twice, 2
- Sometimes, 3
- or, often? 4
-
- Don't know 8
- Refused..... 9

192:

DSM8

In the past year, have you been forced to go beyond what is strictly legal in order to finance gambling or to pay gambling debts?

Would you say it was...

(1/ 309)

- Never, 1
- Once or twice, 2
- Sometimes, 3
- or, often? 4
-
- Don't know 8
- Refused..... 9

193: **DSM9**

In the past year, have you risked or lost an important relationship, job, educational or career opportunity because of gambling?

Would you say it was...

(1/ 310)

- Never, 1
 - Once or twice, 2
 - Sometimes, 3
 - or, often? 4
 -
 - Don't know 8
 - Refused..... 9
-

194: **DSM10**

In the past year, have you sought help from others to provide money to relieve a desperate financial situation caused by gambling?

Would you say it was...

(1/ 311)

- Never, 1
 - Once or twice, 2
 - Sometimes, 3
 - or, often? 4
 -
 - Don't know 8
 - Refused..... 9
-

195: **XSKP2**

=> +1 else => S1A if XROT =2 ; CONTINUE IF ROTATION =2, ELSE
SKIP TO S1A SUMMARY CALCULATIONS

SKIP TO summary or continue = SET FROM XROT (JUST AFTER INT05)

(1/ 312)

The next set of questions is part of a standard measurement scale which has been used throughout the United States in surveys similar to this one. There are no right or wrong answers to the questions that follow. We want to know what your experiences have been. Please try to be as accurate as possible in your answers and remember that all this information is confidential.

IF NEEDED: We realize that these questions may not apply to everyone, but we do need answers to all of the questions. It will only take a few more minutes.

ENTER TO CONTINUE @XS2

196: **XS2**

screen

(1/ 313)

CONTINUE 1 D

242:

S1A

=> * if	S1A1+S1A2 ; SUMMARY OF ANSWERS ONLY
---------	-------------------------------------

READ 1-4

SUMMARY CALCULATION When you participate in the gambling activities we hae discussed, how often have you gone back another day to win back money you lost? Is it..

(1/ 359)

- Never, 1
- Some of the time,..... 2
- Most of the time, 3
- or, everytime?..... 4
- Don't know 8
- Refused..... 9

243:

S1B

=> * if	S1B1+S1B2 ; SUMMARY OF ANSWERS ONLY
---------	-------------------------------------

READ 1-4

SUMMARY CALCULATION How often have you done this in the past year?

(1/ 360)

- Never, 1
- Some of the time,..... 2
- Most of the time, 3
- or, every time?..... 4
- Don't know 8
- Refused..... 9

244:

S2A

=> * if	S2A1+S2A2 ; SUMMARY OF ANSWERS ONLY
---------	-------------------------------------

READ 1-4

SUMMARY CALCULATION Have you ever told others you were winning money from these activities when you really weren't winning?

(1/ 361)

- Never, 1
- Some of the time,..... 2
- Most of the time, 3
- or, everytime?..... 4
- Don't know 8
- Refused..... 9

245: **S2B**

=> * if	S2B1+S2B2 ; SUMMARY OF ANSWERS ONLY
---------	-------------------------------------

SUMMARY CALCULATION How often have you done this in the past year? (1/ 362)

- Never, 1
 - Some of the time,..... 2
 - Most of the time, 3
 - or, every time?..... 4
 - Don't know 8
 - Refused..... 9
-

246: **S3A**

=> * if	S3A1+S3A2 ; SUMMARY OF ANSWERS ONLY
---------	-------------------------------------

READ 1-4

SUMMARY CALCULATION Have you ever spent more time or money gambling than you intended? (1/ 363)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

247: **S3B**

=> * if	S3B1+S3B2 ; SUMMARY OF ANSWERS ONLY
---------	-------------------------------------

SUMMARY CALCULATION Have you done this in the past year? (1/ 364)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

248: **S4A**

=> * if	S4A1+S4A2 ; SUMMARY OF ANSWERS ONLY
---------	-------------------------------------

SUMMARY CALCULATION Has anyone criticized your gambling or said that you had a gambling problem, regardless of whether you thought it was true or not? (1/ 365)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

249: **S4B**

=> * if S4B1+S4B2 ; SUMMARY OF ANSWERS ONLY

SUMMARY CALCULATION Has anyone criticized your gambling in the past year? (1/ 366)

- Yes..... 1
- No..... 2
- Don't know 8
- Refused..... 9

250: **S5A**

=> * if S5A1+S5A2 ; SUMMARY OF ANSWERS ONLY

SUMMARY CALCULATION Have you ever felt guilty about the way you gamble or about what happens when you gamble? (1/ 367)

- Yes..... 1
- No..... 2
- Don't know 8
- Refused..... 9

251: **S5B**

=> * if S5B1+S5B2 ; SUMMARY OF ANSWERS ONLY

SUMMARY CALCULATION Have you felt this way in the past year? (1/ 368)

- Yes..... 1
- No..... 2
- Don't know 8
- Refused..... 9

252: **S6A**

=> * if S6A1+S6A2 ; SUMMARY OF ANSWERS ONLY

SUMMARY CALCULATION Have you ever felt like you would like to stop betting money, but didn't think you could? (1/ 369)

- Yes..... 1
- No..... 2
- Don't know 8
- Refused..... 9

253:

S6B

=> * if	S6B1+S6B2 ; SUMMARY OF ANSWERS ONLY
---------	-------------------------------------

SUMMARY CALCULATION Have you felt this way in the past year? (1/ 370)

- Yes..... 1
- No..... 2
- Don't know 8
- Refused..... 9

254:

S7A

=> * if	S7A1+S7A2 ; SUMMARY OF ANSWERS ONLY
---------	-------------------------------------

SUMMARY CALCULATION Have you ever hidden I.O.U.'s, lottery tickets, gambling money, or any signs of gambling from your family or friends? (1/ 371)

- Yes..... 1
- No..... 2
- Don't know 8
- Refused..... 9

255:

S7B

=> * if	S7B1+S7B2 ; SUMMARY OF ANSWERS ONLY
---------	-------------------------------------

SUMMARY CALCULATION Have you done so in the past year? (1/ 372)

- Yes..... 1
- No..... 2
- Don't know 8
- Refused..... 9

256:

S8

=> * if	S8_1+S8_2 ; SUMMARY OF ANSWERS ONLY
---------	-------------------------------------

SUMMARY CALCULATION Have you ever argued with people you live with over how you handle money? (1/ 373)

- Yes..... 1
- No..... 2
- Don't know 8
- Refused..... 9

257: **S8A**

=> * if S8A1+S8A2 ; SUMMARY OF ANSWERS ONLY

SUMMARY CALCULATION Have these arguments ever centered on your gambling? (1/ 374)

- Yes..... 1
- No..... 2
- Don't know 8
- Refused..... 9

258: **S8B**

=> * if S8B1+S8B2 ; SUMMARY OF ANSWERS ONLY

SUMMARY CALCULATION Have you had any of these arguments in the past year? (1/ 375)

- Yes..... 1
- No..... 2
- Don't know 8
- Refused..... 9

259: **S9A**

=> * if S9A1+S9A2 ; SUMMARY OF ANSWERS ONLY

SUMMARY CALCULATION Have you ever skipped or been absent from school or work due to gambling? (1/ 376)

- Yes..... 1
- No..... 2
- Don't know 8
- Refused..... 9

260: **S9B**

=> * if S9B1+S9B2 ; SUMMARY OF ANSWERS ONLY

SUMMARY CALCULATION Have you missed school or work in the past year due to gambling? (1/ 377)

- Yes..... 1
- No..... 2
- Don't know 8
- Refused..... 9

261: **S10A**

=> * if	S10A1+S10A2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Have you borrowed money from someone and not paid them back as a result of your gambling? (1/ 378)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

262: **S10B**

=> * if	S10B1+S10B2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Have you done so in the past year? (1/ 379)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

263: **S11A**

=> * if	S11A1+S11A2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION screen Have you ever borrowed money from your family (parents, brothers or sisters) or from the household without their knowing to gamble or pay gambling debts? (1/ 380)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

264: **S11B**

=> * if	S11B1+S11B2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Have you borrowed from your family (parents, brothers or sisters) or from the household in the past year? (1/ 381)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

265: **S12A**

=> * if	S12A1+S12A2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Have you ever borrowed money from other relatives without their knowing to gamble or pay gambling debts? (1/ 382)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

266: **S12B**

=> * if	S12B1+S12B2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Have you borrowed from other relatives without their knowing within the past year? (1/ 383)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

267: **S13A**

=> * if	S13A1+S13A2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Have you ever borrowed money from friends or acquaintances to gamble or pay gambling debts? (1/ 384)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

268: **S13B**

=> * if	S13B1+S13B2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Have you borrowed money from friends or acquaintances in the past year? (1/ 385)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

269: **S14A**

=> * if	S14A1+S14A2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Have you ever sold personal property to gamble or pay gambling debts? (1/ 386)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

270: **S14B**

=> * if	S14B1+S14B2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Have you ever sold personal property to gamble or pay gambling debts in the past year? (1/ 387)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

271: **S15A**

=> * if	S15A1+S15A2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Have you ever shoplifted in order to get money to gamble or pay gambling debts? (1/ 388)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

272: **S15B**

=> * if	S15B1+S15B2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Have you ever shoplifted in order to get money to gamble or pay gambling debts in the past year? (1/ 389)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

273: **S16A**

=> * if	S16A1+S16A2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Have you ever stolen in some other way to gamble or pay gambling debts? (1/ 390)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

274: **S16B**

=> * if	S16B1+S16B2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Have you stolen in some other way to gamble or pay gambling debts in the past year? (1/ 391)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

275: **S17A**

=> * if	S17A1+S17A2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Have you ever bought or sold stolen property to gamble or pay gambling debts? (1/ 392)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

276: **S17B**

=> * if	S17B1+S17B2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Have you bought or sold stolen property to gamble or pay gambling debts in the past year? (1/ 393)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

277: **S18A**

=> * if	S18A1+S18A2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Have you ever borrowed money from a loan shark to get money to gamble or pay gambling debts?

(1/ 394)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

278: **S18B**

=> * if	S18B1+S18B2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Have you borrowed money from a loan shark in the past year?

(1/ 395)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

279: **S19A**

=> * if	S19A1+S19A2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Have you worked for a bookmaker or a numbers writer or someone who ran another type of gambling operation to get money to gamble or pay gambling debts?

(1/ 396)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

280: **S19B**

=> * if	S19B1+S19B2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Have you worked for a bookmaker or a numbers writer or someone who ran another type of gambling operation to get money in the past year?

(1/ 397)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

281: **S20A**

=> * if S20A1+S20A2 ; SUMMARY OF ANSWERS ONLY

SUMMARY CALCULATION Have you ever sold drugs in order to get money to gamble or pay gambling debts? (1/ 398)

- Yes..... 1
- No..... 2
- Don't know 8
- Refused..... 9

282: **S20B**

=> * if S20B1+S20B2 ; SUMMARY OF ANSWERS ONLY

SUMMARY CALCULATION Have you sold drugs in order to get money to gamble or pay gambling debts in the past year? (1/ 399)

- Yes..... 1
- No..... 2
- Don't know 8
- Refused..... 9

283: **S21A**

=> * if S21A1+S21A2 ; SUMMARY OF ANSWERS ONLY

SUMMARY CALCULATION Have you ever done anything else illegal in order to get money to gamble or pay gambling debts? (1/ 400)

- Yes..... 1
- No..... 2
- Don't know 8
- Refused..... 9

284: **S21B**

=> * if S21B1+S21B2 ; SUMMARY OF ANSWERS ONLY

SUMMARY CALCULATION Have you done anything else illegal in order to get money to gamble or pay gambling debts in the past year? (1/ 401)

- Yes..... 1
- No..... 2
- Don't know 8
- Refused..... 9

Gambling and Problem Gambling Among Adolescents in Washington State

285: **S22A**

=> * if	S22A1+S22A2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Do you feel that you have ever had a problem with betting money or gambling? (1/ 402)

- Yes..... 1
- No..... 2
- Don't know 8
- Refused..... 9

286: **S22B**

=> * if	S22B1+S22B2 ; SUMMARY OF ANSWERS ONLY
---------	---------------------------------------

SUMMARY CALCULATION Do you feel that you have had a problem with betting money or gambling in the past year? (1/ 403)

- Yes..... 1
- No..... 2
- Don't know 8
- Refused..... 9

287: **H1**

How old were you when you first started gambling? (1/ 404)

Don't know / refused 99

288: **H2**

What type of gambling was that? (1/ 406 - 408)

- instant or scratch off lottery games 01
- the lottery Daily Game or Daily Keno..... 02
- Lotto, Quinto or Lucky for Life 03
- raffles, fund-raising events or Reno Nights..... 04
- bingo..... 05
- pulltabs 06
- flipping coins..... 07
- games of personal skill (bowling, pool or golf) 08
- card, dice or board games with friends or family 09
- card games in card rooms or minicasinosa..... 10
- slot machines, poker machines or other gambling machines..... 11
- arcade or video games 12
- sports events 13
- horse or dog races..... 14
- at a casino 15
- telephone or computer wagering 16
- any other type of gambling (specify)..... 17 O

Gambling and Problem Gambling Among Adolescents in Washington State

289:

H3

READ 1-6

Who was the first person that you gambled with?

(1/ 410 - 412)

- a parent 01
- a grandparent, 02
- a brother or sister, 03
- another relative, 04
- a friend, 05
- Or Some other person? (Specify) 06 O
-
- Don't know 98 X
- Refused 99 X

290:

H3A

READ 1-5

Is that your

(1/ 414 - 415)

- mother, 1
- father, 2
- step mother, 3
- step father, 4
- or someone else? (Specify) 5 O
- Don't know 8
- Refused 9

291:

H4

Was there any time when the amount you were gambling made you nervous?

(1/ 416)

- Yes 1
- No 2 => H7
- Don't know 8 => H7
- Refused 9 => H7

292:

H5

How old were you when that happened?

(1/ 417)

- Don't know / refused 99

Gambling and Problem Gambling Among Adolescents in Washington State

293: **H6**

What type of gambling were you doing when that happened? (1/ 419 - 421)

- instant or scratch off lottery games 01
 - the lottery Daily Game or Daily Keno..... 02
 - Lotto, Quinto or Lucky for Life 03
 - raffles, fund-raising events or Reno Nights..... 04
 - bingo..... 05
 - pulltabs 06
 - flipping coins..... 07
 - games of personal skill (bowling, pool or golf) 08
 - card, dice or board games with friends or family 09
 - card games in card rooms or minicasinosa..... 10
 - slot machines, poker machines or other gambling machines..... 11
 - arcade or video games 12
 - sports events 13
 - horse or dog races..... 14
 - at a casino 15
 - telephone or computer wagering 16
 - any other type of gambling (specify)..... 17 O
-

294: **H7**

Do either of your parents play any games of chance for money? (1/ 423)

- Yes..... 1
 - No 2 => H9
 - Don't know 8 => H9
 - Refused..... 9 => H9
-

295: **H8**

Which parent is that? (1/ 424 - 426)

- mother only 01
 - father only 02
 - both mother and father, 03
 - step mother only 04
 - step father only 05
 - mother and step father 06
 - step mother and father 07
 - other (Specify)..... 08 O
 - Don't know / refused 99 X
-

296: **H9**

Do you feel that either of your parents has ever had a problem with betting money or gambling? (1/ 428)

- Yes..... 1
 - No 2
 - Don't know 8
 - Refused..... 9
-

297: **XRA**

Next, I'd like to ask you a few questions about other activities and about your feelings in general. Please remember that all responses will be kept confidential. I would like to know if you have ever used the following drugs. Please remember that your answers will be strictly confidential.

(1/ 429)

Continue 1 D

298: **RA1**

In your lifetime, have you ever used cigarettes, chewing tobacco or snuff?

(1/ 430)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

299: **RA2**

READ 1-3

Was the most recent time you used them...

(1/ 431)

- within the last month, 1
 - within the last year, 2
 - or more than a year ago? 3
 -
 - Don't know 8
 - Refused..... 9
-

300: **RA3**

In your lifetime, have you ever used alcohol?

(1/ 432)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-

301: **RA4**

READ 1-3;

Was the most recent time you used alcohol...

(1/ 433)

- within the last month, 1
 - within the last year, 2
 - or more than a year ago? 3 => RA9
 -
 - Don't know 8 => RA9
 - Refused..... 9 => RA9
-

302: **RA5**

During the past 12 months, how many times have you gotten into difficulties of any kind with your friends because of your drinking?

(1/ 434)

- none 1
- 1 2
- 2 or 3 3
- 4 to 9 4
- 10 times or more 5
- Don't know 8
- Refused 9

303: **RA6**

(During the past 12 months, have you) Driven a car when you've had a good bit to drink?

(1/ 435)

- Yes 1
- No 2
- Don't know 8
- Refused 9

304: **RA7**

(During the past 12 months, have you) Been criticized by someone you were dating because of drinking?

(1/ 436)

- Yes 1
- No 2
- Don't know 8
- Refused 9

305: **RA8**

(During the past 12 months, have you) Gotten into trouble with the police because of drinking?

(1/ 437)

- Yes 1
- No 2
- Don't know 8
- Refused 9

306: **RA9**

In your lifetime, have you ever used marijuana?

(1/ 438)

- Yes 1
 - No 2
 - Don't know 8
 - Refused 9
-

307: **RA10**

READ 1-3

Was the most recent time you used marijuana... (1/ 439)

within the last month, 1

within the last year, 2

or more than a year ago? 3

Don't know 8

Refused..... 9

308: **RA11**

In your lifetime, have you ever used any other drugs, not prescribed? (such as crack or cocaine, hallucinogens, inhalants, upper or downers.) (1/ 440)

Yes..... 1

No 2

Don't know 8

Refused..... 9

309: **RA12**

READ 1-3

Was the most recent time you used other drugs... (1/ 441)

within the last month, 1

within the last year, 2

or more than a year ago? 3

Don't know 8

Refused..... 9

311: **RA13**

During the past 12 months, how many times have you gotten into difficulties of any kind with your friends because of your drug use? (1/ 443)

none 1

1 2

2 or 3 3

4 to 9..... 4

10 times or more..... 5

Don't know 8

Refused..... 9

312: **RA14**
(During the past 12 months, have you) Driven a car when you've felt high from drugs?
(1/ 444)

Yes..... 1
No..... 2
Don't know 8
Refused..... 9

313: **RA15**
(During the past 12 months, have you) Been criticized by someone you were dating because of your drug use?
(1/ 445)

Yes..... 1
No..... 2
Don't know 8
Refused..... 9

314: **RA16**
(During the past 12 months, have you) Gotten into trouble with the police because of your drug use?
(1/ 446)

Yes..... 1
No..... 2
Don't know 8
Refused..... 9

316: **RA17**
Have you ever sought help, other than from family or friends, for problems connected with your use of alcohol, marijuana or other drugs?
(1/ 448)

Yes..... 1
No..... 2
Don't know 8
Refused..... 9

317: **D1**
RECORD GENDER: IF UNSURE, SAY: I am required to ask, are you a male or female?
(1/ 449)

Male..... 1
Female 2
Don't know 8
Refused..... 9

318: **D2**

How old were you on your last birthday? (1/ 450)

- 13 years old 1
- 14 years old 2
- 15 years old 3
- 16 years old 4
- 17 years old 5
- 18 years old or older 6
- Refused..... 9

319: **D3**

Do you consider yourself Hispanic? (1/ 451)

- Yes..... 1
- No 2
- Don't know 8
- Refused..... 9

320: **D4**

READ 1-5

Which of the following best describes your racial or ethnic background?
 Would you say. . . (1/ 452)

- White or Caucasian, 01
- Black,..... 02
- Native American,..... 03
- Asian,..... 04
- Or something else? 05 O
-
- Don't know/Not sure..... 08
- Refused..... 09

321: **D5**

READ 1-4

What kind of home do you live in? (1/ 454)

- a mobile home or trailer, 1
- an apartment or duplex, 2
- a house or condominium, 3
- or something else? 4
-
- Don't know/Not sure..... 8
- Refused..... 9

Gambling and Problem Gambling Among Adolescents in Washington State

322: **D6**
How many adults live with you, not including older brothers and sisters?
(1/ 455)
None 00
Refused..... 99

323: **D7**
READ 1-4
Which of the following best describes your current religious preference?
(1/ 457)
Protestant 1
Catholic 2
Jewish 3
or, something else? 4

No religion..... 5
Don't know/Not sure..... 8
Refused..... 9

324: **D8**
What grade are you in school right now?
(1/ 458)
less than 8th 01
8th Grade 02
9th grade (freshman) 03
10th grade (sophomore) 04
11th grade (junior)..... 05
12th grade (senior) 06
Working toward GED 07
Graduated 08
Dropped out, quit school 09
Suspended, expelled 10
Refused..... 99

325: **D9**
What is the last grade you completed?
(1/ 460)
less than 8th 1
8th Grade 2
9th grade (freshman) 3
10th grade (sophomore) 4
11th grade (junior)..... 5
12th grade (senior) 6
Refused..... 9

326:

D10

Since this past September / since school began in September, how many hours a week have you worked at a job?

(1/ 461)

- Did not work during school..... 1
 - 1 to 4 hours..... 2
 - 5 to 9 hours..... 3
 - 10 to 20 hours..... 4
 - Over 20 hours per week 5
 - Don't know 8
 - Refused..... 9
-
-

327:

D11

Do you get an allowance?

(1/ 462)

- Yes..... 1
 - No..... 2
 - Don't know 8
 - Refused..... 9
-
-

328:

D12

During the past year, what was your income in an average week, including your allowance, job and other sources of money.

DO NOT READ

(1/ 463)

- \$0..... 01
 - \$1-\$9 02
 - \$10-\$19 03
 - \$20-\$49 04
 - \$50-\$99 05
 - \$100-\$199 06
 - \$200 or more per week..... 07
 - Don't know/Not sure..... 88
 - Refused..... 99
-
-

Gambling and Problem Gambling Among Adolescents in Washington State

In what county do you live?

330:

WC_3

combined question / county

(1/ 467)

ADAMS	01
ASOTIN	03
BENTON.....	05
CHELAN.....	07
CLALLAM.....	09
CLARK	11
COLUMBIA.....	13
COWLITZ.....	15
DOUGLAS.....	17
FERRY	19
FRANKLIN.....	21
GARFIELD.....	23
GRANT	25
GRAYS HARBOR.....	27
ISLAND	29
JEFFERSON	31
KING	33
KITSAP.....	35
KITTITAS.....	37
KLICKITAT.....	39
LEWIS.....	41
LINCOLN	43
MASON	45
OKANOGAN.....	47
PACIFIC.....	49
PEND OREILLE.....	51
PIERCE	53
SAN JUAN.....	55
SKAGIT	57
SKAMANIA	59
SNOHOMISH.....	61
SPOKANE	63
STEVENS	65
THURSTON.....	67
WAHKIAKUM.....	69
WALLA WALLA	71
WHATCOM.....	73
WHITMAN	75
YAKIMA	77

332:

D13

PLEASE NOTE IF YOU FELT THAT. . .

(1/ 473)

Evidence parent was listening	1
No evidence that parent was listening	2
Evidence that parent was NOT listening	3
missing code	9 N

333:

INT01

That was the last question. Your participation is very important to the survey and all of us working on the project. Thank you very much for your time and cooperation.

(1/ 474)

COMPLETED INTERVIEW 01 D => /END
