

**GAMBLING AND PROBLEM GAMBLING  
IN GEORGIA**

*Report to the Georgia Department of Human Resources*

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2 May 1995

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## **ACKNOWLEDGEMENTS**

We would like to thank the residents of Georgia who were interviewed for this survey. Their contribution has been vital in adding to our knowledge of changes in gambling and gambling-related problems in the United States. We would also like to thank Leo Simonetta and the staff of the Georgia State University Applied Research Center who conducted the interviews for this survey as well as Professor Donald Reitzes of Georgia State University for assistance for his help in interpreting some of the results of the survey.

## EXECUTIVE SUMMARY

This report presents the results of the first survey of gambling and problem gambling in the State of Georgia. A large sample of Georgia residents aged 18 and over (N=1,550) were interviewed about the types of gambling they have tried, the amounts of money they spend on gambling, and about problematic gambling-related behaviors. The information in this report will be useful in planning for the availability of future gaming opportunities and in the appropriate design of services for problem and pathological gamblers in Georgia.

### Findings

- The rate of lifetime gambling participation in Georgia is lower than in any other United States jurisdiction surveyed since 1990. In Georgia, only 74% of the total sample indicated that they had ever tried one or more of the types of wagering included in the survey.
- Among respondents in this survey, men were more likely than women to have gambled on card and dice games for money, on sports and on games of skill while women were more likely to have played bingo. Respondents under the age of 30 were more likely than older respondents to have wagered on card games for money, on sports and on games of skill.
- Expenditures on lottery games account for 37% of reported total monthly expenditures on gambling among Georgia respondents. Out-of-state wagering accounts for 27% of reported total monthly expenditures on gambling while wagering on illegal gambling accounts for another 27% of reported total monthly expenditures on gambling among Georgia respondents.
- Overall, the lifetime prevalence rate of problem and probable pathological gambling in Georgia is 4.4% of the adult population while the current prevalence rate of problem and probable pathological gambling is 2.3% of the adult population.
- Problem and probable pathological gamblers in Georgia are significantly more likely to be young, African-American men than non-problem gamblers in the general population. These individuals are significantly less likely to be married and to have graduated from high school than non-problem gamblers and significantly more likely to wager weekly on instant lottery games, the daily lottery game, sports events with friends and on card games for money than non-problem gamblers in Georgia.
- Problem and probable pathological gamblers in Georgia are significantly more likely than non-problem gamblers to use alcohol or drugs while they are gambling and to have sought treatment for an alcohol or drug problem. Problem and probable pathological gamblers in Georgia are significantly more likely than non-problem gamblers to spend long periods of time gambling and to have lost \$100 or more in gambling on a single day.

- Despite the recent availability of legal gambling opportunities in Georgia, the lifetime prevalence rate of problem and probable pathological gambling is substantial. Like Texas, this may be due to the ethnic diversity of the population in Georgia as well as to substantial illegal gambling involvement.
- While lifetime problem and probable pathological gamblers in Georgia are significantly more likely to be men, current problem and probable pathological gamblers are just as likely to be women. This suggests that women in Georgia may be starting to experience gambling-related difficulties similar to the difficulties experienced by male gamblers.

### **Future Directions**

While the results of this survey show that significant numbers of the residents of Georgia participate in gambling, that such activities are widely accepted, and that most spend small to moderate amounts of money on gambling, the results of this survey also show that, at a minimum, 17,000 Georgia adults are currently experiencing severe problems related to their involvement in gambling. Directions for the future include a survey of adolescents to assess gambling involvement and gambling-related problems, wider advertising of the helpline in Georgia to improve public access to this important resource, continued training for treatment professionals in recognizing and treating problem and pathological gamblers and standard screening for gambling-related problems among individuals entering treatment for chemical dependency as well as among incarcerated populations.

## INTRODUCTION

Since the mid-1970s, legalized gambling has exploded across the United States. In 1974, just prior to this gambling boom, the first and only national survey of gambling was completed in the United States. At that time, it was estimated that total legal annual wagering in the United States amounted to about 2% of United States personal income while legal gaming revenues amounted to approximately \$3 billion (Kallick, Suits, Dielman & Hybels 1979). By 1993, the amount wagered legally in the United States had reached 7% of United States personal income while legal gaming revenues had mounted to \$35 billion (Christiansen 1994).

In 1976, only thirteen states had lotteries, only one had approved off-track wagering, and there were no casinos outside of Nevada. By 1993, there were state lotteries operating in 37 states as well as the District of Columbia; riverboat casinos were operating in six states in the Mississippi River basin and delta; Native American casinos were well-established throughout the nation; land-based casinos were being considered in major urban areas such as Chicago, Detroit and New Orleans; and electronic gaming devices (VLTs) were permitted in four states.

Until very recently, the legalization of gambling has proceeded with little consideration of the potentially negative impacts that gambling can have on individuals, families and communities. This study, initiated and funded by the Georgia Department of Human Resources, examines the extent of gambling and problem gambling in Georgia in 1994 and compares these findings to surveys conducted elsewhere in the United States. The purpose of the study is to establish baseline measures of gambling involvement and gambling-related problems among the adult population in Georgia and to provide a foundation for planning prevention and treatment services for individuals in the state with gambling-related problems.

### Defining Gambling and Problem Gambling

Since the 1970s, legalized gambling has become a popular recreational pastime throughout North America. In 1974, 68% of the respondents in a nationally representative sample indicated that they had at some time wagered on one or more types of legal or illegal gambling (Kallick-Kaufmann 1979). In the 1990s, lifetime participation rates in gambling range from 76% to 91% in the adult population in different United States jurisdictions. Respondents in these surveys have been asked about their participation in many types of legal and illegal gambling, ranging from charitable, small-stakes games such as raffles and bingo through lottery play to involvement in speculative investments in the stockmarket.

The vast majority of people who participate in legal gambling do so responsibly, for entertainment and as a means to socialize with friends and family. These individuals typically do not risk more than they can afford to lose and, if they should "chase" their losses to get even, they do so only briefly. It is essential to remember that, as with alcohol and drug use, involvement in gambling is not equivalent to gambling-related problems. Indeed, involvement in gambling is not usually used as a criterion for classifying the severity of an individual's gambling-related difficulties.

A variety of terms have been used to describe people whose gambling does cause difficulties to themselves, their families and their communities. The term typically employed by lay audiences is *compulsive gambler*. However, the term *compulsive* implies that the individual is engaged in an activity that is not enjoyable. Since, at least initially, gambling can be quite enjoyable even for those who later develop difficulties, the term *compulsive gambling* is considered something of a misnomer (Moran 1970).

*Pathological gambling* lies at one end of a spectrum of problematic gambling behavior and was

first recognized as a psychiatric disorder in 1980 (American Psychiatric Association 1980). Recent changes have been made to the psychiatric criteria for pathological gambling in order to incorporate empirical research that links pathological gambling to other addictive disorders like alcohol and drug dependence. *The essential features of pathological gambling are a continuous or periodic loss of control over gambling; a progression, in gambling frequency and amounts wagered, in the preoccupation with gambling and in obtaining monies with which to gamble; and a continuation of gambling involvement despite adverse consequences* (American Psychiatric Association 1994).

The term **problem gambling** is employed in the literature in several different ways. The term is sometimes used to refer to individuals who fall short of the diagnostic criteria for pathological gambling but are assumed to be in a preliminary stage in the development of such a pathology. The term has also been used to refer to individuals who lose excessive amounts of money, relative to their income, through gambling although without reference to specific difficulties that they may experience (Rosecrance 1988). The National Council on Problem Gambling uses this term to indicate all of the patterns of gambling behavior that compromise, disrupt or damage personal, family or vocational pursuits (Lesieur & Rosenthal 1990).

In prevalence surveys, individuals are categorized as **problem gamblers** or **pathological gamblers** on the basis of their responses to the questions included in the South Oaks Gambling Screen. Respondents scoring 3 or 4 out of a possible 20 points are classified as problem gamblers while those scoring 5 or more points are classified as probable pathological gamblers. In prevalence surveys conducted since 1990, a distinction is made between lifetime and current problem and pathological gamblers.

Lifetime problem and pathological gambling refers to individuals who have, at some time in their lives, met the South Oaks Gambling Screen criteria for problem or pathological gambling. Current problem and pathological gambling refers to individuals who have met these criteria in the past year. For example, a middle-aged individual who may have experienced significant gambling-related difficulties in youth but no longer meets criteria for gambling-related difficulties would be referred to as a lifetime problem gambler.

### **The Purpose of Prevalence Surveys**

Increasingly, prevalence surveys of gambling and problem gambling in the general population have become an essential component in the establishment and monitoring of gaming initiatives in jurisdictions in Australia, Canada, Europe and the United States. Information from such surveys helps identify and minimize the potentially harmful impacts that legalized gambling may produce. This pro-active approach to the issue helps ensure that appropriate measures are taken to educate the public as well as treatment professionals and gaming operators about problem gambling.

Prevalence surveys provide estimates of the number of individuals in the general population who have or are experiencing difficulties controlling their involvement in gambling as well as information about the demographic characteristics and gambling involvement of these individuals. This information is vital in planning for the availability of gaming opportunities in the future and in the appropriate design of services for problem and pathological gamblers in these jurisdictions. Replications of these surveys allow policy-makers and program planners to determine the precise impact of new gaming opportunities on the prevalence of gambling-related problems in the general population.

Screens such as the South Oaks Gambling Screen are used to detect psychological maladies in clinical settings as well as in general population research. Such screens are expected to make errors in classification although misclassification has very different consequences in clinical settings as opposed to



general population research. In clinical settings, screening tests are usually followed by more detailed examinations and the generation of "false positives" is acceptable because the purpose of the screen is to detect individuals with a higher-than-normal probability of having a given condition. For screens used in general population research, the generation of both "false positives" and "false negatives" is an issue since the purpose of such research is to identify as precisely as possible the number and characteristics of individuals in a community for whom services may be needed.

The lifetime South Oaks Gambling Screen is very good at detecting pathological gambling among those who experience the disorder. However, as is to be expected from a screen originally developed for clinical purposes, the lifetime South Oaks Gambling Screen identifies at-risk individuals at the expense of generating a large number of false positives. The current South Oaks Gambling Screen produces far fewer false positives than the lifetime measure but more false negatives and thus provides a weaker screen for pathological gamblers. However, the overall efficiency of the current South Oaks Gambling Screen makes it a more useful tool for detecting rates of change in pathological gambling prevalence over time (Abbott & Volberg 1995).

The survey of gambling and problem gambling in Georgia is a baseline measure of gambling participation and prevalence. Since this is the first time that such data have been collected in Georgia, it is essential to focus on the characteristics of individuals in the state at greatest risk for experiencing gambling-related problems. With no earlier data available, it is impossible to address the question of changes in gambling involvement or prevalence rates over time. The focus of this report will necessarily be on lifetime problem and probable pathological gamblers. In future research and reports, when similar data are collected, it will be important to focus on current problem and probable pathological gamblers as well.

## METHODS

The survey in Georgia builds on work carried out in the United States, Canada and New Zealand. Only one survey of gambling in the general population was carried out in the United States prior to 1980 (Kallick, Suits, Dielman & Hybels 1979). Between 1984 and 1990, state-wide surveys of gambling and problem gambling were carried out in California, Connecticut, Iowa, Maryland, Massachusetts, Minnesota, New Jersey, New York and Ohio (Christiansen/Cummings Associates 1992; Laundergan, Schaefer, Eckhoff & Pirie 1990; Sommers 1988; Volberg 1994a; Volberg & Steadman 1988, 1992) as well as in the Canadian province of Quebec (Ladouceur 1993).

Since 1990, prevalence surveys of gambling and problem gambling have been completed in Montana, North Dakota, South Dakota, Texas and Washington State (Volberg 1992, 1993; Volberg & Silver 1993; Volberg & Stuefen 1991; Wallisch 1993) as well as in the Canadian provinces of Alberta, British Columbia, Manitoba, New Brunswick, Nova Scotia and Saskatchewan (Baseline Market Research 1992; Criterion Research 1993; Omnifacts Research 1993; Smith, Volberg & Wynne 1994; Volberg & Angus Reid Group 1994, Volberg 1994b) and in New Zealand (Abbott & Volberg 1991, 1992). All but three of the prevalence surveys carried out since 1980 have been based on the South Oaks Gambling Screen (Lesieur & Blume 1987).

### Development of the South Oaks Gambling Screen

The South Oaks Gambling Screen is a 20-item scale based on the diagnostic criteria for pathological gambling (American Psychiatric Association 1980). Weighted items on the South Oaks Gambling Screen 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. The South Oaks Gambling Screen has been tested for reliability and validity with several populations, including hospital workers, university students, prison inmates and inpatients in alcohol and substance abuse treatment programs as well as in the general population in New Zealand (Abbott & Volberg 1992; Lesieur & Blume 1987; Lesieur, Blume & Zoppa 1986; Lesieur & Klein 1985).

Surveys of gambling and problem gambling completed since 1990 have used a revised version of the South Oaks Gambling Screen. In revising the South Oaks Gambling Screen, the preliminary section of the questionnaire was expanded to collect more detailed information about gambling frequency and expenditures in the general population. In addition, the South Oaks Gambling Screen items were expanded to assess both lifetime and current prevalence of problem and pathological gambling. To determine if the changes made to the South Oaks Gambling Screen had any impact on reported prevalence rates, the revised South Oaks Gambling Screen (SOGS-R) was tested in Iowa where an earlier prevalence survey had been carried out. The difference in the prevalence rates for these two surveys was 0.1% (Volberg & Stuefen 1991).

Work undertaken in New Zealand has cast light on the validity and reliability of the South Oaks Gambling Screen in general population surveys (Abbott & Volberg 1992, 1995; Volberg & Abbott 1994). The work in New Zealand established that, like all measurement instruments, the South Oaks Gambling Screen makes both types of classification errors (false positives and false negatives). The usefulness of this exercise was in determining the size of each type of classification error. The results of this study showed that the lifetime and current South Oaks Gambling Screens are both useful as screening instruments in the general population although the lifetime screen is more *accurate* while the current screen is more *efficient* at correctly classifying pathological gamblers in the general population.

## **The Georgia Survey**

To ensure comparability with gambling and problem gambling surveys conducted elsewhere in the United States, the survey in Georgia was based on the revised South Oaks Gambling Screen. In the first stage of the project, staff from the Georgia Department of Human Resources, the Applied Research Center, the Georgia State University Department of Sociology and Gemini Research met to clarify the goals of the project and finalize the questionnaire for the survey.

In the second stage of the project, staff from the Applied Research Center completed telephone interviews with a random sample of 1,550 residents of Georgia aged 18 years and older. All interviews were completed between November 14, 1994 and December 10, 1994. The Applied Research Center then provided Dr. Volberg with the data for the third stage of the project which included analysis of the data and preparation of this report. One section of this report dealing with the history of gambling in Georgia was prepared by Professor Jacqueline Boles of the Department of Sociology, Georgia State University. Professor Boles and Professor Donald Reitzes also assisted in the preparation of a section of the report detailing the results of the administration of the Rosenberg Self-Esteem Scale.

### **Questionnaire Design**

The questionnaire for the Georgia survey was composed of three major sections. The first section included questions about 18 different types of gambling in which residents of the state may participate. 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. The different types of gambling included:

- instant lottery games
- daily lottery game
- Lotto
- raffles and charitable games
- bingo
- numbers game
- card games for money
- sports events with friends
- sports pools
- sports events with a bookmaker
- dice games for money
- games of skill
- slot machines at casinos
- table games at casinos
- horse or dog races
- other animal events
- speculative investments
- any other type of gambling

The second section of the questionnaire was composed of the lifetime and past-year South Oaks Gambling Screen items and the final section of the questionnaire included questions about the demographic characteristics of each respondent. For the Georgia survey, the Rosenberg Self-Esteem Scale, a standard scale measuring respondents' attitudes towards self (Rosenberg, School, Schoenbach & Rosenberg 1995), was added to the questionnaire and administered between the end of the South Oaks Gambling Screen and

the beginning of the questions on demographics.

### **Sampling Design**

The sampling design was carefully constructed to ensure that inferences could be drawn between the sample and the population aged 18 and over in Georgia. The sample was stratified to proportionally represent county populations on the basis of 1990 census figures. Random sampling of households and random selection of respondents within households were used. All Georgia residents with a working telephone were eligible for this survey. The sample was provided by Survey Sampling, Inc. and interviews were scheduled on weekdays from 10:00AM to 9:15PM Monday through Thursday and 10:00AM through 5:00PM on Friday. Weekend interviews were scheduled on Saturdays from 11:00AM to 7:00 PM and on Sundays from 10:00AM to 6:00PM. Up to twelve attempts were made to contact each number and a minimum of eight callbacks were made to complete an interview with each selected respondent.

### **Representativeness of the Sample**

In order to assess the accuracy of the findings based on this survey, it is important to understand how representative the sample is of the general population of Georgia. To determine representativeness, the demographic characteristics of the sample were compared with demographic information from the United States Bureau of the Census. Since comparisons are with the 1990 Census of Population and Housing, some of the differences identified below may be due to changes in the characteristics of the population over the past 5 years.

It is well-known that telephone surveys tend to under-sample specific groups in the general population that are less likely than other groups to own telephones and to have telephone service. Although the rate of telephone ownership is generally over 90% in the general population, the rate of telephone ownership in areas with high poverty rates tends to be much lower. The table below shows that, as is often the case with telephone surveys, there are some differences between the sample and the general population in terms of gender, age, educational attainment and household income.

**TABLE 1**  
**Comparing the Demographics**  
**of the Sample and the General Population**

	<b>Sample</b>	<b>Population</b>
Male	42%	48%
Under 30	21%	28%
Non-Caucasian	28%	29%
Not Married	44%	47%
Less than HS	12%	29%
Annual HH Under \$25,000	35%	43%

Since prevalence rates of problem and probable pathological gambling tend to be higher among men as well as among individuals under the age of 30 and those with low levels of education, it was deemed important to determine if differences between the Georgia sample and the general population had

contributed to a conservative estimate of the prevalence of problem and probable pathological gambling. However, analysis of prevalence rates after weighting the sample by sex, age and education did not produce significant changes. Despite this analysis, these differences between the sample and the general population suggest that the prevalence rates for problem and probable pathological gambling identified in Georgia should be viewed as conservative.

### **Response Rate**

Response rates for problem gambling surveys in the United States range from 78% in South Dakota to 65% in New Jersey. In general, response rates are higher in rural areas of the United States than in heavily urban areas such as the Northeast.

The response or completion rate for this survey was calculated by taking the number of completed surveys and dividing it by the number of completes *plus* refusals *plus* partial interviews. A number was removed from the valid list of respondents if it was: (1) disconnected or changed, (2) the respondent was unable to complete the survey due to illness or (3) the respondent was out of town for the duration of the survey. Using this method, the response or completion rate of valid respondents for this survey was 73% which compares well with response rates for similar surveys in other states.

All survey results are subject to margins of error. For data based on the total number of completions in this survey (N=1,550), the margin of error is  $\pm 2.56\%$  assuming a 95% confidence interval and assuming that the total proportion of the sample responding in one way or another to the question is relatively large. For example, if 50% of all the respondents surveyed answered a question in a particular way, then we can be sure, nineteen times out of twenty, that if the entire population of Georgia had been interviewed, the proportion would lie between 47.4% and 52.6% based on the responses of respondents in the sample.

### **Analytic Categories**

For purposes of analysis as well as comparison with other jurisdictions, detailed demographic data on age, ethnicity, education, income and marital status were collapsed into dichotomous variables. For example, while respondents' age was categorized initially into 6 groups, these groups were collapsed into 2 groups (Under 30 and Over 30) for purposes of analysis. Again, in the case of responses about ethnicity, respondents were categorized initially into 6 groups (Caucasian/White, Hispanic, Native American, African-American/Black and Other) but these groups were collapsed into 2 groups (Non-Caucasian and Caucasian) for purposes of analysis. In Georgia, African-American respondents constitute 83% of the non-Caucasian respondents.

## **A BRIEF HISTORY OF GAMBLING IN GEORGIA**

*By Jacqueline Boles, Ph.D.*

In November 1992, Georgia voters approved a constitutional amendment authorizing the creation of a state lottery whose general purpose is to generate money for education. The Georgia Lottery Corporation was established to operate that lottery. However, lotteries are not new to Georgia as this brief review of the history of gambling in Georgia reveals.

### **Gambling in History**

While there is anecdotal evidence that pre-literate peoples engaged in gambling, we know that ancient Egyptians, Sumerians, Chinese, Greeks and Romans gambled. Gambling then, as now, was often considered problematic. In Pharonic Egypt, gambling was well developed; the first known dice were found in the tomb of Queen Hatasua. However, common people were forbidden to gamble under penalty of slavery in the mines (Ashton 1969; Wykes 1964) In Europe during the Middle Ages, gambling and gamblers were generally condemned while the New England Puritans saw gambling as a vice and gamblers as idlers and miscreants although lotteries were utilized to pay for public works.

Gambling has also been a method of status enhancement by demonstrating one's self-control, power, or general character. In the Old West, risking one's fortune in gambling was a sign of manliness among Native Americans, cowboys and outlaws. In the antebellum South, plantation owners gambled away fortunes in casinos while their slaves and poor white sharecroppers gambled too although for smaller stakes. Whereas the planters gambled with cards, dice and horses, the common folk enjoyed cockfights which sometimes lasted two or three days. Real and fictional characters like Doc Holliday, Bret Maverick, Minnesota Fats and Fast Eddie Felsen illustrate the persona of the professional gambler who dares to risk all on the turn of a card.

The first commercial lottery seems to have been invented in Belgium in 1446, and the first public English lottery was sponsored by Queen Elizabeth in 1569 to support public works (Ashton 1969). The first American government-sanctioned lottery took place in Massachusetts in 1744; however, private lotteries were often sponsored by civic, fraternal, religious and educational institutions, including Harvard, Princeton, Yale and Dartmouth, to raise funds for capital projects. Lotteries were most popular in the United States between 1790 and 1860.

By 1832, approximately 420 lotteries were drawn in eight states. The \$66 million paid for tickets in these lotteries amounted to five times the expenses of the federal government for the same year (Faris 1955). However, as had happened in England, these lotteries were gradually taken over by professional gamblers and then gradually abolished. In 1890, Congress forbade the distribution of lottery materials through the mails and, five years later, prohibited the interstate transport of lottery tickets.

### **Gambling in Georgia: Then**

Prior to the Civil War, lotteries were popular in Georgia, often as a means of distributing farm land as well as land which might contain gold. Land which had originally belonged to the Cherokee Nation was divided up into gold lots. Between 1832 and 1833, 85,000 families competed for 18,309 farm land lots and 133,000 people for 35,000 gold lots (Williams 1989).

Georgia lotteries were most often used to build public academies although a number of churches, public buildings, water pipes, and paved streets were also built from monies raised by lotteries.

Immediately after the end of the Civil War, there was a large number of desperately poor people in the state, many of whom were widows and orphans of Confederate soldiers. In 1866, several Atlanta women petitioned the state legislature for the right to conduct a lottery for the benefit of the poor. They met with opposition but, through intensive lobbying, a state lottery was created whose primary beneficiary was the Masonic Orphans' Home. The first drawing probably took place on January 8, 1867 with the grand prize a brick home on Peachtree Street (Bolster 1985/6). Charles T. Howard, who ran the highly popular Louisiana Lottery, was contracted to manage the Georgia Lottery and was so successful that offices were established in Savannah and other cities. Daily newspapers carried a special notice of winning numbers drawn the previous day (Bolster 1985/6).

While the lottery increased in popularity, most Georgians at the time were concerned by the new constitution which was mandated as a condition of admission back in the Union. The framers of this constitution instituted a number of reforms, e.g., prohibited imprisonment for debt and whipping as punishment for crimes, gave all males the right to vote, and required the general assembly to provide free education. Among its many provisions, Section XXIII of the Bill of Rights prohibited lotteries.

In spite of the constitution, lotteries continued to flourish in Georgia. In 1873, the Georgia State Lottery advertised daily for drawings for 30,316 prizes amounting to \$53,253 (Bolster 1985/6). In February 1876, the Georgia legislature finally put an end to the state lottery. The prohibition against gambling remained unchanged until 1981 when voters adopted a provision allowing the general assembly to authorize and regulate bingo by nonprofit organizations. In 1992, Georgia voters approved a constitutional amendment which in effect rescinded Section XXIII of the Bill of Rights of the Constitution as passed in 1868.

### **Gambling in Georgia: Now**

Between 1868 and 1981, all wagering was illegal in the state; however, illegal gambling was prevalent then as now. Until the 1960s, most gambling was local and small-time. For serious action, gamblers went outside the state, most often to Phoenix City, Alabama. Rural folks bet on dog and cockfights while those in the cities played illegal lotteries, i.e., numbers, cards and dice. Sports betting was largely local; the top two rows of the bleachers at Georgia Crackers ball games were usually occupied by bookmakers who took bets on the local team.

However, with the arrival of a major league baseball team, serious sports betting became more popular. Professional gamblers moved to the state, especially Atlanta, in ever-increasing numbers. During the 1960s and 1970s, a number of floating casinos opened up in rural counties surrounding Atlanta, and go-go dancers worked as shills enticing customers to play these high-stake games. In the Fall of each year, carnivals criss-crossed the state bringing with them games which were fixed so that the customers could not possibly win. Some of these games were called flat stores (the popular six cat game) and others alibi joints (you need an alibi to explain why the customer doesn't win.). The Southeastern Fair was a mecca for gamblers from around the country.

Today illegal gambling is big business and a major component of the underground economy. Clandestine casinos, bookmaking, and numbers are the most popular forms of illegal gambling in the state. Mike Lewis of the Georgia Bureau of Investigation estimates that illegal gamblers in Georgia take in about \$1 billion a year, about \$10 million of that from bookmaking. He also notes that illegal gambling is connected with the distribution and sale of illicit drugs.

Since 1981, nonprofit groups have been allowed to offer bingo but are forbidden to pay out more

than \$1,100 a night. Many committed "bingo heads" go to Cherokee, North Carolina or Piedmont, Alabama where larger jackpots are offered. Revenues from bingo have declined since the advent of the lottery, but bingo hall managers are beginning to advertise in order to win back their players.

### **The Georgia Lottery**

In 1963, New Hampshire authorized the first modern state lottery; since then 37 states have followed its lead. Utilizing computers and sophisticated software, a number of different types of lotteries can be offered the public. Chief among these lottery products are instant games (the customer scratches off the ticket's coating to see if a prize is won), on-line games (the player's numbers are entered in a computer terminal and immediately recorded at the Lottery's headquarters), and Lotto (the player selects a combination from a field of numbers).

In Georgia, the lottery's first two instant games went on sale June 29, 1993. Cash 3, a daily three-number drawing, began August 10th, 1993. Lotto Georgia, a weekly six-number drawing, began on September 10th, 1993 (Georgia Lottery 1994). Since that time, an ever-increasing number of games have been added, most of which are instant ticket games. The odds of winning are much better in instant ticket games than in lotto or on-line games; however, the payouts are considerably smaller.

Financially, the Georgia Lottery has been a huge success. At the end of its first year of operation, the Lottery reported \$1.13 billion in sales or \$165 per resident (Georgia Lottery 1994). The Lottery for Education Act mandates that at least 30% of all lottery proceeds must be used for three educational functions: the HOPE program for college and technical school tuition grants to Georgia students making at least a B average, a voluntary pre-kindergarten program, and special capital outlay projects. By the end of the lottery's first year, over \$330 million has been given for these programs. The Georgia Lottery Corporation is mandated to turn over \$200,000 annually out of unclaimed winnings to the Department of Human Resources to fund prevention and treatment services for problem gamblers.

### **A Look to the Future**

A review of the history of gambling demonstrates that: (1) gambling, whether legal or illegal, occurs in almost every known society; and (2) legalized gambling has most often been used to pay for public works that the public did not want to fund through taxes. As recent history attests, state and local governments are increasingly turning to gambling to provide employment, supplement taxes, and otherwise improve the local economy. The number of state lotteries, casinos and bingo halls in the United States has increased dramatically though some of these legalized endeavors have started to fail, particularly casinos located along the Gulf Coast of Mississippi.

Technological innovations will facilitate increased gambling opportunities; electronic gaming devices, sometimes known as video lottery terminals (VLTs), and interactive home betting on television are examples of innovations that make gambling easier and more convenient. As state governments become increasingly gambling-dependent, legislators may move to legalize higher revenue producing games. However, given the empirical links between increased access to legalized gambling and increased prevalence of gambling-related difficulties, particularly among the poor and minorities (Volberg 1995), it is essential to balance the maximization of these revenues with the provision of prevention and treatment services to those individuals most likely to experience the negative effects of legalized gambling.



## GAMBLING IN GEORGIA

In this section, we present information about the scope and magnitude of gambling in the general population in Georgia. For each different 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 the amounts that they spent on each type of gambling that they had tried in the past year.

Chi-square analysis was used to test for statistical significance. In order to adjust for the large number of statistical tests conducted, p-values smaller than .01 are considered *highly significant* while p-values at the more conventional .05 level are considered *significant*. In reading the tables presented in this report, one or two asterisks in the right-hand column of each table indicate that *one* of the figures in that row is significantly different from other figures in the same row.

### Gambling in the General Population

In every recent survey of gambling participation, the great majority of respondents in the general population state that they have participated in one or more of the gambling activities included in the questionnaire. The proportion of respondents who have ever gambled ranges from 76% in Texas to 95% in Alberta and British Columbia (Smith, Volberg & Wynne 1994; Volberg & Angus Reid Group 1994; Wallisch 1993). In Georgia, only 74% of the general population stated that they had ever tried one or more of the types of wagering included in the survey. This rate of lifetime participation is lower than in any other jurisdiction surveyed since 1990 and probably reflects the very recent availability of legal wagering opportunities in the state.

The following table shows that respondents who have ever gambled and those who have not are significantly different in terms of gender, age, ethnicity, education and income. Respondents who have never gambled are significantly more likely to be female, over the age of 30 and non-Caucasian than respondents who have gambled. Respondents who have never gambled are significantly less likely to have completed high school and more likely to have annual household incomes under \$25,000 than respondents who have gambled.

**TABLE 2**  
**Demographics of Non-Gamblers and Gamblers**

	Non-Gamblers (N=399)	Gamblers (N=1,151)	
Male	30%	45%	**
Under 30	16%	23%	**
Non-Caucasian	33%	27%	*
Not Married	43%	44%	
Less than HS	22%	9%	**
Annual HH Under \$25,000	47%	31%	**
* Significant (p≤.05)			
** Highly significant (p≤.01)			

Although marital and employment status do not appear significantly different for respondents who have ever gambled and those who have not on first glance, it is interesting to note that there are significant differences between these groups of respondents when these variables are dis-aggregated. Respondents who have never gambled are significantly more likely to be widowed and respondents who have gambled are significantly more likely to be divorced than the general population. Respondents who have never gambled are also significantly more likely to be retired than respondents who have gambled.

### **Lottery and Non-Lottery Gamblers**

Since the lottery in Georgia has only been available for 18 months, it is important to assess the relationship between this new, legal type of gambling and the types of gambling that were available and popular in Georgia prior to the lottery. In an effort to better understand the relationship between lottery play and other types of gambling in Georgia, differences between gamblers who played lottery games and non-lottery gamblers were analyzed.

Non-lottery gamblers are significantly more likely to be married and to be keeping house than gamblers who have played the lottery games. The only types of gambling that non-lottery gamblers are significantly more likely to have tried than gamblers who have played the lottery games are raffles and speculative investments such as the stockmarket.

Gamblers who have played lottery games are significantly more likely than non-lottery gamblers to be divorced and to be employed fulltime. Gamblers who have played the lottery games are significantly more likely than non-lottery gamblers to have wagered on card games for money, on sports events with friends and on sports pools. Gamblers who have played the lottery games are also significantly more likely than non-lottery gamblers to have wagered on table games at casinos and on horse or dog races.

The majority of respondents who have played lottery games, including instant scratch games, the daily game and Lotto, have all done so in the past year. For example, 86% of respondents who acknowledged ever playing instant scratch games or a daily lottery game have done so in the past year. Among Lotto players, 94% of respondents who acknowledged ever playing this game had done so in the past year while only 6% of these respondents had not played Lotto in the past year.

This analysis of lottery and non-lottery gamblers suggests that lottery players in Georgia tend to have already participated in other types of gambling prior to the legalization of the lottery. In other words, lottery play has been added by these respondents to an already extensive gambling repertoire, including out-of-state activities as well as illegal gambling.

### **From Lifetime to Weekly Gambling**

Not surprisingly, the most popular types of gambling in Georgia are clearly the state's lottery games. Table 3, below, shows that a majority of Georgia respondents (54%) has at some time played instant lottery games. Two-fifths of the respondents (43%) have played Lotto, another state lottery game, and 38% have wagered on raffles or other small-stakes charitable games.

Lifetime participation rates are lower for other types of gambling. One-quarter (25%) of respondents have wagered on slot machines at casinos and 21% have wagered on the state's daily lottery game. One-fifth of respondents (20%) have wagered on card games for money and an equal proportion have wagered on sports events with friends, acquaintances or co-workers. Nearly one-fifth of respondents (18%) have wagered on bingo and 17% have wagered on horse or dog races. One-sixth of respondents

(15%) have wagered on speculative investments and an equal proportion have wagered on sports pools. Lifetime participation rates are under 10% for all other types of gambling in Georgia.

Research in Australia, Canada and the United States suggests that behavioral correlates of problem gambling include frequent gambling and heavy gambling losses (Dickerson 1993; Ladouceur, Gaboury, Dumont & Rochette 1988; Walker 1992). To understand the types of gambling most closely associated with high-risk gambling involvement, it is helpful to examine how likely respondents are to become weekly gamblers if they have ever tried a particular gambling activity.

**TABLE 3**  
**Lifetime Participation and Conversion to Weekly Gambling**  
**for Different Types of Wagering**  
(N=1,550)

Type of Activity	Lifetime Participation	Conversion Rate
Instant Lottery Games	54%	23%
Lotto	43%	41%
Raffles/Charitable Games	38%	4%
Slot Machines at Casinos	25%	1%
Daily Lottery Game	21%	33%
Card Games for Money	20%	9%
Sports with Friends	20%	13%
Bingo	18%	7%
Horse or Dog Races	17%	<1%
Speculative Investments	15%	12%
Sports Pools	15%	8%
Table Games at Casinos	10%	<1%
Dice Games for Money	5%	6%
Sports with a Bookmaker	2%	12%

A *conversion rate* is used to assess the relationship between lifetime and weekly participation in specific gambling activities. The conversion rate for each type of gambling is determined by dividing the number of respondents who say that they gamble once a week or more on each type of gambling by the number of respondents who have ever tried that type of gambling. In addition to lifetime participation, Table 3 shows conversion rates for different types of gambling included in the Georgia survey.

As in other jurisdictions, conversion rates for lottery games in Georgia are higher than conversion rates for other types of gambling. The conversion rate for Lotto in Georgia is similar to the conversion rate for Lotto in Canadian provinces such as Alberta and British Columbia. Conversion rates for instant lottery games and for the daily lottery game are higher in Georgia than in most other jurisdictions. It is important to note that although lifetime participation rates are very low for some games, such as wagering on dice games for money, conversion rates for some of these types of gambling can be substantial.

### Patterns of Gambling Participation

As in other jurisdictions, gambling participation in Georgia is closely related to the demographic characteristics of the respondents. In Georgia, men are more likely than women to have gambled on card and dice games for money, on sports and on games of skill while women are more likely to have played bingo. Respondents under the age of 30 are more likely than older respondents to have wagered on card games for money, on sports and on games of skill.

It is interesting to note that non-Caucasian respondents are more likely than Caucasian respondents in Georgia to have wagered on numbers games and, since it has been available, on the daily lottery game (which closely resembles the traditional numbers game). While substantial proportions of the population in Georgia wager on the state lottery, respondents with less than a high school education are more likely than others to have purchased instant tickets as well as to have played the daily lottery game. These respondents are also more likely to have ever wagered on the traditional numbers. Respondents with annual household incomes under \$25,000 are over-represented among those who play the daily lottery game and the numbers game. In contrast to some jurisdictions, marital status and fulltime employment do not appear to be related to involvement in specific types of gambling in Georgia.

In order to understand gambling involvement in the general population, it is useful to distinguish different levels of gambling participation among respondents in different jurisdictions. To analyze gambling involvement in Georgia, we divided respondents into four groups:

- ***non-gamblers*** who have never participated in any type of gambling (26% of the sample);
- ***infrequent gamblers*** who have participated in one or more types of gambling but not in the past year (9% of the sample);
- ***past year gamblers*** who have participated in one or more types of gambling in the past year but not on a weekly basis (37% of the sample); and
- ***weekly gamblers*** who participate in one or more types of gambling on a weekly basis (28% of the sample).

The pattern of gambling participation identified in Georgia is unique compared to patterns identified in other United States jurisdictions. Like Texas where experience with a state lottery was limited at the time of the gambling survey, a large proportion of the population in Georgia has never gambled at all. In contrast to Texas and like Montana and Washington State, there is a substantial proportion of the population in Georgia that gambles on a weekly basis.

**TABLE 4**  
**Demographics of Gamblers in Georgia**

	Infrequent (N=146)	Past Year (N=579)	Weekly (N=426)	
<b>Demographics</b>				
Male	35%	42%	53%	**
Under 30	24%	26%	20%	
Non-Caucasian	28%	26%	28%	
Not Married	43%	44%	45%	
Less than HS	13%	8%	9%	
Annual HH Under \$25,000	40%	33%	27%	*
<b>Mean Number of Lifetime Activities</b>	<b>2.1</b>	<b>3.9</b>	<b>5.5</b>	<b>**</b>
* Significant (p≤.05)				
** Highly significant (p≤.01)				

The table above shows that weekly gamblers in Georgia are significantly more likely than other gamblers to be male and to have annual household incomes over \$25,000. This table also shows that the *number* of gambling activities that different groups of gamblers have ever tried increases significantly with increased levels of gambling participation.

### Expenditures on Gambling

*Reported estimates of expenditures obtained in this and similar surveys are based on recollection and self-report. These estimates do not include amounts spent on gambling within a jurisdiction by non-residents or tourists. Data on reported expenditures are best suited for analyzing the relative importance of different types of gambling among Georgia residents rather than for ascertaining absolute spending levels on different types of wagering.*

To determine expenditures on gambling in the general population, the total monthly expenditure for each gambling activity is calculated by summing the amount of money reported by each respondent for each gambling activity. The reported *total monthly expenditure* for each gambling activity is then calculated by summing the amount of money reported by each respondent for each gambling activity. The *proportion* of reported total monthly expenditure spent on each gambling activity is calculated by dividing the amount reported spent on each activity by the reported total monthly expenditure. Finally, the total monthly expenditure on all gambling activities is divided by the total number of respondents to obtain an average amount spent per respondent.

### Adjustments to Expenditures

One adjustment made in calculating the reported total monthly expenditure on gambling for Georgia was to exclude expenditures on stocks and speculative investments from the calculation. In every jurisdiction, amounts spent on stocks and speculative investments reflect large amounts of money spent by a relatively small number of respondents. Amounts spent on stocks and speculative investments constituted

47% of the unadjusted total monthly expenditure in Georgia although only 8% of the respondents had participated in this type of activity in the past year.

Stocks and speculative investments are not universally regarded as a gambling activity. Excluding amounts spent on stocks and speculative investments is done in order to more clearly explicate the relative gambling expenditures of the majority of Georgia respondents. This adjustment is also made in order to allow for comparisons of expenditure data from Georgia with data from other United States jurisdictions.

Another adjustment made in calculating the reported total monthly expenditure on gambling for Georgia was to exclude expenditures by 7 respondents (4.5% of total sample) whose reported expenditures accounted for 55% of total monthly expenditures after speculative investments were excluded. Demographically, these respondents were quite varied in terms of gender, age, ethnicity, marital status, education and income and only one scored as a lifetime probable pathological gambler. The bulk of reported gambling expenditures by these respondents were on card games for money, table games at casinos and horse or dog races although they also reported spending substantial amounts on Lotto, dice games for money and on slot machines at casinos.

It is possible that these respondents misunderstood questions about expenditures and reported annual rather than monthly expenditures on gambling. It is also possible that their responses were miscoded by the interviewers. A third possibility is that these respondents deliberately over-stated their expenditures for unknown reasons. Regardless of the explanation, when these respondents were included in the calculation of total monthly expenditures in Georgia, the total monthly expenditure was far beyond the range of total expenditures reported in other jurisdictions.

The impact of dropping these 7 respondents was to bring total monthly expenditures on gambling in Georgia closer to the range reported elsewhere in North America. As with stocks and speculative investments, excluding the amounts reported by these respondents was done in order to more clearly explicate the relative gambling expenditures of the majority of Georgia respondents. These respondents were dropped only from the analysis of expenditures on gambling and not from analysis of gambling participation or prevalence rates.

### **Total Expenditures**

Using the method detailed above, and with the adjustments outlined, we calculate that respondents in Georgia spent an average of \$82 per month or \$984 per year on all of their gambling activities in 1994. If we consider only in-state expenditures, we calculate that respondents spent an average of \$59 per month or \$708 per year on their gambling activities in Georgia in 1994.

Despite adjustments made to reported expenditures in Georgia, these figures are still higher than average expenditures reported in other jurisdictions in the United States. For example, the average expenditure per respondent in Montana was \$51 and the average expenditure per respondent in Washington State in 1992 was \$53 when out-of-state expenditures are included. If we consider only in-state expenditures, the average expenditure per respondent in Montana was \$27 and the average expenditure per respondent in Washington State was \$32 in 1992 (Volberg 1992; Volberg 1993).

The table below shows total reported monthly expenditures on different types of gambling in Georgia as well as the proportion that each type of expenditure represents of total adjusted monthly expenditures on gambling. Only those types of gambling for which total monthly expenditures exceeded 1% of the total monthly expenditure are shown.

**TABLE 5**  
**Reported Monthly Expenditures on Gambling**  
(N=1,543)

Type of Gambling Activity	Monthly Expenditure	Percentage of Total
Instant Lottery Games	\$ 20,655	16%
Slot Machines at Casinos	\$ 19,544	15%
Lotto	\$ 19,388	15%
Dice Games for Money \$	10,343	8%
Card Games for Money \$	9,049	7%
Sports with Friends	\$ 8,159	6%
Table Games at Casinos \$	7,923	6%
Horse or Dog Races	\$ 7,502	6%
Daily Lottery Game	\$ 7,086	6%
Raffles/Charitable Games	\$ 6,198	5%
Sports Pools	\$ 3,418	3%
Games of Skill	\$ 2,194	2%
Bingo	\$ 2,150	2%
Sports with a Bookie	\$ 1,340	1%
<b>Total</b>	<b>\$ 127,182</b>	<b>100%</b>

This table shows that spending on lottery games (Lotto, instant games and the daily game) accounts for 37% of reported total monthly expenditures on gambling among Georgia respondents. Out-of-state wagering in casinos, on slot machines and table games, and on horse and dog races accounts for 27% of reported total monthly expenditures on gambling among Georgia respondents. Wagering on illegal gambling activities accounts for another 27% of reported total monthly expenditures on gambling among Georgia respondents.

Given the higher-than-expected reported expenditures on gambling in Georgia, it is important to compare these expenditures with expenditures reported in other jurisdictions. In other jurisdictions where detailed expenditure data are available, the proportion of reported monthly expenditures on lottery games ranges from a low of 14% in Montana to a high of 22% in Alberta (Smith, Volberg & Wynne 1994; Volberg 1992). These figures are much lower than the 37% of spending on lottery games in Georgia which suggests that the recent legalization and popularity of the Georgia Lottery and, in particular, the popularity of the lottery's instant games is contributing to higher-than-average expenditures on lottery games in Georgia.

## **Variations in Expenditures**

In contrast to other jurisdictions, where reported monthly gambling expenditures vary significantly with the sex, age, ethnicity, education and income of respondents, there are few significant differences in mean reported expenditures in Georgia. As in other jurisdictions, men in Georgia report spending significantly more per month on gambling (\$108) than women (\$64). Further, respondents with annual household incomes over \$25,000 report spending significantly more per month on gambling (\$108) than respondents with lower household incomes (\$43).

As in other jurisdictions, the majority of respondents in Georgia report spending rather small amounts on gambling in a typical month. Nearly two-fifths of respondents in Georgia (38%) report spending nothing on gambling in a typical month while another 17% report spending less than \$10 on gambling in a typical month. Another third of the respondents (34%) report spending between \$10 and \$99 on gambling in a typical month and only 11% of the respondents reported spending \$100 or more on gambling in a typical month. However, this small proportion of the respondents account for 86% of reported monthly expenditures on gambling in Georgia.

Respondents in the highest spending group are significantly more likely to be male, under the age of 30, and divorced or never married than respondents in the lower spending groups. These higher spending respondents are also significantly more likely to have graduated from high school and to have annual household incomes over \$25,000 than respondents who spend less on gambling.



## PREVALENCE OF PROBLEM AND PATHOLOGICAL GAMBLING IN GEORGIA

In the section on Methods, we outlined the development of the South Oaks Gambling Screen in detail. Following established criteria for discriminating between non-problem gamblers and individuals with moderate to severe gambling problems (Lesieur & Blume 1987), Georgia respondents' scores on the lifetime and past-year South Oaks Gambling Screen items were tallied. In accordance with these criteria, prevalence rates were calculated as follows:

- *lifetime problem gamblers* are those respondents who score 3 or 4 points on the lifetime SOGS items;
- *lifetime probable pathological gamblers* are those respondents who score 5 or more points on the lifetime SOGS items;
- *current problem gamblers* are those respondents who score 3 or 4 points on the past-year SOGS items; and
- *current probable pathological gamblers* are those respondents who score 5 or more points on the past-year SOGS items.

We have noted that lifetime prevalence data are most useful for identifying the characteristics of individuals in the general population at greatest risk for experiencing problems related to their gambling involvement. Current prevalence data are most useful for assessing rates of change in gambling problems and pathology over time, both for individuals and in the general population (Abbott & Volberg 1995; Volberg & Abbott 1994).

Since the survey in Georgia is a baseline measure of prevalence, the focus of this report is on lifetime problem and probable pathological gamblers who are at greatest risk for actually experiencing gambling-related difficulties. In future research and reports, it will be important to focus on current problem and probable pathological gamblers as well in order to examine the precise impact of gambling introductions on the prevalence of gambling-related difficulties in the general population.

In reporting results from prevalence surveys based on the South Oaks Gambling Screen, individuals who score as problem gamblers and those who score as pathological gamblers are generally treated as a single group. This approach is based on discriminant analysis that has established a strong and significant separation between non-problem gamblers and those who score as problem and probable pathological gamblers (Volberg & Abbott 1994).

### **Lifetime Prevalence**

In Georgia, 2.8% ( $\pm 0.8\%$ ) of the respondents scored as lifetime problem gamblers while 1.6% ( $\pm 0.6\%$ ) of the respondents scored as lifetime probable pathological gamblers. Overall, the lifetime prevalence rate of problem and probable pathological gambling in Georgia is 4.4% of the adult population. According to the census, the population aged 18 and over in Georgia is 4,747,600 individuals.

Based on these figures, we estimate that between 94,000 and 171,900 Georgia residents aged 18 and over can be classified as lifetime problem gamblers. In addition, we estimate that between 46,530 and 105,400 Georgia residents aged 18 and over can be classified as lifetime probable pathological gamblers.

**TABLE 6**  
**Comparing Lifetime Problem Gamblers**  
**with the General Population**

<b>Demographics</b>	<b>Non-Problem Respondents (N=1,482)</b>	<b>Problem &amp; Pathological Gamblers (N=68)</b>	
Male	41%	63%	**
Under 30	20%	41%	**
Non-Caucasian	27%	48%	**
Not Married	43%	63%	**
Less than HS	12%	19%	
HH Income Under \$25,000	35%	33%	
Employment Status			**
Parttime	7%	18%	
School	4%	9%	
Unemployed	2%	4%	

\* Significant ( $p \leq .05$ )

\*\* Highly significant ( $p \leq .01$ )

The table above shows that lifetime problem and probable pathological gamblers in Georgia are significantly more likely than the general population to be male, under the age of 30, non-Caucasian and unmarried. In contrast to many other jurisdictions, there are no significant differences between lifetime problem and probable pathological gamblers and the general population in terms of education. However, analysis shows that individuals who score as lifetime problem and probable pathological gamblers are significantly more likely than the general population to be working parttime.

### **Current Prevalence**

In Georgia, 1.5% ( $\pm 0.6\%$ ) of the respondents scored as current problem gamblers while 0.8% ( $\pm 0.4\%$ ) of the respondents scored as current probable pathological gamblers. Overall, the current prevalence rate of problem and probable pathological gambling in Georgia is 2.3% of the adult population.

Based on these figures, we estimate that between 42,540 and 99,700 Georgia residents aged 18 and over can be classified as current problem gamblers. In addition, we estimate that between 17,100 and 58,900 Georgia residents aged 18 and over can be classified as current probable pathological gamblers.

**TABLE 7**  
**Comparing Current Problem Gamblers**  
**with the General Population**

<b>Demographics</b>	<b>Non-Problem Respondents (N=1,515)</b>	<b>Problem &amp; Pathological Gamblers (N=35)</b>	
Male	41%	54%	
Under 30	21%	46%	**
Non-Caucasian	28%	51%	**
Not Married	43%	71%	**
Less than HS	12%	29%	**
HH Income Under \$25,000	35%	45%	

\* Significant ( $p \leq .05$ )

\*\* Highly significant ( $p \leq .01$ )

The table above shows that most of the differences between respondents who scored as lifetime problem or probable pathological gamblers and the larger sample from Georgia hold true for current problem and probable pathological gamblers. Current problem and probable pathological gamblers in Georgia are even more likely than lifetime problem and probable pathological gamblers to be under the age of 30, non-Caucasian and unmarried. In contrast to lifetime problem and probable pathological gamblers, current problem and probable pathological gamblers in Georgia are significantly less likely than the general population to have graduated from high school.

Current problem and probable pathological gamblers in Georgia are not significantly more likely to be male than the general population or lifetime problem and probable pathological gamblers. This finding suggests that, like women in other jurisdictions where legalized gambling has recently been introduced, women in Georgia may be starting to experience gambling-related difficulties similar to the difficulties experienced by male gamblers (Volberg 1992; Volberg & Silver 1993).

### **Natural Recovery**

Gambling surveys conducted since 1990 have collected information on current as well as lifetime prevalence rates of problem and probable pathological gambling. The difference between lifetime and current prevalence rates represents individuals who have experienced a gambling problem at some time in their lives but do not score as having a gambling problem currently. Since there are few treatment services for problem and pathological gamblers available in North America, these individuals can be regarded as problem and pathological gamblers in *natural recovery*. The proportion of problem and pathological gamblers in natural recovery in the general population ranges from 29% in New Brunswick to 57% in British Columbia (Baseline Market Research 1992; Volberg & Angus Reid Group 1994).

As in other jurisdictions, a proportion of the Georgia respondents who score as lifetime problem or probable pathological gamblers do not score as having a current problem or pathology. In Georgia, 48% of lifetime problem and probable pathological gamblers do not score as having a current problem or pathology.

## **COMPARING PROBLEM AND NON-PROBLEM GAMBLERS IN GEORGIA**

In considering the development of policies and programs for problem and pathological gamblers, it is important to determine where it would be most efficient to direct these efforts. Rather than target the general population, it is more cost-efficient to focus prevention and outreach efforts on those individuals who are most at risk in the general population of experiencing gambling-related difficulties. In this section, we examine differences between non-problem gamblers and those who have experienced moderate to severe gambling-related difficulties in order to assist in the development of policies and programs for problem gamblers in Georgia.

For this analysis, respondents who scored as lifetime problem gamblers are combined with those who scored as lifetime probable pathological gamblers. Lifetime, rather than current, problem and probable pathological gamblers are used for this analysis because of the greater accuracy of the lifetime South Oaks Gambling Screen in identifying individuals at the greatest risk for developing gambling-related problems in the general population (Volberg & Abbott 1994).

Research in Australia, Canada and the United States suggests that behavioral correlates of problem and pathological gambling include frequent gambling, regular heavy losses and involvement with continuous forms of gambling (Dickerson 1993; Ladouceur, Gaboury, Dumont & Rochette 1988; Walker 1992). Continuous forms of gambling are characterized by rapid cycles of play as well as by the ability for players to immediately *reinvest* their winnings. Continuous forms of gambling available to Georgia residents include slot machines and table games at casinos in nearby jurisdictions, instant lottery games and such illegal forms of gambling as card and dice games as well as wagering on sports events.

It is important to remember that approximately half of the individuals classified as lifetime problem and probable pathological gamblers have not experienced substantial difficulties in the past year. While these individuals are not presently experiencing difficulties, it is important to recognize that these respondents are at greater risk than non-gamblers or those who have gambled without difficulty for developing gambling-related problems in the future. This is particularly clear when we consider that 94% of the lifetime problem and probable pathological gamblers in Georgia have participated in one or more types of gambling in the past year.

### **Demographics**

The following table shows that, as in other jurisdictions, lifetime problem and probable pathological gamblers are demographically distinct from non-problem gamblers in the general population in Georgia. Problem and probable pathological gamblers in Georgia are significantly more likely to be male, under the age of 30, non-Caucasian and unmarried than non-problem gamblers in the general population. Problem and probable pathological gamblers in Georgia are significantly less likely to have graduated from high school than non-problem gamblers in the general population.

**TABLE 8**  
**Demographics of Non-Problem and Problem Gamblers**  
**in Georgia**

<b>Demographics</b>	<b>Non-Problem Gamblers (N=1,083)</b>	<b>Problem &amp; Pathological Gamblers (N=68)</b>	
Male	44%	63%	**
Under 30	22%	41%	**
Non-Caucasian	26%	48%	**
Not Married	43%	63%	**
Less than HS	8%	19%	*
HH Income Under \$25,000	31%	33%	

\* Significant (p≤.05)

\*\* Highly significant (p≤.01)

### **Gambling Participation**

As in other jurisdictions, problem and probable pathological gamblers in Georgia are significantly more likely than non-problem gamblers to be involved in one or more types of gambling on a frequent and regular basis. In Georgia, 63% of respondents who score as lifetime problem or probable pathological gamblers participate weekly in one or more types of gambling compared to 35% of respondents who have ever gambled.

The following table shows that respondents who score as lifetime problem or probable pathological gamblers in Georgia are significantly more likely than non-problem gamblers to wager weekly on several types of gambling. An important exception is the Georgia Lottery's Lotto game which is played weekly by 23% of the non-problem gamblers and 31% of the problem and probable pathological gamblers. Only those types of gambling in which 10% or more of the problem and probable pathological gamblers participate weekly are shown.

**TABLE 9**  
**Weekly Gambling Involvement**  
**of Non-Problem and Problem Gamblers**

<b>Games Played Weekly</b>	<b>Non-Problem Gamblers (N=1,083)</b>	<b>Problem &amp; Pathological Gamblers (N=68)</b>	
Lotto	23%	31%	
Instant Lottery Games	16%	29%	**
Daily Lottery Game	9%	21%	**
Sports with Friends	3%	12%	**
Card Games for Money	2%	10%	**
<b>Mean Number of Weekly Activities</b>	<b>.64</b>	<b>1.37</b>	<b>**</b>

\* Significant ( $p \leq .05$ )

\*\* Highly significant ( $p \leq .01$ )

The table shows that problem and probable pathological gamblers in Georgia are significantly more likely to wager weekly on instant lottery games, the daily lottery game, sports events with friends and on card games for money. While problem and probable pathological gamblers in Georgia are also significantly more likely than non-problem gamblers to wager weekly on sports pools, bingo, dice games for money, table games at casinos and horse or dog races, the number of individuals involved in these activities is extremely small. The table also shows that problem and probable pathological gamblers in Georgia participate in a significantly greater number of gambling activities on a weekly basis than non-problem gamblers.

### **Gambling Expenditures**

Given correlations between gambling problems and regular heavy losses in many jurisdictions, it is important to compare gambling expenditures of non-problem gamblers with those with moderate to severe gambling-related problems. The following table shows differences in the mean reported monthly expenditures on gambling for non-problem and problem and probable pathological gamblers in Georgia. Only those types of gambling for which expenditures among problem and probable pathological gamblers exceeded \$10 per month are shown.

**TABLE 10**  
**Reported Monthly Expenditures**  
**of Non-Problem and Problem Gamblers**

<b>Type of Gambling Activity</b>	<b>Non-Problem Gamblers (N=1,083)</b>	<b>Problem &amp; Pathological Gamblers (N=68)</b>	
Dice Games for Money	\$ 7.76	\$ 101.98	**
Slot Machines at Casinos	\$ 20.30	\$ 37.66	
Table Games at Casinos	\$ 5.23	\$ 33.25	**
Instant Lottery Games	\$ 20.72	\$ 22.37	
Lotto	\$ 21.21	\$ 20.85	
Sports with a Bookie	\$ .32	\$ 14.56	**
Sports Pools	\$ 2.33	\$ 13.22	*
Horse or Dog Races	\$ 16.42	\$ 11.32	
Daily Lottery Game	\$ 5.88	\$ 10.62	
<b>Total Monthly Expenditures on Gambling</b>	<b>\$ 131.41</b>	<b>\$ 298.63</b>	<b>*</b>

\* Significant ( $p \leq .05$ )

\*\* Highly significant ( $p \leq .01$ )

In contrast to other jurisdictions, there are few significant differences in the mean expenditures on gambling by non-problem and problem and probable pathological gamblers. This table shows that there are significant differences between non-problem and problem and probable pathological gamblers in mean expenditures on dice games for money, table games at casinos, sports with a bookmaker and sports pools.

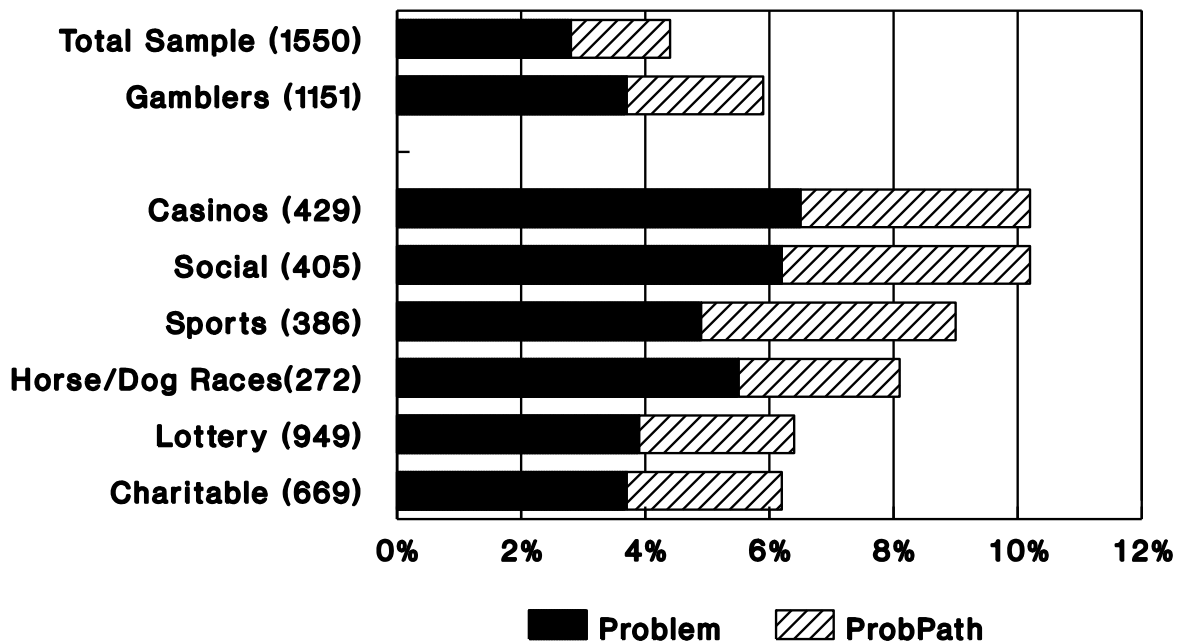
We noted above, in our discussion of gambling expenditures in the general population, that a small proportion of the total sample (11% of the respondents) reported spending \$100 or more on gambling in a typical month and that this small group of respondents accounted for 86% of reported monthly expenditures on gambling in Georgia. These respondents were more likely to be male, under the age of 30, and divorced or never married than respondents in lower spending groups.

If we examine the relationship between gambling-related problems and gambling expenditures, it is clear that the individuals in the highest spending group also account for a substantial proportion of individuals in Georgia who experience gambling-related problems. One-third of the lifetime problem gamblers (32%) and two-fifths of the lifetime probable pathological gamblers (44%) report spending \$100 or more on gambling in a typical month. This constitutes a lifetime prevalence rate of 14.7% which is significantly higher than the lifetime prevalence rates in other spending groups.

## Prevalence by Type of Gambling

The question most often asked about the relationship between gambling and problem gambling is: What type of gambling is most likely to add to the number of problem and pathological gamblers in the general population? We have examined the relationship between weekly involvement, gambling expenditures and problematic gambling among respondents in this survey to help answer this question for the State of Georgia. Another approach is to examine the prevalence of gambling-related problems among individuals who have ever participated in different types of gambling. Figure 1 illustrates the prevalence rate of lifetime problem and pathological gambling for the total sample, for respondents who have ever gambled and for respondents who have ever participated in different types of gambling.

**Figure 1**  
**Lifetime Prevalence by**  
**Type of Gambling**



Georgia 1994

Figure 1 shows that lifetime prevalence rates are significantly higher among individuals who have ever gambled than among the sample as a whole. Prevalence rates are highest among individuals who have ever gambled on dice games, slot machines or table games in casinos and among individuals who have ever gambled socially on card games for money, on games of skill and on the numbers. Prevalence rates are also high among individuals who have ever gambled on sports and on horse or dog races. While prevalence rates are lower among respondents who have wagered on lottery and charitable games, prevalence rates among



these players are still substantially higher than among the sample as a whole.

The types of gambling associated with the highest prevalence rates in Georgia (casinos and social gambling as well as sports and some lottery games) can all be classified as continuous forms of gambling, with rapid cycles of stake, play and determination (Dickerson 1993).

### Other Significant Differences

Beyond differences in gambling involvement and expenditures, there are other significant differences between respondents who have gambled without problems and those who score as problem and probable pathological gamblers in Georgia. The following table shows that the mean age at which problem and probable pathological gamblers start gambling is significantly younger than the mean age at which non-problem gamblers started. The table also shows that lifetime problem and probable pathological gamblers are significantly more likely than non-problem gamblers to have felt nervous about their gambling, to have felt that they have had a problem with their gambling at some time and to feel that one or both parents has had a gambling problem at some time.

**TABLE 11**  
**Other Significant Differences Between**  
**Non-Problem and Problem Gamblers**

	<b>Non-Problem Gamblers (N=1,083)</b>	<b>Problem &amp; Pathological Gamblers (N=68)</b>	
Mean age started gambling	27	20	**
Ever felt nervous about gambling?	10%	57%	**
Ever felt you had a problem?	<1%	15%	**
Parent ever had problem w/gambling?	3%	9%	**
Alcohol or drug use while gambling?	29%	50%	**
Alcohol or drug problem suggested?	7%	19%	**
Sought alcohol or drug treatment?	2%	15%	**

\* Significant ( $p \leq .05$ )

\*\* Highly significant ( $p \leq .01$ )

The table above also shows that problem and probable pathological gamblers in Georgia are significantly more likely than non-problem gamblers to use alcohol or drugs while they are gambling, to acknowledge that someone has suggested that they have at some time had difficulties with alcohol or drugs, and to have sought treatment for an alcohol or drug problem.

Respondents who gave the age at which they started gambling were asked what type of gambling they were initially involved with. In Georgia, problem and probable pathological gamblers were significantly more likely than non-problem gamblers to say that they started gambling on card games with relatives or friends or on dice games for money. Respondents who acknowledged that they had felt nervous

about their gambling were asked what type of gambling they were involved with when this happened. Problem and probable pathological gamblers were significantly more likely than non-problem gamblers to say that they were gambling on card games with relatives or friends or on Lotto when they became nervous.

In addition to differences in their gambling careers, in their perceptions of their gambling and in their involvement with alcohol and drugs, there are significant differences between non-problem and problem and probable pathological gamblers in terms of the time and resources that they devote to gambling. The following table shows that there are significant differences between non-problem gamblers and those with moderate to severe gambling-related problems in terms of the amount of time they spend gambling per session, the largest amount they acknowledge ever losing in one day and their social ties to gambling.

**TABLE 12**  
**Differences Between**  
**Non-Problem and Problem Gamblers:**  
**Company, Time and Losses**

	<b>Non-Problem Gamblers (N=1,083)</b>	<b>Problem &amp; Pathological Gamblers (N=68)</b>	
<b>Company While Gambling</b>			<b>**</b>
Alone	39%	31%	
Spouse	24%	15%	
Other Family	10%	18%	
Friends or Co-workers	23%	37%	
<b>Time Spent Gambling Per Session</b>			<b>**</b>
<1 hour to 2 hours	89%	65%	
3 hours to 5 hours	8%	25%	
6 or more hours	4%	10%	
<b>Largest Amount Wagered in One Day</b>			<b>**</b>
Less than \$10	46%	25%	
\$10 - \$99	35%	35%	
\$100 or more	19%	40%	
*     Significant (p≤.05)			
**    Highly significant (p≤.01)			

The table above shows that problem and probable pathological gamblers in Georgia are significantly more likely to say that they gamble with friends and co-workers or with family member apart from their spouse than non-problem gamblers. Problem and probable pathological gamblers in Georgia are significantly more likely to spend long periods of time gambling and to have lost \$100 or more in gambling on a single day than non-problem gamblers.

## **Self-Esteem, Gambling and Problem Gambling**

Self-esteem, generally defined as an overall positive or negative feeling about oneself, is one of the most studied dimensions of the concept of self in the sociological and psychological literature. There is a large research literature in which self-esteem is considered in terms of its effects on a wide range of psychological and behavioral phenomena. Self-esteem has been found to affect conformity, interpersonal attraction, moral behavior, educational orientations, and various aspects of personality and mental health (Rosenberg 1979). In general, high self-esteem is viewed as a favorable characteristic associated with effective and healthy personal functioning while low self-esteem has been viewed unfavorably and has been associated with unhealthy behaviors such as addiction (Peele 1985).

In the field of gambling studies, high self-esteem has been associated with successful gambling involvement while low self-esteem has been associated with gambling-related difficulties. For example, sociologists looking at different types of gambling have observed that wagering on horse races or poker games is often a means for bettors to enhance their self-esteem (Hayano 1982; Herman 1967; Kusyszyn & Rutter 1985; Zola 1964). Treatment professionals working with problem and pathological gamblers have maintained for years that pathological gamblers are characterized by extremely low levels of self-esteem.

This view is captured most clearly by Custer and Milt (1985) in their discussion of a typology of pathological gambling. These authors argue that pathological gamblers are individuals with vulnerable personalities which are then acted upon by parental indifference, neglect or abuse to produce a person with low self-esteem and an incapacity to deal with life's problems. These vulnerable individuals then seek relief and escape in the fantasy and illusion offered by different types of gambling (Custer & Milt 1985). Researchers working with pathological gamblers in treatment in both the United States and Great Britain have argued that pathological involvement in gambling is symptomatic of low self-esteem (Shewan & Brown 1993; Yaffee, Lorenz & Politzer 1993).

Researchers concerned generally with addictive behaviors among adolescents support the notion that low self-esteem is an important pre-disposing factor in the development of such disorders (Jacobs 1993; Jacobs, Marston & Singer 1985). These researchers argue that the combined impact of physiological, psychological and social conditions during early life conspire to inhibit certain vulnerable individuals from learning a range of coping skills to offset inordinate feelings of low self-esteem and, as a consequence, render these individuals particularly susceptible to chance encounters with substances or experiences that relieve these unpleasant physiologic or psychologic states.

### **Measuring Self-Esteem**

While the links between self-esteem, gambling involvement and pathological gambling are widely accepted, there is little if any empirical evidence of the existence of such a link in the research literature. In the survey of gambling and problem gambling in Georgia, we elected to explore this link by including an established measure of self-esteem in the telephone interview. This is the first time that any measure of self-esteem has been used in connection with a study of gambling and problem gambling in the general population. After a review of the self-esteem literature, we decided to adopt the Rosenberg Self-Esteem Scale to explore the link between gambling, problem gambling and self-esteem (Rosenberg 1965).

The Rosenberg Self-Esteem Scale measures self-esteem in terms of positive self-worth. The scale, originally developed for use with high school students, has been widely used with other populations as well and consists of ten items answered on a four-point scale. Since all of the items revolve around approval or disapproval of the self, the scale probably measures the self-acceptance aspect of self-esteem better than it

does other factors of self-esteem such as authenticity, efficacy or internal control (Gecas 1982).

One advantage in using the Rosenberg Self-Esteem Scale in a telephone interview is that the items were designed specifically with brevity and ease of administration in mind. A further advantage is that this scale has been shown in a wide variety of studies to have high validity and reliability. The test-retest reliability of the scale has been established at .85 (Silber & Tippett 1965). The scale is highly correlated with several similar measures of self-esteem as well as with clinical assessments of self-esteem. Rosenberg and his colleagues have published considerable data about the construct validity of this measure as well as its relationship to numerous other social and behavioral measures (Rosenberg, Schooler, Schoenbach & Rosenberg 1995).

### **Linking Self-Esteem and Problem Gambling**

The Rosenberg Self-Esteem Scale was administered in the Georgia survey after all of the South Oaks Gambling Screen items and before the demographic questions. In analyzing the relationship between self-esteem, gambling and problem gambling, we first looked at the reliability of the Rosenberg Self-Esteem Scale in this particular sample. This was important in order to ensure that the scale was operating as expected in a normal population. In assessing the reliability of any scale, an unstandardized alpha greater than .7 is considered desirable. After recoding half of the Rosenberg Self-Esteem Scale items so that scoring on positive and negative items agreed, we found that the unstandardized alpha for the Rosenberg scale was .84 which is well over the level considered necessary for establishing the reliability of the scale in this sample.

Our next step was to run a multiple regression procedure to assess the relationship between lifetime gambling involvement and self-esteem. Lifetime gambling involvement was included as a dependent variable and self-esteem, along with several demographic variables, was assumed to be an independent variable that would explain some proportion of the variation in lifetime gambling involvement. Our analysis showed that self-esteem exerted a significant positive impact on lifetime gambling involvement in that men and women with high self-esteem were less likely to be heavy gamblers.

Our final step was to examine the relationship between self-esteem and gambling-related difficulties among the respondents in this survey. Scores on the lifetime South Oaks Gambling Screen were used as an ordinal scale and included as a dependent variable in the analysis. Again, self-esteem, along with several demographic variables, was assumed to be an independent variable that would explain some proportion of the variation in lifetime gambling-related problems. The results of our analysis showed that self-esteem is negatively associated with gambling-related problems. In other words, individuals with low self-esteem were more likely to have increasingly serious gambling-related problems.

### **Future Research Directions**

Based on our analysis, we recommend expanding the use of measures of self-esteem in research on gambling and problem gambling in the general population as well as among pathological gamblers in treatment. As gambling research matures, it is essential that tacitly accepted beliefs about links between gambling, problem gambling and other sociological and psychological concepts be more rigorously tested. Our use of the Rosenberg Self-Esteem Scale in this survey of gambling and problem gambling in Georgia is a first step in this direction.

In pursuing research on the links between gambling, problem gambling and self-esteem, it will be important to attend to changes in sociological and psychological research in relation to measurement of the

concept of self-esteem. As the history of the South Oaks Gambling Screen makes clear, debates and disagreements about the measurement of social and psychological phenomena can be a major obstacle to cumulative and valid knowledge in many social science research arenas. The Rosenberg Self-Esteem Scale has been criticized because it treats self-esteem as a global and unidimensional variable (Gecas 1982). In future research, it will be important to distinguish more carefully between the dimensions of acceptance, efficacy and authenticity within the concept of self-esteem in its relationship to gambling and problem gambling.

There are several trends in the most recent literature on self-esteem that present interesting challenges in connection with our findings on the relationship between self-esteem, gambling and problem gambling. Increasingly, self-esteem is viewed as an active and evolving element in the construct of the self. In the future, we believe that it will be important to carry out longitudinal research on changes in self-esteem over the careers of both social and problem gamblers. Such research would provide a better understanding of the reciprocal effects of heavy gambling involvement and changes in self-esteem.

## COMPARING GEORGIA WITH OTHER JURISDICTIONS

As described in the section on Methods, six baseline surveys of gambling and problem gambling in the general population in the United States were completed in the United States between 1986 and 1990. These include surveys in California, Iowa, Maryland, Massachusetts, New Jersey and New York (Volberg 1994a; Volberg & Steadman 1988, 1992). Seven baseline surveys of gambling and problem gambling in the general population have been completed in the United States since 1990. These include surveys in Connecticut, Minnesota, Montana, North Dakota, South Dakota, Texas and Washington State (Christiansen/Cummings Associates 1992; Laundergan, Schaefer, Eckhoff & Pirie 1990; Volberg 1992, 1993; Volberg & Silver 1992; Volberg & Stuefen 1991; Wallisch 1993). All of these surveys have been based on the original or on revised or modified versions of the South Oaks Gambling Screen.

In this section, we present the results from baseline surveys in these other United States jurisdictions for comparison with the results from the baseline survey in Georgia. Comparisons include lifetime and current prevalence rates, lifetime gambling involvement in the general population, availability of gambling and demographic characteristics of problem and probable pathological gamblers in all of these jurisdictions.

### Comparing Problem Gambling Rates Across States

Cross-jurisdictional comparisons of surveys of gambling and problem gambling suggest that the relationship between gambling availability, gambling participation and the prevalence of problematic gambling behaviors in the general population may be more complex than previously assumed. The states where gambling and problem gambling surveys have been done differ in terms of the types of gambling that have been legalized in each jurisdiction, in terms of gambling participation and in terms of the demographic characteristics of the general population.

Prior to the Georgia survey, all of the states where gambling surveys had been completed permitted wagering on bingo and charitable games as well as parimutuel wagering on horses and/or dogs for many years. At the time these surveys were done, state lotteries were operating in all of the states except North Dakota and Texas. Wagering in card rooms was legal in California, Iowa, Maryland, Montana, North Dakota, South Dakota and Washington State at the time of these surveys. Casino gambling was legal in New Jersey, North Dakota and South Dakota at the time of these surveys. Widely available electronic gaming devices (sometimes known as VLTs) were legal in Maryland, Montana, New Jersey and South Dakota and wagering on sports events was legal in Montana and North Dakota when these surveys were conducted. In Georgia, the only legal types of wagering available to respondents at the time of the survey were lottery games, bingo and small-stakes charitable games.

Ethnicity represents one major demographic difference among jurisdictions where gambling surveys have been done. Nearly a third of the population in California and Texas is non-Caucasian; a quarter of the population in Maryland and New York is non-Caucasian; and nearly a fifth of the population in New Jersey and Washington State is non-Caucasian. In Georgia, nearly a third of the population is non-Caucasian. Hispanic groups make up the bulk of the non-Caucasian population in California and Texas. In the Eastern states, the non-Caucasian population includes African-Americans as well as Hispanic groups. The minority population in Washington State is made up largely of Asians and Native Americans. The non-Caucasian population in the Midwestern and Central states is largely Native American. In Georgia, the non-Caucasian population is largely African-American.

The following table shows lifetime gambling participation rates as well as prevalence rates of

lifetime and current problem and probable pathological gambling in all of the states where surveys based on the South Oaks Gambling Screen have been completed in the United States.

**TABLE 13**  
**Lifetime and Current Prevalence Rates**  
**Across Jurisdictions**

Year	State	Sample Size	Lifetime Gambling Participation	Lifetime Prevalence	Current Prevalence
<b>Northeast</b>					
1986	New York	1,000	85%	4.2%	---
1988	New Jersey	1,000	92%	4.2%	---
1988	Maryland	750	89%	3.9%	---
1989	Massachusetts	750	90%	4.4%	---
1991	Connecticut	1,000	---	6.3%	---
<b>Midwest &amp; Central</b>					
1989	Iowa	750	84%	1.7%	
1990	Minnesota	1,200	---	---	1.5%
1991	South Dakota	1,560	86%	2.8%	1.4%
1992	Montana	1,020	86%	3.6%	2.2%
1992	North Dakota	1,517	85%	3.5%	2.0%
<b>South &amp; West</b>					
1990	California	1,250	89%	4.1%	
1992	Texas	6,308	76%	4.8%	2.5%
1992	Washington State	1,502	91%	5.1%	2.8%
<b>1994</b>	<b>Georgia</b>	<b>1,550</b>	<b>74%</b>	<b>4.4%</b>	<b>2.3%</b>

Cross-jurisdictional and cross-temporal averaging of results from these different states shows that, despite substantial differences, states with few non-Caucasian residents and with recently legalized gambling, like Iowa and South Dakota, tend to have lower rates of problem and probable pathological gambling. At the higher end of the spectrum are states like California and New Jersey with heterogeneous populations and/or longer access to legalized gambling.

An additional dimension that must be considered is the impact of public awareness of gambling and gambling-related problems on reported rates of problem and pathological gambling. Prevalence rates tend to be lower in states where surveys were completed in 1990 and earlier than among states where surveys were completed later. For example, the average prevalence rate of lifetime problem and probable pathological gambling is 4.15% among East and West Coast states compared to an average of 2.15% in the Midwest states among states surveyed in 1990 and earlier. The average prevalence rate of lifetime problem and probable pathological gambling is 5.03% among East Coast and Western states compared to an average

of 3.27% in the Midwest states among states surveyed in 1991 and later (Volberg 1995).

It is particularly interesting in this regard to compare the results from Georgia with the results from Texas. Both of these states have substantial minority populations and low lifetime gambling participation rates. Despite the lack of legal gambling opportunities in both states, lifetime and current prevalence rates of problem and probable pathological gambling are substantial.

### Comparing Non-Problem and Problem Gamblers Across Jurisdictions

In contrast to variations in the prevalence of problem and probable pathological gambling, individuals with gambling-related problems are strikingly similar across jurisdictions. This is true regardless of the availability of legalized gambling in a jurisdiction or the rate of gambling participation in the general population. In considering results from surveys of gambling and problem gambling in the general population, it is important to focus on respondents who have gambled rather than on representative samples of the general population. The discussion that follows is based on data from respondents in Montana, North Dakota, South Dakota, Texas and Washington State where detailed information on gambling involvement as well as gambling-related problems was collected.

#### Demographics

As in Georgia, problem and probable pathological gamblers in other jurisdictions are demographically distinct from non-problem gamblers in the general population. The following table shows that problem and probable pathological gamblers in the general population in Montana, North Dakota, South Dakota, Texas and Washington State are significantly more likely than non-problem gamblers to be male, under the age of 30, non-Caucasian and unmarried. Problem and probable pathological gamblers in these jurisdictions are significantly less likely than non-problem gamblers to have completed high school. The table also shows that problem and probable pathological gamblers recall starting to gamble at a significantly earlier age than non-problem gamblers in the general population.

**TABLE 14**  
**Demographics of Non-Problem and Problem Gamblers**  
**Across Jurisdictions**

Demographics	Non-Problem Gamblers (N=9,103)	Problem & Pathological Gamblers (N=507)	
Male	48%	60%	**
Under 30	20%	37%	**
Non-Caucasian	16%	34%	**
Not Married	37%	53%	**
Less than HS	12%	17%	**
Mean age started gambling	29	21	**
* Significant ( $p \leq .05$ ) ** Highly significant ( $p \leq .01$ )			



Comparison of Table 14, which includes data from Montana, North Dakota, South Dakota, Texas and Washington State, with Table 8 on Page 23, which presents the same data from Georgia, shows that problem and probable pathological gamblers in Georgia are somewhat more likely to be non-Caucasian and unmarried than problem and probable pathological gamblers in other jurisdictions. However, these differences probably reflect variations in the characteristics of the general population from these jurisdictions.

### **Weekly Gambling**

As in Georgia, problem and probable pathological gamblers in other jurisdictions are significantly more likely than non-problem gamblers to gamble frequently. In Montana, North Dakota, South Dakota, Texas and Washington State, 19% of respondents who gamble without problems participate in one or more gambling activities on a weekly basis while 52% of lifetime problem and probable pathological gamblers participate in one or more gambling activities on a weekly basis. In Georgia, 35% of respondents who gamble without problems participate in one or more gambling activities on a weekly basis while 63% of respondents who score as lifetime problem or probable pathological gamblers participate weekly in one or more types of gambling.

### **Expenditures on Gambling**

The amounts that problem and probable pathological gamblers report spending on gambling are significantly higher than the amounts reported by non-problem gamblers. In Montana, North Dakota, South Dakota, Texas and Washington State, non-problem gamblers report monthly expenditures on gambling that are significantly lower than the monthly gambling expenditures reported by problem and probable pathological gamblers. In these jurisdictions, non-problem gamblers estimate that they spend an average of \$66 per month on all types of gambling while problem and probable pathological gamblers estimate that they spend an average of \$302 per month.

The difference between non-problem and problem and probable pathological gamblers in Georgia with regard to gambling expenditures is smaller than in other jurisdictions. In Georgia, non-problem gamblers estimate that they spend an average of \$131 per month on all types of gambling while problem and probable pathological gamblers estimate that they spend an average of \$299 per month. Comparison of expenditure data from Georgia with other jurisdictions suggests that heightened rates of participation in state lottery games, as a result of the recent legalization of the state lottery, may be contributing to these higher-than-expected expenditures on gambling in Georgia.

## SUMMARY AND CONCLUSION

Like many other states, Georgia has recently legalized a state lottery while, at the same time, the availability of legalized gambling in nearby states has expanded greatly. Further, there is a lucrative underground economy in illegal gambling in Georgia, as evidenced by reports of the Georgia Bureau of Investigation. While the data from this survey indicate that significant numbers of the residents of Georgia participate in gambling, that such activities are widely accepted, and that most spend small to moderate amounts of money on gambling, the results of this survey also show that, *at a minimum*, 17,000 Georgia adults are currently experiencing severe problems related to their involvement in gambling.

### Summary

To summarize the findings from this survey of gambling and problem gambling in Georgia: although gambling has been a part of social life in Georgia for many years, the availability of legal forms of gambling, including bingo and the lottery, is quite recent. The low rate of lifetime participation in gambling in Georgia reflects this recent advent of legal gambling. Women, older respondents, non-Caucasians and those with low levels of education and income are less likely to have ever gambled than other individuals in the general population. In terms of lifetime participation, the most popular types of gambling in Georgia are the state's lottery games, particularly the instant games.

Patterns of gambling participation identified in Georgia are unique compared to other United States jurisdictions. While a substantial proportion of the population in Georgia has never gambled at all, an equally substantial proportion participates weekly in one or more types of gambling. Weekly gamblers in Georgia are significantly more likely than other gamblers and non-gamblers to be male and to have annual household incomes over \$25,000.

Reported monthly expenditures on gambling in Georgia are far higher than reported monthly expenditures in other jurisdictions, despite dropping from our analysis a small number of respondents who reported spending extremely high amounts on gambling activities. Lottery games account for nearly two-fifths of the remaining expenditures with out-of-state wagering and illegal gambling accounting for another half of the remaining expenditures. Over half of the respondents report spending less than \$10 per month on gambling while a small group of respondents (11% of the sample) who report spending \$100 or more per month on gambling account for the majority of the remaining reported monthly expenditures on gambling.

Despite the recent advent of legal gambling in Georgia, 4.4% of the respondents can be classified as lifetime problem and probable pathological gamblers while 2.3% of the respondents can be classified as current problem and probable pathological gamblers. Lifetime problem and probable pathological gamblers in Georgia are significantly more likely than the general population to be male, under the age of 30, non-Caucasian and unmarried. It is important to note that, as in several Midwestern states with recently legalized gambling, there is no significant difference in the gender of current problem and probable pathological gamblers in Georgia, suggesting that women may be starting to experience gambling-related difficulties similar to the difficulties more traditionally experienced by men in relation to their gambling.

As in other jurisdictions, lifetime problem and probable pathological gamblers in Georgia are demographically distinct from non-problem gamblers in the general population. Problem and probable pathological gamblers in Georgia are also distinct from non-problem gamblers in terms of the number and types of gambling in which they are regularly involved as well as in terms of their monthly gambling expenditures. Finally, as in other jurisdictions, problem and probable pathological gamblers in Georgia report having started gambling at a significantly younger age than non-problem gamblers.

## Directions for the Future

The lottery in Georgia is intended to generate money for education and provides substantial funds for the HOPE program, pre-kindergarten programs and special capital projects. While the State of Georgia clearly benefits from the gambling involvement of its citizens through the revenues raised by lottery, the results of this survey indicate that there are significant costs associated with gambling involvement among Georgia residents.

Since the State of Georgia benefits directly from its citizens' participation in legalized gambling, it seems reasonable to expect the government to provide assistance to individuals who experience problems related to their gambling. Indeed, the State of Georgia has already taken the first steps in this direction by mandating funding for treatment and education programs aimed at individuals with gambling-related problems. In addition to the prevalence survey reported here, these efforts have included training for treatment professionals at state mental health facilities in recognizing problem gamblers and the establishment of a helpline for Georgia residents experiencing a gambling-related problem.

While the first steps have been taken in establishing the full array of services needed to address the issue of problem gambling in Georgia, it is critical that adequate and continued funding for such services be maintained. Further, an organizational commitment to maintaining and evaluating these efforts is needed. Directions for the future should include:

- *a survey of adolescents* to assess the level of gambling involvement and gambling-related difficulties among a particularly vulnerable segment of the population;
- *wider advertising of the helpline* to improve the access of Georgia residents seeking information or referrals in relation to a gambling-related problem;
- *continued training* for treatment professionals to ensure that services are available to individuals seeking assistance for their gambling-related difficulties; and
- *screening* for gambling-related difficulties among clients entering chemical dependence treatment programs, prisons and other institutions where the prevalence of gambling-related problems tends to be high.

The results of the survey presented here provide a benchmark for future assessments of gambling involvement and problem and pathological gambling in Georgia. These data also provide a foundation for policy making and planning for services for individuals who experience difficulties related to their involvement in gambling. In the future, it will be important to replicate this survey in order to determine if there have been changes in gambling involvement and gambling-related problems associated with the continued operation of legalized gambling in Georgia, with the possible introduction of new types of gambling and with the wider availability of prevention and treatment services for problem and pathological gamblers in Georgia.

Consideration must now be given to educating Georgia residents about the potential problems associated with gambling, to providing prevention and treatment services for those individuals who

experience problems related to their gambling, and to ensuring that everyone involved with legalized gambling in Georgia works together to address fully the social costs associated with the legalization of gambling in Georgia.

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## **APPENDIX A**

### **Questionnaire for the Georgia Survey on Gambling and Problem Gambling**