Compulsive Gambling in Kentucky

Research Report No. 316

Legislative Research Commission
Frankfort, Kentucky

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Kentucky Legislative Research Commission

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Compulsive Gambling in Kentucky

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Foreword

The 2003 General Assembly directed the Legislative Research Commission staff to study compulsive gambling in Kentucky. The legislature directed staff to provide a descriptive and economic analysis of the current status of compulsive gambling in the state. This report presents the results of the study.

This report is the result of the dedicated effort of LRC staff. The assistance of the many people from the public and private sector who supplied information, insight, and data is gratefully acknowledged.

Robert Sherman
Director

Frankfort, Kentucky
November 2003

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Executive Summary

Kentucky currently allows commercial, legalized gambling in horse racing, lottery sales, and charitable gaming. Legalizing electronic slot machine or casino-style gambling also is being discussed at the state level.

Recent increases in casino-style gambling in surrounding states, and the United States in general, has been followed by an increased awareness that some gamblers develop a pathological disorder from gambling. This severe form of problem gambling is referred to as compulsive gambling. The 2003 General Assembly enacted House Concurrent Resolution (HCR) 126, directing the Legislative Research Commission to study compulsive gambling in Kentucky. The resolution directed that the study include a descriptive and economic analysis of the current status of compulsive gambling in the state.

Therefore, the purpose of the study is to provide an accounting of the compulsive gamblers in the state and provide information about this type of gambler. The report as directed by HCR 126 addresses three major objectives.

- Identify the number of current compulsive gamblers in the state.
- Describe costs associated with compulsive gamblers.
- Determine the resources available to treat persons who exhibit compulsive gambling behavior.

Many people gamble in a responsible manner as entertainment and experience no personal or financial hardships as a result of gambling. Others seem to experience an addiction to gambling, similar to alcoholism or drug dependency. Gambling behavior has been described as a continuum of behavior similar to the use of alcohol: there are "tee-totalers" or abstainers, social drinkers, alcohol abusers, and alcoholics; likewise, there are abstainers, social gamblers, problem gamblers, and compulsive gamblers.

In 1980, compulsive gambling was listed by the American Psychiatric Association as a psychiatric disorder. There are a number of difficulties that occur when persons exhibit compulsive gambling behaviors such as:

- financial troubles;
- criminal behavior;
- depression and other psychiatric conditions;
- suicide, including suicidal thoughts and attempts;
- family dysfunction; and
- domestic violence, including child abuse and child neglect.

While there is agreement that compulsive gambling is a true psychiatric disorder, it is important to note that research into compulsive gambling behaviors is a relatively new field with little consensus on the nature and cause of the disorder. There is even some disagreement among professionals and researchers about the classification and criteria for the disorder.

What is known is that the compulsive gambling population is susceptible to more than just a gambling problem. Many compulsive gamblers who present themselves for treatment are found to have other psychiatric disorders such as depression or substance abuse. These coexisting disorders present a difficulty in assessing the nature and magnitude of problems that are directly and solely related to gambling.

The Compulsive Gambling Population in Kentucky

A statewide survey was developed to provide insight into gambling in Kentucky. The survey results provide information on the types of gambling taking place in Kentucky and to what extent there is problem and compulsive gambling behavior among the adult population of Kentucky.

Based on the survey it is estimated that 55 percent of adult Kentuckians engaged in some form of gambling in the past year. Of those who gambled, it is estimated that 12.3 percent may have had some problem with their gambling. An affirmative answer to at least one of the 10 criteria used to determine the degree of problem and compulsive gambling would indicate a gambler who may be at risk of developing serious gambling problems. Nearly 1 percent of past year gamblers, and 0.5 percent of all adult Kentuckians, exhibited compulsive gambling behavior in the past year based on these 10 criteria.

The 10 criteria used to evaluate at-risk, problem, and compulsive gambling come from the American Psychiatric Associations' Diagnostic and Statistical Manual of the Mental Disorders (DSM-IV). The DSM-IV criteria is intended to establish a diagnosis for pathological (compulsive) gambling in a clinical setting and as such often produces conservative estimates when used in a survey setting. Therefore, those who meet at least five of the 10 criteria are referred to as probable compulsive gamblers since they are not being diagnosed in a clinical environment. Those meeting three or four of the criteria are considered exhibiting problem gambling behavior. If one or two of the criteria are met, then the gambler is considered at risk of developing problem and compulsive gambling behavior.

In Kentucky, it is estimated that there were 20,000 problem and 15,000 probable compulsive gamblers over the past year. An additional 170,000 adults may be considered at risk of developing some problems with their gambling. Of all past-year gamblers, an estimated 24,000 sought treatment for their gambling problems.

Because of the method required to gain statewide information on gamblers, it is suspected that the prevalence of problem gambling is underreported and represents a lower-bound

estimate. The estimate does provide a benchmark for evaluating the extent of problem gambling. This benchmark provides a point of reference for future inquiries into the extent of problem and compulsive gambling in the state.

Cost Associated with Compulsive Gambling

Compulsive gambling can result in negative consequences, both personal such as divorce and bankruptcy, and public such as crime. Generally, these negative consequences have been lumped into the broadly defined social costs of gambling.

The costs associated with problem and compulsive gambling generally occur in the following areas:

- Employment costs from loss of employment and productivity
- Welfare costs paid by taxpayers for income assistance and medical services
- Unpaid debt borne by creditors
- Theft, including embezzlement and fraud
- Criminal and civil court costs and legal services
- Police and security costs from potential crime increases and increases in populations (i.e. tourist) near gambling centers
- Treatment cost associated with problem and compulsive gambling

In order to better understand these costs, a questionnaire was distributed to Gamblers Anonymous attendees across the state. Fifty-five responded to the questionnaire and provided information on the types of gambling they played, what types of gambling caused them the most problems, financial sources for their gambling, their legal history and employment history as it relates to their gambling problem, other types of disorders they may have, treatment, and demographic information.

For these Gamblers Anonymous (GA) attendees, casino-style gambling, including electronic gambling devices, was most frequently cited as the type of gambling activity that caused serious problems. Horse racing, charitable gambling, the lottery, and sports betting were cited less frequently as a form of gambling creating a serious problem for these respondents.

For compulsive gamblers, the most obvious result of their disorder is financial difficulty. The respondents to the GA survey reveal there are often severe financial strains that serious gambling problems place on them and others. Often these serious gambling problems coupled with financial obligations have led many respondents to illegal acts. Everything from intentionally writing bad checks to theft, fraud, and embezzlement were reported as means to access money for gambling. For some the need to support their gambling led to arrests, convictions, and incarcerations. Often the loans, credit card debt, or illegally acquired money was not repaid. These respondents were sued for unpaid debts and more than a third filed bankruptcy seeking relief from their gambling debts.

Literature reviewed in Chapter 2 indicates that many compulsive gamblers have a co-existing disorder and this was true for the GA attendees. In addition to indicating they thought of themselves as compulsive gamblers, just over one-half of the respondents indicated having other disorders and most of them cited alcohol and drugs. While most (83 percent) claimed to have been successful in stopping their gambling since joining GA, some still indicated that the existence of greater treatment availability would be important to them. Likewise, they indicated that greater awareness in the state of how gambling can lead to an "addiction" is needed.

An investigation into academic research on gambling's affect on crime and bankruptcy indicated that very little rigorous research has been performed. The research that has been undertaken has been inconclusive regarding crime or bankruptcies increasing from expanded gambling opportunities.

Research was conducted into Kentucky's experience at the county-level with compulsive gambling and the possible rise in personal bankruptcy. Analysis on the recent access to riverboat casinos by some Kentucky counties did not yield a measurable impact on personal bankruptcy rates. Counties with close access to pari-mutuel wagering were found to have higher bankruptcy rates after controlling for other factors that may contribute to personal bankruptcies. These results may hinge on the fact that most counties with access to casino-style gambling have only recently gained access to this form of gambling.

Creating Awareness
and Providing Treatment for Compulsive Gambling

The final chapter of this study discusses efforts that are being made in Kentucky and in the nation to create awareness about compulsive gambling and reviews the availability of treatment for compulsive gamblers. The state provides no public funding to create awareness. The Kentucky Council on Compulsive Gambling, a privately funded non-profit organization, was created to educate the public about problem gambling. Some industry establishments are also making efforts in this area, including Churchill Downs and the Kentucky Lottery Corporation. These entities sometimes work with the Kentucky Council on Compulsive Gambling in their efforts.

Almost no information is available regarding the level of state funding by other states for awareness and treatment of compulsive gambling. Likewise, little or no information is available on the effectiveness of efforts to create awareness. While there are groups in the state, both public and private, that put forth efforts to create awareness about gambling problems and compulsive gambling, there is no assessment of the overall effectiveness of these efforts.

Kentucky provides no public funding specifically for the treatment of compulsive gambling. An association of state-funded gambling treatment agencies identified 16 states that currently have some type of state-funded compulsive gambling programs. According to the Kentucky Council on Compulsive Gambling, the self-funded Gamblers

Anonymous provides most of the treatment for compulsive gamblers in Kentucky. The community mental health centers receive federal and state funding, but none of the funding provided to these centers is targeted for the treatment of compulsive gambling. Because of the lack of dedicated funding and a limited number of counselors trained to diagnose compulsive gambling, a person who went to a community mental health center for a gambling problem but did not have a coexisting mental health or substance abuse problem, would be referred elsewhere for services or offered fee-based treatment if a qualified clinician was available.

Because of the many similarities between compulsive gambling and alcoholism, some mental health researchers are recommending a similar public health approach to compulsive gambling. This approach involves broad prevention and awareness strategies, early identification and risk reduction, and appropriate treatment for those with a gambling disorder.

Chapter 1

Study Overview and Trends in Legalized Gambling

Introduction

Legal gambling in Kentucky consists of horse racing, lottery sales, and charitable gaming.

Kentucky has a lengthy history of various forms of legal gambling. Kentucky state law currently allows commercial, legalized gambling in horse racing, lottery sales, and charitable gaming. Legalizing electronic machine or casino-style gambling is also being discussed by state policymakers. In addition to gambling in Kentucky, several neighboring state legislatures have legalized casino-style gambling. Casinos in the neighboring states have often located near the Kentucky border, making the facilities easily accessible to residents of Kentucky.

Recent increases in casino-style gambling along Kentucky's borders have resulted in greater awareness of compulsive gambling.

The recent increases in casino-style gambling in surrounding states, and the United States in general, have been followed by an increased awareness of compulsive gambling. Therefore, the 2003 General Assembly enacted House Concurrent Resolution (HCR) 126, directing the Legislative Research Commission to study compulsive gambling in Kentucky. The study was to include a descriptive and economic assessment of the effects of compulsive gambling in the state. The study includes three major objectives:

1. To identify the number of current compulsive gamblers in the state,
2. To describe the costs associated with compulsive gambling behavior, and
3. To determine the resources available to treat persons who exhibit compulsive gambling behavior.

Increased interest regarding compulsive gambling has generated several studies.

Evidence of an increased awareness regarding compulsive gambling and its negative social impacts can be found in recent research conducted in the state. In December 1999, PricewaterhouseCoopers released a study analyzing the economic and social impacts of expanded gaming in Kentucky. In the spring of 2001, an entire issue of the Journal of Business and Public Affairs, published by Murray State University, was devoted to issues surrounding

legalized gambling and included a number of gambling-related articles specific to Kentucky. Beginning on December 22, 2002, *The Courier-Journal* produced a three-day series of articles titled "Gambling Addiction – Kentuckiana's Growing Problem." *The Courier-Journal* editors spent six months examining the problems associated with what they described as the rising number of compulsive gamblers in the region.

None of these research efforts has attempted to measure the number of compulsive gamblers in the Commonwealth. This study is the first to provide a baseline number of current, compulsive gamblers in the state. Similar baselines have been established in 23 other states.

Expanded Gambling Opportunities And Compulsive Gambling

Research linking expansions in gambling to increases in the number of compulsive gamblers is inconclusive.

Research into the effect of expanded gambling opportunities on the prevalence of compulsive gambling has only recently begun, and so far, has been inconclusive. Most of the research has focused on expansions in casino-style gambling rather than other forms, such as state lotteries or horse racing. Several studies have concluded that the presence or growth of casinos resulted in an increase in compulsive gambling. These studies include one by the National Opinion Research Center (1999) and another by Australia's Productivity Commission (1999). The results of these and other studies, however, have been called into question due to several technical limitations (The WAGER, 2003).

Research studies have been unable to account for other factors that might contribute to changes in the number of compulsive gamblers.

The first limitation was that researchers were not able to control for other important determinants of compulsive gambling's prevalence. For example, people vulnerable to gambling problems may move their residence to be near casinos. As a result, the number of compulsive gamblers in the area near casinos could increase, while the total number of compulsive gamblers did not change. In addition, casinos might locate in areas with more vulnerable populations, such as urban areas or business centers. Or it could be that both gambling venues and problem gamblers are attracted to similar locations. In either instance, increases in the prevalence of compulsive gambling from increased gambling opportunities could be overstated. Another limitation is the procedure for measuring the

prevalence of compulsive gambling has not been standardized. This reduces the ability to make comparisons of prevalence rates across different studies and to attribute any changes in prevalence to the expansion of legalized gambling.

Limitations associated with research about the effect of expanded gambling opportunities on compulsive gambling have not been resolved.

The difficulties of measuring the impact that expanded gambling may have on the compulsive gambling population remain unresolved. Therefore, this study will not try to establish any link between Kentucky's prevalence of compulsive gamblers and expanded gambling opportunities.

Defining Different Types of Gamblers

Throughout the gambling literature, different phrases are used to describe gamblers with gambling problems. To be clear what is meant by the terms "compulsive gamblers" or "problem gamblers," definitions are established and used throughout the rest of this report.

Gamblers who incur no hardships from gambling are referred to as "social gamblers."

The majority of gamblers are able to gamble responsibly as a form of entertainment with no personal or financial hardships from gambling. Gamblers who incur no hardships from gambling are referred to as "social gamblers."

Gamblers who have displayed some problem gambling behavior, but do not meet the criteria for compulsive gambling are referred to as "problem gamblers."

Gamblers who experience some hardship or difficulties are often called problem gamblers. The National Council on Problem Gambling describes the problem gambler as a person whose gambling behavior "causes disruptions in any major area of life: psychological, physical, social or vocational." The Council includes in this definition the compulsive gambler. Thus, the term "problem gamblers" is often a catch-all phrase to describe gamblers who experience some problem with gambling regardless of severity. Quite often the problem gambler is assumed to be in the preliminary stage of the progressive disorder known as pathological or compulsive gambling (Lesieur and Rosenthal, 1991). For this report, "problem gamblers" refers specifically to persons who have displayed some problem gambling behaviors, but do not meet the criteria for compulsive gambling.

In 1980, the American Psychiatric Association recognized certain gamblers as having a psychiatric disorder.

In 1980, the American Psychiatric Association recognized certain gamblers as having a psychiatric disorder relating to

Gamblers who have displayed serious problems with gambling or are diagnosed as pathological gamblers are referred to as "compulsive gamblers."

gambling and established a set of criteria for clinical diagnosis of pathological gamblers. The National Council on Problem Gambling describes the condition known as pathological or compulsive gambling as a "progressive addiction characterized by increasing preoccupation with gambling, a need to bet more money more frequently, restlessness or irritability when attempting to stop, 'chasing' losses, and loss of control manifested by continuation of the gambling behavior in spite of mounting, serious, negative consequences." For this report, rather than the clinical term "pathological gamblers," the more common term "compulsive gamblers" is used. The compulsive gambler is one who meets the criteria for clinical diagnosis of pathological gambling.

When reporting on all gamblers that have experienced personal or financial hardships from gambling, no matter how severe or numerous, the term "problem gambling" is used.

Thus, there are three distinct types of gamblers that are referred to in the rest of this report: the social gambler, the problem gambler, and the compulsive gambler. Throughout the report, where appropriate, a distinction between the problem and compulsive gambler will be made. When reporting on all gamblers who have experienced personal or financial hardships from gambling, no matter how severe or numerous, the term of "problem gambling" is used.

Methodology

To establish a thorough understanding of the issue relating to compulsive gambling, staff reviewed the relevant literature and conducted interviews with various interested parties across the state.

To establish a thorough understanding of the issues relating to compulsive gambling, staff reviewed other state reports, academic literature, and other relevant literature. Additionally, staff conducted interviews with various interested parties across Kentucky. This included interviews with the Kentucky Council on Problem Gambling, private and public counselors of problem and compulsive gamblers, and state agencies that may be affected by the compulsive gambling population. The interviews with private and public mental health officials and counselors across the state assisted in developing a broader understanding of compulsive gamblers, their treatment, and other problems.

Staff also conducted three surveys: a statewide telephone survey, a survey of Gamblers Anonymous attendees in the state, and a survey of the state's substance abuse counselors

Staff also conducted three surveys. The first survey establishes a baseline prevalence of probable compulsive gamblers in Kentucky in the past year. This survey also provides information on where people in the state choose to gamble. The second survey collects information from individuals attending Gamblers Anonymous meetings. This survey provides insight into the experiences and hardships resulting from serious gambling problems. This survey also provides information on what types of gambling activities have caused problems for these individuals. The final survey obtains information from substance abuse counselors. The survey gauges awareness and training in the treatment of compulsive gambling.

An analysis of personal bankruptcy and access to gambling was performed using Kentucky county data.

To gain an understanding of the expected social impact from access to gambling opportunities, a statistical analysis of Kentucky county-level data was performed. The county-level data was collected from 1990 to 2000 on social and economic factors including personal bankruptcy. Following work by national research centers and academics, the data was used to study the impact on personal bankruptcies from access to certain types of legal gambling opportunities.

Organization of the Report

The organization of the report is as follows:

- The remainder of Chapter 1 presents a brief historical perspective on gambling, both in the nation and Kentucky, and an overview of the growth in legalized gambling in the past 30 years.

- Chapter 2 discusses compulsive gambling as a pathological disorder and its similarities with other addictive and impulse/control disorders. Included is a discussion of how pathological disorders, like compulsive gambling, often coexist with other compulsive/addictive behavior, a phenomenon known as comorbidity. The chapter relies on information gathered from the academic literature. To supplement the literature, interviews were conducted with representatives from state agencies and counselors, both public and private, who work with this population.

- Chapter 3 reports the results from the statewide telephone survey commissioned for this study. Included in the results is an estimate of the number of compulsive gamblers in the state. Additionally, data from the survey is used to provide an understanding of where and how often Kentuckians gamble, and of the demographic characteristics of people who gamble.

- Chapter 4 presents information on some costs related to compulsive gambling. Following methodology found in other studies, the costs associated with problem and compulsive gambling is presented using a survey of participants attending Gamblers Anonymous meetings across the state. In order to understand the possible effect access to gambling has on personal bankruptcies, an analysis using Kentucky data was performed.

- Chapter 5 reviews efforts, in Kentucky and the rest of the nation, to increase awareness about compulsive gambling as a psychiatric disorder and the availability of treatment for the disorder. Both public and private awareness and treatment resources are discussed. This chapter also provides information about local and national associations' efforts to create awareness of compulsive gambling problems and to expand treatment options.

Trends in Legalized Gambling

Legalized gambling in Kentucky consists of pari-mutuel wagering on horse races, the state lottery, and charitable gaming.

Legalized gambling in Kentucky currently consists of pari-mutuel wagering on horse racing, the state lottery, and charitable gaming. As legalized gambling opportunities increased in areas surrounding Kentucky, awareness of the social costs of gambling has also increased. There has been an increase nationally in the access to legal, commercial gambling, which has taken place over the last 30 years. For Kentuckians, increased access has occurred mostly in the past decade. Recent growth in gambling opportunities has occurred along Kentucky's borders. A map at the end of this chapter shows the location of Kentucky's race tracks, off-track betting facilities, and nearby riverboat casinos.

Legalized Gambling in the Nation

Legal gambling has proliferated in the United States during three separate time periods. The country is now in the middle of the third wave of legal gambling.

Legal gambling has proliferated in the United States during three time periods, according to Professor I. Nelson Rose, a gambling law scholar and law professor at Whittier College Law School in California. The first wave occurred during the colonial period and the second wave occurred during the latter part of the 19th century and beginning of the 20th century. While legal gambling spread during these first two periods, the growth ended in scandal and gambling was subsequently prohibited. The country is now in the middle of what Rose refers to as the third wave of legal gambling.

The third wave of legal gambling began in 1931, when Nevada re-legalized casinos, becoming the only state to have legal casino gambling.

The third wave of legal gambling began in 1931, when Nevada re-legalized casinos, becoming the only state to have legal casino gambling. During the 1930s, 21 states authorized wagering at horse race tracks and charitable gaming spread throughout the nation. By the 1950s most states had enacted legislation to authorize wagering at horse race tracks. Charitable gaming opportunities were also widespread. The third wave gained momentum when state lotteries once again began to operate in the 1960s and with the opening in 1978 of casinos in Atlantic City. In 1987, the U.S. Supreme Court affirmed the right of Indian tribes to operate and regulate high stakes versions of all games that were not prohibited by individual state laws.[1] The following year, the federal Indian Gaming Regulatory Act was passed, leading to casinos on Indian land in many states. Another important year in the third wave of legal gambling was 1991, when riverboat casinos opened in both Iowa and Illinois. In 1995, the first riverboat casinos opened in Indiana.

The most common form of legal gambling is charitable bingo followed by pari-mutuel wagering.

Table 1 shows the legal gambling activities that currently exist in the United States. Utah is the only state with no form of legal gambling. The most common form of legal gambling is charitable bingo, which is operating in 46 states. The next most common form of legal gambling is pari-mutuel wagering, which is operating in 40 states.

[1] California v. Cabazon Bank of Mission Indians, 480 U.S. 202 (1987)

Pari-mutuel wagering consists of either wagering at an in-state horse race track or wagering on out-of-state horse races via simulcasting.

Pari-mutuel wagering consists of either wagering at an in-state horse race track or wagering on out-of-state horse races via simulcasting. The pari-mutuel industry continues to rely on simulcasting and account wagering to promote growth. Account wagering refers to wagering from an individual account set up for that purpose, such as a telephone account.

Forty states have authorized a state lottery; only 11 states have what the American Gaming Association industry group refers to as commercial casinos.

Forty states have authorized a state lottery. The last two states to authorize a lottery, Tennessee and North Dakota, are in the process of implementing their state lotteries following the passage of constitutional amendments in 2002. Twenty-four states have Indian casinos, which vary by the types of gaming offered. Fourteen states also have other types of casinos. Only 11 of these 14 states, however, have what the American Gaming Association industry group refers to as commercial casinos. The distinction involves the types of gaming offered, with commercial casinos offering most forms of gaming. Of these 11 states, six states have only riverboat casinos, four have land-based casinos, and one (Louisiana) operates both land-based and riverboat casinos.

Currently, eight states allow slot/video gambling at race tracks.

Another type of legal gambling involves slot/video gambling at race tracks, known as racinos. Currently, racinos operate in seven states. An eighth state, New York, has passed enabling legislation and is in the process of implementing racinos. Legislatures in several other states, including Ohio and Kentucky, have discussed legalizing racinos.

Nevada is the only state that has legalized Internet gambling.

In early 2001, Nevada became the only state to legalize Internet gambling. Internet gambling allows anyone with computer access to the World Wide Web to wager on casino-style games. These Internet gambling sites request that a person be at least 18 years old and require a credit card to establish an account. Currently, all Internet gambling sites are operating outside the United States, but are accessible by computer from anywhere in the world.

Table 1.1
Legal Gambling in the United States as of May 2003

	Charitable Bingo	Land-Based Casinos	Indian Casinos	Lottery	Pari-Mutuel Wagering	Slots/Video Gambling at Race Tracks
ALABAMA	X				X	
ALASKA	X					
ARIZONA	X		X	X	X	
ARKANSAS					X	
CALIFORNIA	X		X	X	X	
COLORADO	X	X	X	X	X	
CONNECTICUT	X		X	X	X	
DELAWARE	X			X	X	X
DC	X			X		
FLORIDA	X		X	X	X	
GEORGIA	X			X		
HAWAII						
IDAHO	X		A	X	X	
ILLINOIS	X	B		X	X	
INDIANA	X	B		X	X	
IOWA	X	B	X	X	X	X
KANSAS	X		X	X	X	
KENTUCKY	X			X	X	
LOUISIANA	X	C	X	X	X	X
MAINE	X			X	X	
MARYLAND	X			X	X	
MASSACHUSETTS	X			X	X	
MICHIGAN	X	X	X	X	X	
MINNESOTA	X		X	X	X	
MISSISSIPPI	X	B	X			
MISSOURI	X	B		X	F	
MONTANA	X	D	X	X	X	
NEBRASKA	X		E	X	X	
NEVADA	X	X	X		X	
NEW HAMPSHIRE	X			X	X	
NEW JERSEY	X	X		X	X	
NEW MEXICO	X		X	X	X	X
NEW YORK	X		X	X	X	F
NORTH CAROLINA	X	D	X			
NORTH DAKOTA	X		X	F	X	
OHIO	X			X	X	
OKLAHOMA	X		X		X	
OREGON	X		X	X	X	X
PENNSYLVANIA	X			X	X	
RHODE ISLAND	X			X	X	X
SOUTH CAROLINA	X			X		
SOUTH DAKOTA	X	X	X	X	X	
TENNESSEE				F	F	
TEXAS	X			X	X	
UTAH						
VERMONT	X			X	F	
VIRGINIA	X			X	X	
WASHINGTON	X	G	H	X	X	
WEST VIRGINIA	X			X	X	X
WISCONSIN	X		X	X	X	
WYOMING	X				X	
PUERTO RICO	X	X		X	X	

NOTES:

X= Authorized and operating.

A= Tribes signed compacts for non-casino gaming, such as pari-mutuel wagering and lottery games; however, VLTs are also operating.

B= Riverboat casinos only.

C= One land-based casino and 14 riverboat casinos operating.

D= Commerical bingo, Keno, or pulltabs only.

E= Table games and electronic pull-tabs. No slots.

F= Authorized but not operating.

G= Cardrooms with table games only.

H= Table games, VLTs, and linked bingo machines.

Source: LRC staff analysis of data provided by International Gaming and Wagering Business, National Conference of State Legislatures, Gambling and the Law: Status of Gambling Laws, and telephone interviews with other states.

Legalized Gambling in Kentucky

Kentucky Courts have often disallowed most forms of gaming.

Before the Kentucky Constitution was adopted in 1891, the General Assembly could grant charters to private organizations to conduct lotteries as a means of funding public works such as roads and schools. In the years preceding the adoption of the 1891 Constitution, records indicate a considerable amount of abuse was occurring from lotteries (Klotter, 1989). These abuses persuaded framers of the 1891 Constitution to include the prohibition on lotteries found in Section 226. Kentucky courts interpreting that section have often disallowed most forms of gaming, with no regard to the type of organization conducting the gaming or the purpose for which the gaming was conducted. There is one exception in gaming case law, pari-mutuel wagering on horse racing. In a 1931 case, the Kentucky Court of Appeals (Kentucky's highest court at the time) ruled that the pari-mutuel system of wagering on horse races did not constitute a lottery as prohibited by the 1891 Constitution.

Pari-mutuel wagering at horse racing tracks has existed for some time. The legalization of a state lottery and charitable gaming are fairly recent developments in the state.

While pari-mutuel wagering at horse racing tracks has existed for some time, the legalization of a state lottery and charitable gaming are fairly recent developments in the state. In 1988, voters approved a constitutional amendment to establish a state lottery. As a result, Section 226 of the Kentucky Constitution was amended to permit the General Assembly to establish a Kentucky state lottery and a lottery to be conducted in cooperation with other states. Kentucky began its first state-supported lottery sales in April 1989. The Kentucky Constitution was also amended to legalize charitable gaming. The legislation was enacted by the 1992 General Assembly.

The Kentucky Constitution was amended to allow the lottery and legalize charitable gaming.

Charitable gaming as it currently exists in Kentucky consists of bingo, pulltabs, raffles, special charity fundraising events, and non-cash prize wheels. The primary goals of the charitable gaming statutes are to prevent commercialization of charitable gaming and to prevent the diversion of funds from legitimate charitable purposes.

Legislative Efforts to Expand or Restrict Legalized Gambling in Kentucky Since 1994

Since 1994, several bills have been introduced to expand or restrict existing legalized gambling, or to introduce a new form of legalized gambling.

Legislative attempts to expand or restrict legalized gambling opportunities in Kentucky are common. During the seven legislative sessions since and including the 1994 Session, several bills were introduced to change legalized gambling in the state.

Some of these bills would have expanded legalized gambling, while others would have restricted legalized gambling (Appendix A).

While there have been many efforts to expand or restrict legalized gambling in the state, few have been successful. Of the bills introduced since the 1994 Session, nine have become law. These nine bills were directed at establishing simulcast and off-track wagering, and charitable gaming.

Since 1994, attempts to expand legalized gambling have been unsuccessful.

Since 1994, several attempts to expand legalized gambling have been unsuccessful. These attempts have included allowing one land-based casino at each horse race track in Kentucky, amending the Constitution to permit casino-style gambling, authorizing electronic gaming at Kentucky horse race tracks, and revising the charitable gaming statutes.

Along with attempts to expand legalized gambling, there has been an increased awareness that some gamblers can develop serious problems with gambling. The balance of this report will provide a discussion of compulsive gambling as a psychiatric disorder, present an estimate of the number of Kentuckians who have experienced problems from their gambling in the past year, describe some of the costs associated with serious gambling problems, and discuss efforts to create awareness about compulsive gambling and treatment resources.

The Location of Horse Racing Tracks, Off-Track Betting Facilities and Riverboat Casinos

Source: Locations compiled by LRC staff

Chapter 2

Compulsive Gambling as a Psychiatric Disorder

Gambling behavior has been described as a continuum ranging from social gambler to compulsive gambler.

Many people gamble in a responsible manner for entertainment and experience no personal or financial hardships as a result of gambling. Others seem to experience an addiction to gambling, similar to alcoholism or drug dependency. Gambling behavior has been described as a continuum of behavior similar to the use of alcohol: there are "tee-totalers" or abstainers, social drinkers, alcohol abusers, and alcoholics; likewise, there are abstainers, social gamblers, problem gamblers, and compulsive gamblers.

The mental health profession recognizes compulsive gambling as a psychiatric disorder.

There is agreement among most mental health professionals that compulsive gambling is a psychiatric disorder. No consensus has emerged, however, regarding the appropriate classification or the most accurate behavioral indicators of the disorder. While there is agreement that compulsive gambling is a true disorder, it is important to note that research into problem gambling behaviors is a relatively new field with little current consensus on the nature and cause of the disorder. A review of relevant literature reveals complementary and competing theories about problem and compulsive gambling.

Many compulsive gamblers have other psychiatric disorders such as depression or substance abuse.

What is known is that the compulsive gambling population is susceptible to more than just a gambling problem. Many compulsive gamblers who present themselves for treatment are found to have other psychiatric disorders such as depression or substance abuse. These coexisting disorders present a difficulty in assessing the nature and magnitude of problems that are directly and solely related to gambling.

Understanding Compulsive Gambling Through Comparisons to Substance Abuse

In this chapter, "substance abuse" is used as a term to represent alcoholism and other drug disorders including chemical dependency.

Gambling and substance abuse have many similarities both culturally and as a disorder.

Gambling and substance abuse have many similarities both culturally and as a disorder. Both industries are promoted and advertised as entertainment and recreation and both provide a source of tax revenue for the government. At times society has viewed gambling and drinking as vices. Continued overindulgence in either activity often has negative consequences. Government has regulated access to and the availability of gambling and alcoholic beverages. Both gambling and alcohol have been prohibited at some point in the 20th Century.

There is a significant amount of research relating gambling behavior to substance abuse behavior and documenting the existence of substance abuse disorders in compulsive gamblers. The diagnostic criteria for compulsive gambling and substance abuse are similar. Treatment approaches such as individual counseling, therapy, self-help programs, and residential programs are also similar.

Substance abuse and compulsive gambling persist in spite of the negative consequences.

Substance abuse and compulsive gambling involve persistent behavior that continues regardless of the negative consequences. Symptoms of both illnesses tend to parallel each other in their progression (Petry, 2002). Both illnesses involve the need for increased amounts to satisfy the urges and use increases during times of stress. Three phases in the progression of compulsive gambling that are the same as the phases of chemical dependency, reported by Custer and Milt, 1985, are described below.

- *Early phase* – use of defense mechanisms such as minimization, rationalization, denial
- *Losing stage* (the critical stage in chemical dependency) – the person is consumed with gambling and everything else is secondary; includes loss of family and friends, problems with money and work, and loss of outside interests
- *Desperation phase* (the chronic stage in chemical dependency) – persons are powerless over their compulsions, there is impaired thinking and moral/physical/emotional/spiritual deterioration, and the gambling problem is no longer secret or invisible

Compulsive gambling can be more difficult to detect than substance abuse.

Differences, however, do exist between compulsive gambling and chemical dependency. There is no physical evidence or visible signs of gambling and no way to test for compulsive gambling such as through a urine or blood test (Sweeting and Weinberg, 2002). It may be easier for the problem gambler to go without detection of the problem or its severity by friends, family members, or coworkers. Many times families are unaware of the

problem until it has become very serious. Typically, the financial problems associated with problem gambling will be greater than those found with substance abusers. Compulsive gamblers tend to remain functional until they "hit bottom" and the financial crises demands immediate attention (Berman and Siegel, 1992).

Currently, programs to educate and prevent compulsive and problem gambling are rare.

Education and prevention programs about problem gambling are rare, while programs for substance abuse and chemical dependency are much more common. Programs for substance abuse and chemical dependency are beginning to focus more on harm reduction through increased awareness and prevention (Volberg, 2001). The alcohol warning labels about use of alcohol during pregnancy, the red ribbons of Mothers Against Drunk Driving, and "Be A Designated Driver" campaigns are examples of alcohol harm reduction through awareness and prevention programs.

As noted by several of the presenters at the 2003 National Conference on Problem Gambling, similarities between compulsive gambling and alcoholism are shown in the trends in research and public opinion. Alcoholism was once thought of as emanating from a flawed character trait. Through decades of biological and psychological research and evaluation, alcoholism is now known to have specific biological, psychosocial, and socio-cultural causal factors. Public awareness efforts and public health approaches to alcoholism and substance abuse have increased the understanding of alcoholism as a disease and have created some significant efforts toward awareness and prevention (Shaffer and Korn, 2002). It appears that similar knowledge is being gained about compulsive gambling behaviors through recent and current research. Volberg (2001) notes that the knowledge and expertise about compulsive gambling lags behind that of substance abuse.

Diagnosis of the Compulsive Gambling Disorder

The American Psychiatric Association recognized compulsive gambling as psychiatric disorder in 1980.

Although gambling activities have been part of the human experience for thousands of years, no scientific research into problem gambling behavior occurred until the 20th Century (Lindner, 1950). It was not until 1980 that compulsive gambling was recognized as a distinct disorder by the American Psychiatric Association. The psychiatric profession identifies compulsive gambling by an individual as the inability to stop gambling despite its negative consequences.

The Diagnostic and Statistical Manual of the Mental Disorders (DSM) published by American Psychiatric Association, is a descriptive and numerically coded catalog of disorders used by a

psychiatrist or psychologist to make a diagnosis that an individual exhibits behaviors and symptoms of a disorder. A process of research and evaluation is required for a condition to become listed as a disorder. Revisions, edits, and changes to classifications undergo scrutiny by the American Psychiatric Association. Diagnostic codes from the DSM are used for prevalence and incidence rates, research, and for third-party billing for treatment services.

Currently, compulsive gambling is classified as an impulse-control disorder.

The DSM-IV, published in 1994, is the current version of the manual and includes compulsive gambling as an "impulse-control disorder not elsewhere classified." Other disorders in this category include:

- kleptomania (stealing objects not needed for personal use or monetary value);
- pyromania (fire setting for pleasure or relief); and
- trichotillomania (pulling one's hair out for pleasure or relief resulting in noticeable hair loss).

Compulsive gambling is a "persistent and recurrent maladaptive gambling behavior that disrupts personal, family, or vocational pursuits."

The DSM-IV differentiates between social gambling and compulsive gambling by defining social gambling as that which "typically occurs with friends or colleagues and lasts for a limited time, with predetermined acceptable losses" (APA, 2000). The DSM-IV notes that the "essential feature" of compulsive gambling is "persistent and recurrent maladaptive gambling behavior that disrupts personal, family, or vocational pursuits" (APA, 1994).

Established in the DSM-IV is a set of criteria that indicate maladaptive gambling behavior. These criteria have helped guide research on problem gambling behavior. The American Psychiatric Association's DSM-IV diagnostic criteria for compulsive gambling are shown in Figure 2.A.

Figure 2.A
DSM-IV Criteria

The DSM-IV lists a set of criteria that indicate maladaptive gambling behavior. Meeting five or more of the criteria is necessary for a diagnosis of compulsive gambling.

A. Persistent and recurrent maladaptive gambling behavior is indicated by five (5) or more of the following.

An individual:

1. is preoccupied with gambling, (e.g., is preoccupied with reliving past gambling experiences, handicapping or planning the next venture, or thinking of ways to get money with which to gamble);
2. needs to gamble with increasing amounts of money in order to achieve desired excitement;
3. has repeated unsuccessful efforts to control, cut back, or stop gambling;
4. is restless or irritable when attempting to cut down or stop gambling;
5. gambles as a way of escaping from problems or of relieving feelings of anxiety, depression, guilt or helplessness
6. after losing money gambling, often returns another day to get even ("chasing" one's losses);
7. lies to family members, therapists, or others to conceal the extent of involvement with gambling;
8. has committed illegal acts, such as forgery, fraud, theft, or embezzlement to finance gambling;
9. has jeopardized or lost a significant relationship, job, educational or career opportunity because of gambling;
10. relies on others to provide money to relieve a desperate financial situation caused by gambling; and

B. The gambling behavior is not better accounted for by a manic episode[1].

Source: DSM-IV (APA, 1994).

For each disorder, the DSM-IV includes discussion of associated features and disorders, the course of the disorder, and familial patterns (the occurrence among generations in the same families).

The following statements from the DSM-IV pertain to compulsive gamblers:

[1] LRC Staff Note: A manic episode is "a distinct period of abnormally and persistently elevated, expansive, or irritable mood, lasting at least 1 week." (APA,1994)

- Distortions in thinking may be present (denial, superstition, overconfidence, sense of power and control);
- They are prone to medical conditions associated with stress (hypertension, peptic ulcers, migraines);
- Increased rates of mood disorders (such as depression), attention deficit disorders, substance abuse or dependence, and antisocial, narcissistic, and borderline personality have been reported;
- Of individuals in treatment for compulsive gambling, 20 percent have attempted suicide;
- Two-thirds of all compulsive gamblers are males—females are further underrepresented in treatment programs;
- It typically begins in early adolescence in males and later in life for most females;
- Some are "hooked" with their first bet or first win, but for most the disorder is insidious with years of social gambling followed by an abrupt onset usually precipitated by greater exposure to gambling or by a stressor;
- There is a general progression in the frequency of gambling, the amount wagered, and the preoccupation with gambling and obtaining money with which to gamble and activity tends to increase during periods of stress or depression; and
- Compulsive gambling is more common with those whose parents were compulsive gamblers than the general population (the familial patterns).

The DSM-IV also includes statements that clinicians have discretion in evaluating behaviors and in making diagnoses. Professional freedom and discretion are also provided by the fact that a diagnosis does not require that all 10 criteria be met. The DSM-IV also added the criteria of lying and escaping behavior and criteria on tolerance and withdrawal, which appear to reflect current research findings on gambling behavior.

One criticism of the DSM-IV criteria is that it does not weight the criteria or account for the severity of each criteria.

Currently, there is criticism over the strict use of requiring "five or more criteria" as the basis for clinical diagnosis (Barron, 1998 and Radden, 1995). It seems possible that social or nonproblem gamblers could meet five of the criteria, but not rise to the level of a compulsive behavior. Conversely, it is possible for the compulsive gambler to not meet at least five of the criteria. Additional concerns include that there is no discussion in the DSM of the weight and severity given to each criteria or the relationship among various criteria.

The Progression and Onset of Problem and Compulsive Gambling

Problem gambling has been described as progressing from relatively mild problems to more severe compulsive gambling.

Problem gambling has been described as a chronic, progressive disorder moving from relatively mild problems to the more severe compulsive gambling. Little is currently known about how the behavior progresses. The research that has been conducted suggests that an individual with certain characteristics is at a greater risk of becoming a compulsive gambler. Even less research has been conducted to determine what types of gambling might or might not lead to the onset of problem and compulsive gambling.

Risk Factors Associated With Compulsive Gambling

In efforts to learn more about how or why people become compulsive gamblers, researchers have attempted to produce a personality profile that distinguishes compulsive gamblers from social gamblers, but so far they have been unsuccessful (Murray, 1993 and Davis and Brissett, 1995). A study by the National Research Council (NRC) in 1999 sought to identify the causes of compulsive gambling and to identify factors unique to this disorder that are not predictors of other excessive or deviant behavior. The following broadly summarizes findings of the NRC study on potential risk factors:

- **Age** – The onset of problem gambling often occurs in the preteen or adolescent years, a time when family and peer influences are important. Preliminary evidence suggests that the earlier people begin gambling, the more likely they are to experience problems, but it is not known if this alone is a risk factor for compulsive gambling.

- **Family History** – As with many other psychiatric conditions, a family history of any mental illness or substance abuse is a risk factor.

- **Gender** – Men are more likely than women to become problem gamblers, but it is not known if gender affects other aspects such as frequency, duration, severity, or type of gambling.

- **Ethnicity** – More research is needed to distinguish the effects of socioeconomic status of minorities and its association to gambling behavior.

- **Biological** – There is some evidence that genetic factors and brain activity influence compulsive gambling behavior and the possibility of inheriting impulsiveness, but these characteristics have not been distinguished from other psychiatric or substance abuse disorders.

- **Comorbidity** – Antisocial personality disorder, substance use disorders and depression seem to be the most prevalent disorders among compulsive gamblers, but more research is needed about the effects one condition has upon the other. For example, it remains unclear whether people who are depressed tend to become problem gamblers, or whether problem gamblers tend to become depressed.

Recent research suggest that there may be stages of development in the progression of compulsive gambling; from moderately risky behavior to full-blown pathological behavior.

In an investigation of the DSM-IV criteria for compulsive gambling, reported at an October 2002 conference in Barcelona, the research team of Gerstein (née Toce), Gerstein, and Volberg reported that gamblers with different numbers of DSM-IV criteria also reported different mixtures of problems, suggesting that there may be stages of development and progression from moderately risky behavior to full-blown pathology. In their study of a national sample, they found that different stages of problem gambling were associated with certain types of behaviors. These stages progress from chasing losses at the early stage to illegal acts for the severe compulsive gambler. They report the following:

- "At-risk" gamblers (reporting one or two DSM-IV criteria) most commonly reported chasing behavior (this occurs when gamblers attempt to recover their losses by continuing to gamble, usually incurring additional debt);

- Problem gamblers (three to four criteria) most commonly reported preoccupation with gambling, gambling to escape negative feelings, and lying about their gambling (an active "fantasy" perspective);

- Compulsive gamblers (five or more criteria) reported withdrawal symptoms, losing control over their gambling, and tolerance for larger bets, and also were most likely to report risking relationships and needing to be bailed out; and

- Compulsive gamblers at or near the maximum number of criteria (8 to 10) were much more likely to report criminal behavior due to their gambling.

Their findings provide some insight into how problem and compulsive gambling might progress, but this research, as with much of the gambling research, is in its infancy.

Onset of Problem and Compulsive Gambling

Clinicians and members of Gamblers Anonymous have reported anecdotal evidence that gambling by electronic gaming devices such as video terminals and slot machines may lead more rapidly to the onset of problem gambling. However, there has only been one scientific research project completed on this subject.

Breen and Zimmerman (2002) found that problem and compulsive gambling may develop faster with machine gambling.

Breen and Zimmerman (2002) studied adult compulsive gamblers in treatment and looked at the time it took them to transition from being a social gambler to becoming a compulsive gambler. They found that the onset of problem and compulsive gambling occurred three to four times faster with machine gambling than with other types of gambling. In their small sample of compulsive gamblers, 66 percent identified machine gambling as the source of their problems. These findings do support the anecdotal evidence, but since this is the first study of this type, it is too early to draw definite conclusions. Chapter 4 presents similar findings about the types of gambling that caused problems for Kentucky attendees of Gamblers Anonymous.

Youth Gambling

While compulsive gambling is generally considered an adult problem, there is evidence that problem and compulsive gambling occurs in the adolescent population (Derevensky, Gupta and Della Cioppa, 1996).

Studies have found that gambling is common among adolescents and that 4 to 8 percent of adolescents presently exhibit problem gambling behavior.

This body of research finds that gambling activities are attractive to the adolescent population and that a higher percentage of youths gamble than adults. Research shows that children begin gambling before high school and that gambling is more common with males than females. Gupta and Derevensky (1998) found that more than 80 percent of adolescents between the ages of 12 and 17 reported having wagered money during the past 12 months, and 35 percent admitting gambling at least once per week. It is estimated that between 4 and 8 percent of adolescents presently exhibit a gambling problem, and an additional 10-14 percent of adolescents are at risk for developing or returning to a serious gambling problem (Shaffer and Hall, 1996).

Problem gambling among adolescents can result in delinquency and crime, disruption of relationships, and impaired school and work performance (Ladouceur, Dubé and Bujold, 1994).

Problem gambling among adolescents is associated with an increase in delinquency and crime, the disruption of relationships, and impaired academic performance and work activities (Ladouceur, Dubé and Bujold, 1994). Most adolescents state the primary reason for gambling is for the excitement and enjoyment. Adolescents with serious gambling problems report that their problems disappear and nothing else matters when they are gambling. Gambling is seen as a coping mechanism in dealing with day-to-day stresses (Gupta and Derevensky, 1998; 2000).

Compulsive Gambling As an Addiction

Some researchers have concluded that the brain has the same reaction to the "action" of gambling as its has for a cocaine-dependent individual anticipating ingesting cocaine.

There is controversy over what constitutes an addiction or addictive behavior. One current thought is that addiction is not the product of a substance or external entity, but rather it results from emotional experiences and the relationship between a person and the object of the addiction (Shaffer, 2003). Recent neurobiological research (Breiter et al, 2001) has demonstrated, that as far as brain functioning is concerned, a reward is a reward, whether it comes from a psychoactive drug or an exhilarating experience. Breiter et al conclude the brain has the same reaction to the "action" of gambling as its has for a cocaine-dependent individual anticipating ingesting cocaine.

Wray and Dickerson (1981) found that 30-50 percent of the compulsive gamblers in their sample had experienced physical withdrawal symptoms when they stopped gambling. This and other results suggest that there is a similar relationship between compulsive gambling and other addictive behaviors.

Comorbidity and Co-Occurring Disorders

Comorbidity is the existence of a mental or physical condition occurring at the same time as another condition.

Comorbidity is the existence of a mental or physical condition occurring at the same time as another condition. With comorbidity there is a clear, causal relationship between the two conditions. Co-occurrence is the existence of a mental or physical condition that occurs at the same time as another condition, but there is no clear causal relationship between the two. As a matter of convenience, comorbidity will be used to label incidences of either comorbidity or co-occurrence. This labeling convention is consistent with the approach taken in the literature on compulsive gambling.

There is substantial evidence showing that many compulsive gamblers also suffer from other psychiatric disorders.

The U.S. Surgeon General reports that approximately 3 percent of the adult population suffer from a combination of addictive and psychiatric disorders in any given year (Mental Health: A Report of the Surgeon General, 1999). The prevalence of psychiatric disorders among compulsive gamblers entering treatment has been well documented in research over the past 20 years. Current

research shows that the compulsive gambler is at risk for a variety of psychiatric disorders.

Some disorders common among compulsive gamblers include anxiety, escapism, and depression.

Many problem gamblers exhibit personality traits such as hyperactivity, high tolerance of stress, escapism, depression, attention deficit disorder, poor impulse control, anxiety disorders, and alcohol or substance abuse. Research reviewed by LRC staff on the topic of comorbidity indicates that a high percentage of compulsive gamblers (identified by DSM-IV criteria or other diagnostic tests) had another psychiatric condition. [2] Studies have reported that between 25 and 70 percent of compulsive gamblers who present themselves for treatment sought help from mental health and addiction treatment professionals for other psychiatric disorders (Custer and Custer, 1978; Lesieur and Bloom, 1991).

The National Research Council (1999) reports that patients admitted into drug and alcohol treatment programs are three to six times more likely to be problem gamblers than individuals in the general population. This finding coincides with the National Opinion Research Center (1999) study by Gerstein, et al, which reports that problem gamblers are significantly more likely than the general population to have been drug or alcohol dependent at some point in their lives.

Nearly half of the Gamblers Anonymous members surveyed had sought professional treatment for some disorder other than gambling.

The LRC staff survey of Gamblers Anonymous members indicated 47 percent had sought professional treatment for some disorder other than gambling. What is not clear from the research is whether other disorders are the cause of, or the consequence of compulsive gambling, or merely co-occurring conditions.

A recent article by Shaffer and Korn (2002), reviewed and synthesized information about compulsive gambling, other disorders, and relevant research. The article highlighted some of the controversies in the compulsive gambling literature and included the following findings related to comorbidity:

- Although studies vary, it is estimated that between 25 percent and 63 percent of compulsive gamblers meet criteria for substance abuse disorder in their lifetime, and 9 to 16 percent of patients with a substance abuse disorder are found to be probable compulsive gamblers;
- The link between gambling and suicide comes from anecdotes about suicides after gambling loses, higher rates of depression

[2] An extensive bibliography on comorbidity is available from the National Association of State and Provincial Lotteries <www.naspl.org>.

among compulsive gamblers, and clinical case studies, but there is no substantial research on the subject; and
- There is a strong correlation between personality disorders, impulse disorders, and compulsive gambling.

The Significance of Comorbidity

Little is known about how compulsive gambling and other disorders interact, but persons with other disorders or substance abuse disorders have a greater risk of becoming compulsive gamblers.

Prior research and studies have aptly demonstrated a strong likelihood that a compulsive gambler could have a co-occurring psychiatric disorder. Likewise, persons with other disorders have a greater risk of becoming compulsive gamblers. A presentation given at the 2003 National Conference on Problem Gambling focused on the causes of compulsive gambling. The presenters, Thomas Moore and Thomas Jadlos, using data from their study (Moore and Jadlos, 2002) of 75 adult compulsive gamblers found high percentages of pre-occurring disorders. They concluded that compulsive gambling may be a symptom of an underlying condition and that the trauma of abuse, neglect, or abandonment may be important to understanding compulsive gambling.

Current research does not allow predictions about increasing access to gambling and the impact on the development of psychiatric disorders.

Because of the comorbidity associated with compulsive gambling, it is reasonable to question whether compulsive gamblers would manifest their behaviors in other ways if they were not gambling, or whether persons with associated psychiatric disorders would become compulsive gamblers if they had the opportunity or access to gambling venues. Unfortunately, research has not advanced sufficiently to provide definitive answers to these questions. Currently, there is insufficient research into the specifics of human behavior, individual thought processes, and individual life experiences to make predictions with any reliability.

Because of comorbidity among compulsive gamblers, it is difficult to determine what outcomes are directly associated with compulsive gambling.

The likelihood of comorbidity in the compulsive gambling population creates difficulties in assessing the net effects associated with compulsive gambling. Only when researchers can isolate the effects of compulsive gambling on, for example, crime, from the effects of co-occurring conditions, like drug abuse, can researchers fully determine the net effects from compulsive gambling.

Chapter 3

Prevalence of Problem and Compulsive Gambling Kentucky

A statewide survey revealed that 55.1 percent of adult Kentuckians in the past year engaged in some form of gambling.

A statewide telephone survey commissioned for this study revealed that 55.1 percent of adult Kentuckians engaged in some form of gambling in the past year. These gamblers are typically between the age of 25 and 54, are slightly more likely to be males, to be working for pay, and to have at least some college education. Of those who gambled, it is estimated that 12 percent could have had some problem with their gambling. Nearly 1 percent of past year gamblers, and 0.5 percent of the total adult population, exhibited compulsive gambling behavior in the past year.

Measuring Problem and Compulsive Gambling

Researchers have relied on surveys, based on the American Psychiatric Association's diagnostic criteria, to estimate the number of problem and compulsive gamblers.

With the designation of compulsive gambling as a recognized disorder by the American Psychiatric Association in 1980, and with a growing gambling industry, researchers have tried to provide assistance to policymakers in assessing the level of problem gambling in their communities. Researchers have typically relied on surveys to estimate the number of problem and compulsive gamblers in a community. These surveys ask questions similar to those a mental health professional would ask in order to diagnose problem or compulsive gambling.

The original survey instruments were based on diagnostic criteria established in an earlier version of the American Psychiatric Association's Diagnostic and Statistical Manual of the Mental Disorders (DSM). Most notably, the South Oaks Gambling Screen (Leseiur and Blume, 1987) was developed using this earlier version of the DSM. Because this screen had undergone reliability and validity testing it was a popular tool for researchers.

New survey instruments were developed when the American Psychiatric Association revised the criteria in the DSM-IV (1994). The most notable of these surveys was the National Opinion Research Center's DSM-IV screen for problem gambling. This gambling screen was used to report on the nation's prevalence of problem and compulsive gamblers in the National Gambling Impact Study Commission's Final Report (1999).

These survey instruments are not a perfect substitute for clinical diagnosis.

Although these surveys use diagnostic questions derived from the DSM criteria, surveys are not a perfect substitute for clinical diagnosis. The DSM criteria is intended to establish a diagnosis for pathological (compulsive) gambling in a clinical setting. A trained professional in a clinical setting can interact with the individual. This interaction may result in a different diagnosis than one made as a result of only answers to survey questions. When questions derived from these criteria are used in general population surveys, such as telephone surveys, researchers qualify their results by reporting the compulsive gambler as a "probable compulsive gambler."

Researchers qualify survey results by reporting the compulsive gambler as a "probable compulsive gambler."

An analysis by Shaffer, Hall, and Vander Bilt (1997) of 120 North American gambling prevalence studies established a mean current (or past year) prevalence rate of probable compulsive gamblers of 1.14 percent (± 0.24 percent) of the U.S. adult population. One approach by some researchers is to use these national estimates and apply them to the populations of states being analyzed. This approach may over or under estimate the number of probable compulsive gamblers in states that have different average gambling opportunities and demographics. Kentucky has a long history with horse racing, but a relatively short history with the lottery, and even shorter history with commercial casino and charitable gambling; therefore, it is inappropriate to assume that the percentage of compulsive gamblers in Kentucky is the same as the average nationally. It is more appropriate to establish a unique accounting of probable compulsive gamblers in Kentucky. This approach may also prove beneficial for future assessments of the affect on compulsive gambling from changes to Kentucky's gambling market.

DSM-IV Criteria

A survey instrument similar to those utilized in other studies was developed for Kentucky.

In order to estimate the amount of current year problem and compulsive gamblers in Kentucky, a survey instrument similar to those utilized in other studies was developed. The survey questions were based on the 10 DSM-IV criteria. The selection of questions relied on work by Stinchfield, Govoni, and Frisch (2001) and Stinchfield, et al, (2001) that tested the reliability, validity, and classification accuracy of the DSM-IV criteria when put into survey question form.

The 10 criteria from the DSM-IV describe certain types of behavior, which facilitates placing the criteria into question form. For example, a respondent can simply be asked, "In the past year, have you ever tried, but were unsuccessful in cutting back,

controlling, or stopping gambling?" The responses to these questions are a simple "yes" or "no." Five or more "yes" answers indicates a person is a probable compulsive gambler.

Sample

A total of 1,253 persons across the state 18 years old and older were surveyed by telephone.

A total of 1,253 persons across the state 18 years old and older were surveyed by telephone. The survey was performed June 2003 by the University of Louisville Urban Studies Institute. The telephone numbers were obtained from a nationally recognized telephone number bank and were selected using random digit dialing. Random digit dialing allows for the possibility of contacting unlisted phone numbers and new numbers. A person within the household was selected randomly to take the survey. The response rate was 51.6 percent. The response rate was calculated by taking the total completed interviews divided by the total completed interviews plus the number of partial interviews, refusals, break-offs, and other persons who did not complete the interview.

It should be noted that because the sample size required to provide a characterization of problem and compulsive gamblers would need to be quite large, demographic and gambling activity of these subgroups cannot be reported with this survey data. Chapter 4 presents findings about some of the characteristics of problem gamblers in the state from a survey of people who attended Gamblers Anonymous meetings.

Survey Questionnaire Results

Staff prepared a 20-question survey (see Appendix B). The survey was comprised of three main sections. The first section contained questions about respondents' demographic characteristics. The second section asked whether they gamble, and if so, how often they gamble and what type of gambling. The final section included the 10 questions derived from the DSM-IV criteria presented in Chapter 2. All of the questions in sections two and three were based on respondents' past year experiences with gambling.

The use of the telephone survey and the DSM-IV criteria tend to produce conservative results; therefore, these estimates should be considered conservative, lower bound estimates.

The use of a telephone survey and the DSM-IV criteria tend to produce conservative results. Thus, the prevalence of problem and compulsive gambling in the state based on these estimates should be considered conservative, lower-bound estimates. A detailed explanation of the limitations of the survey and the weighting used to produce the results are presented at the end of this section.

Demographics

The level of past year gambling participation has not changed since the 1999 survey conducted by PricewaterhouseCoopers on gambling in Kentucky.

It is estimated that 55.1 percent of Kentucky's adult population gambled in the past year. This level of past year gambling participation is the same as that found in the PricewaterhouseCoopers 1999 survey on gambling in Kentucky. Also in 1999, the National Opinion Research Center estimated the nation's gambling participation rate to be 63 percent.

Males are more likely to gamble than females and most gamblers are between the age of 25 and 54.

Table 3.1 breaks out different demographic attributes of non-gamblers, past year gamblers, and a subset of past year gamblers—weekly gamblers. There are a few demographic differences between gamblers and nongamblers. Males are more likely to gamble than females. Most gamblers are between the age of 25 and 54. Gamblers are also more likely to be employed and have had some college. Gamblers also have higher annual household income than nongamblers. Weekly gamblers are even more likely to be males between the age of 25 and 54. The weekly gambler is also somewhat more likely to have had at least some college compared to nongamblers.

Table 3.1
Demographic Characteristics of Kentucky Gamblers

	Demographic Characteristic	% Non-Gamblers	% Past Year Gamblers	% Weekly Gamblers	% Kentucky's Adult Population (2000 Census)
Gender	Male	43.8%	51.4%	61.9%	48.0%
	Female	56.2%	48.6%	38.1%	52.0%
Age	18 - 24	11.7%	14.4%	7.9%	13.2%
	25 - 54	49.7%	64.9%	64.2%	58.0%
	over 54	38.5%	20.8%	27.9%	28.8%
Race	White	91.1%	89.2%	89.5%	90.9%
	Black	6.7%	9.4%	10.5%	6.8%
	Other	2.2%	1.4%	0.0%	2.3%
Marital Status	Married	54.5%	59.4%	62.6%	60.4%
	Widowed	15.0%	4.6%	7.7%	7.6%
	Divorced/Separated	13.8%	14.4%	12.8%	13.5%
	Never Married	16.4%	21.5%	17.0%	18.5%
Household Income*	Less than $25,000	35.4%	27.3%	33.6%	37.7%
	$25,000 to $75,000	34.0%	51.1%	49.3%	47.4%
	Over $75,000	4.0%	6.6%	7.1%	14.9%
Education	High School or less	57.3%	43.9%	46.4%	59.2%
	Some College	21.9%	28.1%	31.4%	20.3%
	College	20.8%	28.0%	22.2%	20.5%
Employed	Yes	48.8%	69.6%	71.3%	58.5%
	No	51.2%	30.2%	28.7%	41.5%
Survey Sample Size		590	663	129	

Source: 2003 LRC Gambling Survey
*Does not round to 100 because 21 percent of sample respondents did not report their household income

Fifty-eight percent of those 18 to 24 gambled in the past year compared with only 37.8 percent of adults older than 54.

A total of 61.3 percent of blacks gambled in the past year. This compares with 52.4 percent for whites and 42.6 percent for other race and ethnic groups.

Table 3.2 breaks down the percentage of persons who gambled by each demographic component. For example, of all persons age 18 to 24, 58 percent gambled in the past year. The survey data revealed that males are more likely to gamble than females. In fact, 56.9 percent of all males had gambled in the past year, while 49.3 percent of females had gambled. Additionally, younger adults are more likely to gamble than older adults. Fifty-eight percent of those 18 to 24 gambled in the past year compared with only 37.8 percent of adults older than 54. This corresponds with the finding that only 25.6 percent of those who are widowed had gambled in the past year.[1] Over 61 percent of black respondents had gambled within the past year. This compares with 52.4 percent for whites and 42.6 percent for other race and ethnic groups. Most gamblers are employed[2] with only 39.9 percent of all nonemployed respondents having gambled.

Table 3.2
Past Year Gambling Participation
by Various Demographic Groups

	Demographic Group	Percent Gambled in Past Year
Gender	Male	56.9%
	Female	49.3%
Age	18 - 24	58.0%
	25 - 54	59.5%
	over 54	37.8%
Race	White	52.4%
	Black	61.3%
	Other	42.6%
Marital Status	Married	55.1%
	Widowed	25.6%
	Divorced/Separated	53.8%
	Never Married	59.6%
Household Income*	Less than $25,000	46.4%
	$25,000 to $75,000	62.9%
	Over $75,000	65.1%
Education	High School or less	46.3%
	Some College	59.0%
	College	60.2%
Employed	Yes	61.6%
	No	39.9%
Survey Sample Size		1253

Source: 2003 LRC Gambling Survey

*Does not round to 100 because 21 percent of sample respondents did not report their household income

[1] 90 percent of widowed persons were 55 or older (CPS,1999).

[2] By employed survey respondents were asked if they worked for pay in the last year.

Types of Gambling

The survey asked respondents to indicate whether they had participated in various gambling activities in the past year. Tables 3.3 and 3.4 summarize the results from those responses. Table 3.3 presents the participation rates for different types of gambling activities.

The greatest percentage of gamblers played the lottery. Charitable gambling was the second most popular form of gambling.

As noted earlier, it is estimated that in the past year 55.1 percent of adult Kentuckians participated in some type of gambling. The greatest percentage of those gamblers played the lottery. Charitable gaming was the second most popular form of gambling. The 16 percent statewide participation rate in horse race betting is similar to the statewide participation rate in riverboat gambling (35 percent of those who gambled at the horse racing tracks also gambled at riverboat casinos and visa versa). Statewide, 15.1 percent of the adult population, or an estimated 460,000 adult Kentucky residents, went to the riverboats at least once in the past year.

An estimated 460,000 adults went to the riverboats at least once in the past year.

Table 3.3
Kentucky Gambling Participation Rate
by Type of Gambling Activity

Gambling Activity	Percent of Adult Population Participating
Any Type	55.1%
Lottery	41.7%
Charitable	22.0%
Horse Racing	16.0%
Riverboat Casinos	15.1%
Sports, Cards, Dice, etc.	12.5%
Vegas, Atlantic City, etc.	6.8%
Other	6.4%
Off Track Betting	5.0%
Internet	0.9%
Sample Size	1253

Source: 2003 LRC Gambling Survey

The percentage of the population who gambled at a riverboat casino was more than twice as high for counties within 25 miles of a casino than for other counties.

In order to understand whether proximity to riverboat casinos affects Kentuckians' choice to go to riverboat casinos, a comparison of participation rates with counties within 25 miles of a riverboat was made with the rates in counties further away. It is estimated that 23 percent of adults in counties within 25 miles of a riverboat casino gambled there at least once. This compares with only 9.5 percent of adults in counties further than 25 miles from a riverboat casino.

Sixty-seven percent of the population of Central Kentucky gambled in the past year, compared to 43 percent in the east and 46 percent in the west.

There were also regional differences in gambling. Sixty-seven percent of those in Central Kentucky had gambled in the past year, while 43 percent in Eastern Kentucky and 46 percent in Western Kentucky had gambled. This higher participation in gambling from counties in the central part of the state was consistent across the different types of gambling.

Several reasons might explain higher gambling participation rates in the central part of the state including higher incomes, more employment, and greater access to gambling.

There are three primary reasons the central part of the state would be expected to have a higher gambling participation rate than the other two regions. First, the central part of the state has higher household incomes on average. The survey data suggest that income is an important determinant in choosing to gamble. The second possible reason are regional differences in employment. The survey also found higher percentage of gamblers among those who had been employed in the past year, which is a higher percentage in Central Kentucky. Additionally, the central region has greater access to gambling establishments such as racetracks and riverboat casinos. In fact, 28 percent of the counties in the central part of the state are within 25 miles of a riverboat casino, compared with no counties in the east and only 14 percent of the counties in the western part of the state.

Nearly 34 percent of all gamblers gamble regularly and 19 percent gamble weekly. The lottery was played most frequently.

In Table 3.4, "regular gamblers" refers to those persons who participate in one or more of the gambling activities on a monthly or weekly basis. The "weekly gamblers" are a subset of the regular gamblers, but they have indicated participating in at least one of the gambling activities on a weekly basis. It is estimated that nearly 34 percent of all gamblers gamble regularly and 19 percent gamble weekly.

Just over 75 percent of past year gamblers played the lottery. No other form of gambling is as widely played as the lottery. Charitable games, such as bingo, come in a distant second with nearly 40 percent of past year gamblers playing charitable games.

Internet gambling does not appear to be a widely used form of gambling.

Almost 23 percent of those who gamble have participated in sports betting, private cards, or dice games. Internet gambling does not

appear to be a widely used type of gambling, as only an estimated 0.9 percent adult Kentuckians participated in Internet gambling in the past year.

There are an estimated 235,000 adults who play the lottery on a weekly basis.

As expected, the lottery and charitable gambling have the highest regular and weekly participation rates. There are an estimated 235,000 adults who play the lottery on a weekly basis. Sports betting, cards, dice, and riverboat casinos have the next highest participation rates of regular gamblers with 11.1 percent and 9.1 percent, respectively. Since racetracks across the state are not open year round, fewer gamblers would be expected to regularly gamble on live horse racing. The survey found that only 6.7 percent regularly bet on live horse racing.

Table 3.4
Gambling Participation Rates
by Type of Gambling Activity
(Gamblers Only)

Gambling Activities	Percent of All Gamblers	Percent of Regular Gamblers	Percent of Weekly Gamblers
Lottery	75.8%	73.0%	72.6%
Charitable	39.9%	22.0%	16.2%
Horse Racing	28.9%	6.7%	6.1%
Riverboat Casinos	27.5%	9.1%	3.6%
Sports, Cards, Dice, etc.	22.8%	11.1%	10.0%
Vegas, Atlantic City, etc.	12.3%	0.8%	0.0%
Other	11.7%	2.5%	1.9%
Off Track Betting	9.0%	5.5%	3.2%
Internet	1.6%	0.9%	0.0%
Survey Sample Size	663	230	129

Source: 2003 LRC Gambling Survey

Prevalence of Problem and Compulsive Gambling in Kentucky

There are three classifications of problem gambling: the at-risk gambler, the problem gambler, and the compulsive gambler.

There are three classifications of problem gambling based on the answers to the DSM-IV questions: the at-risk gambler, the problem gambler, and the compulsive gambler. The DSM-IV criteria, when put into question form, requires a "yes" or "no" response. A person answering "yes" to five or more of the questions would be designated as a probable compulsive gambler. Persons responding affirmatively on three or four of the questions would be categorized as a problem gambler. The problem gambler is one who has experienced some problems with gambling, but these problems currently do not rise to the level of compulsive gambling. Those who answer affirmatively on one or two of the questions would be considered at-risk gamblers. An at-risk gambler is one

who may have had some problems related to gambling and could potentially progress into becoming a problem or pathological gambler (Volberg, 1996).

Problem Gambling Prevalence Rates

It is estimated that the state's overall prevalence rate of current compulsive gamblers is 0.5 percent of all adult Kentuckians.

It is estimated that the state's overall prevalence rate of current compulsive gamblers is 0.5 percent of all adult Kentuckians. This is comparable with the national rate of 0.6 percent of past year compulsive gamblers reported by National Opinion Research Center in its 1999 survey. Table 3.5 shows estimates of the percentage and number of respondents who are social gamblers, at-risk gamblers, problem gamblers, and probable compulsive gamblers, and the respective estimated population counts for these categories.

Table 3.5
Share of Kentucky Population
Exhibiting Characteristics of Problem Gambling

Type of Gambler (Number of Affirmative Responses to DSM-IV questions*)	Percent of Adult Population Past Year Rates	Percent of Past Year Gamblers	Number of Past Year Gamblers
Social Gambler (0)	93.3%	87.7%	1,472,000
At Risk Gambler (1-2)	5.6%	10.2%	171,000
Problem Gambler (3-4)	0.7%	1.2%	20,000
Probable Compulsive Gambler (5 or more)	0.5%	0.9%	15,000
Sample Size	1253	663	

Source: 2003 LRC Gambling Survey
*DSM-IV questions were asked only to those who indicated having gambled in the past year.

An estimated 12.3 percent of adult Kentucky gamblers may have had some problem with their gambling during the past year.

An estimated 12.3 percent of adult Kentucky gamblers may have had some problem with their gambling during the past year. This estimate is based on an affirmative response to at least one of the DSM-IV questions. Table 3.6 shows the percent of "yes" responses to each of the 10 questions. The question with the highest response rate (5.9 percent) asked about returning to gamble in order to "get even." The question with the second highest response rate (4.1 percent) asked about problems in cutting back, controlling, or stopping gambling. Committing illegal acts, such as writing bad checks or embezzlement, had the lowest response rate (0.4 percent).

Table 3.6
DSM-IV Criteria:
Gambling Survey Response Rates

DSM-IV Criteria	% Affirmative Response
1. After losing money gambling, do you often return in order to get even.	5.9%
2. Need to gamble increasing amounts of money to achieve the desired excitement.	2.0%
3. Gamble to escape problems or relieve anxiety, depression, guilt or feelings of helplessness.	3.6%
4. Tried, but unsuccessful in cutting back, controlling or stopping gambling.	4.1%
5. Felt restless or irritable whenever you cut down or stopped gambling.	1.3%
6. When not gambling, preoccupied reliving past gambling experiences or thinking of ways to get money with which to gamble.	1.7%
7. Lied to those you care about to conceal the extent of gambling involvement.	2.2%
8. Written bad checks, committed forgery, fraud, theft, or embezzlement to finance gambling.	0.4%
9. Jeopardized or lost a significant relationship, job, educational or career opportunity because of gambling.	0.7%
10. Rely on others to provide money to relieve a desperate financial situation caused by gambling.	1.2%

Source: 2003 LRC Gambling Survey

An estimated 15,000 (0.9 percent) of past year gamblers in the state are probable compulsive gamblers.

In Kentucky, according to the 2000 decennial census, there are more than 3.047 million people 18 years old and older. Of those adults, it is estimated that 1.68 million (55.1 percent) wagered money at least once in the past year. It is estimated that 15,000 (0.9 percent) of past year gamblers in the state are probable compulsive gamblers. The margin of error is ± 0.7 percent. This means there is 95 percent probability that the true number of past year compulsive gamblers falls between 3,500 and 27,000. Given the limitations inherent in using telephone surveys to measure this population, these estimates are likely to be conservative.

An estimated 24,000 past year gamblers sought some form of treatment for a gambling problem.

One question on the survey asked those who gambled in the past year if they had sought help for their gambling problems. An estimated 1.4 percent responded they had sought some type of treatment for their gambling. Thus, in the past year an estimated 24,000 people who had gambled sought some form of treatment for a gambling problem.

As noted above, these numbers represent a conservative estimate of problem gamblers and they only measure those who have experienced these problems in the past year. This means compulsive gamblers who have not gambled in the past year or who have not engaged in behaviors relevant to the DSM-IV criteria in the past year would not be identified as problem or compulsive gamblers in this survey. Problem gambling is a chronic, progressive disorder and the effects can manifest and persist over a lifetime. In other words, unlike an acute injury, such as a broken bone, a compulsive gambler is vulnerable to recurring episodes of compulsive gambling. By measuring a past year occurrence of problem and compulsive gambling behaviors, eliminated is a portion of the population who may have experienced varying degrees of problem gambling throughout their lives.

These estimates reflect only current adult gamblers who have experienced multiple problems with their gambling in the past year.

Chapter 2 indicated that problem gambling has also affected the youth population. In fact, studies of youth gamblers have found that the prevalence rate of problem and compulsive gambling is two to three times that of the adult population. Additionally, compulsive gamblers who have not gambled in the past year will not be included in this estimate. Therefore, the past year prevalence of problem and compulsive gambling, estimated at 1.2 percent, reflects only current adult gamblers who experienced multiple problems with their gambling within the past year.

Current research provides little understanding about the development of compulsive gambling and the possible link between types of gambling or access to gambling.

Finally, in addition to the types of gambling available, the access to commercial casino-style gambling may also influence the level of compulsive gambling in a community. The National Opinion Research Center study on gambling analyzed nine communities that had legalized casino-style gambling. They found seven of the nine communities had experienced an increase in compulsive gambling. The study suggested that despite the level of overall gambling remaining the same, there was an increase in compulsive gambling. The study related this increase to casino-style gambling. The reason stated is that casino gambling can be a more habitual form of gambling, which is done with a greater frequency and intensity. However, a study by Morgan, et al, (1996) did not find strong support for these conclusions. Also, as noted in the introduction to this report, there are other confounding factors and

measurement problems that make it difficult to assess the impact casinos have on the prevalence of compulsive gambling. As with much of the research into compulsive gambling, the links between casino gambling and compulsive gambling is still not clearly understood.

Limitations

While the survey results provide useful insights into compulsive gambling in Kentucky, there are some limitations that deserve mention. The primary limitation of telephone surveys is that all possible candidates for the survey (in this case Kentuckians 18 years old and older) do not have an equal probability of being included in the sample. Because only persons with wired telephone service are included in the survey sample, persons without phones or who only use cellular phones are not included.

Reaching problem and compulsive gamblers through phone surveys may lead to underestimating the problem gambling population.

Also, attempting to reach problem and compulsive gamblers through phone surveys may lead to underestimating the problem gambling population for several reasons. First, problem gamblers are more likely to have experienced financial problems and may not have telephone service as a result. Second, because of these financial problems they may carefully screen their calls to avoid creditors. Third, people with gambling problems may be uncomfortable divulging the extent of their problems in an telephone survey setting. Finally, the phone survey will not reach persons who have been institutionalized (Thompson, Gazel, and Rickman, 1997). As noted in Chapter 2, often persons who are receiving institutional treatment for drug or alcohol addiction may also have a gambling disorder.

The use of questions based on the DSM-IV, provides a conservative estimate of the prevalence rate of compulsive gambling (Gotestam and Johansson, 2003).

Another limitation is the use of questions based on the DSM-IV, which may underestimate the prevalence rate (Gotestam and Johansson, 2003). The DSM-IV is expected to give a conservative estimate of problem and compulsive gambling (Derevensky and Gupta, 2000). Preliminary work by Stinchfield, et al (2001) suggests using a score of four or more affirmative responses, instead of five, to reduce the number of false-negatives (a person not identified as a compulsive gambler, but who is, in fact, a compulsive gambler) in past year estimations of compulsive gambling. To be consistent with other surveys, a cutoff of five responses indicating probable compulsive gambling was used.

The limitations of the survey outlined above indicate that there is the potential for underreporting the current number of compulsive and problem gamblers in the state. Therefore, the reader is

cautioned that the results from the telephone survey should be considered lower-bound estimates of problem gamblers.

Weighting

To determine if the sample was representative of the general adult population in Kentucky, the demographics of the survey respondents were compared with data from the 2000 Census. After the comparison it was determined weighting based on gender and age was necessary since males and young adults had been slightly underrepresented in the sample. All results were reported using the weighted sample. Appendix C compares the weighted and unweighted sample demographics for gender, age, and race.

CHAPTER 4

Describing the Social Costs of Compulsive Gamblers

In this chapter the costs of problem and compulsive gambling, both public and private, are discussed and information about these costs is presented. A survey of Gamblers Anonymous (GA) respondents was conducted for this study. The survey of GA respondents is used to help characterize many of the costs associated with serious problem and compulsive gambling in Kentucky. The final part of the chapter reviews research into gambling's effect on crime and bankruptcy. Analysis of the relationship between Kentucky's county bankruptcy rates and access (measured in distance) to casino and pari-mutuel gambling opportunities is presented.

Negative Consequences From Problem and Compulsive Gambling

The negative consequences from problem and compulsive gambling can be borne by both the individual gambler and the general public.

As legal gambling opportunities increase there has been greater attention to the potential negative consequences, both personal such as divorce and bankruptcy, and public such as traffic congestion and crime. Generally, these negative consequences have been lumped together and referred to as the social costs of gambling.

Past research has identified some of the costs associated with gambling as:

- a loss in employment and productivity;
- an increased use of government assistance programs;
- unpaid debt borne by creditors;
- theft, including embezzlement and fraud;
- an increased use of legal services and incarceration;
- an increased need for police and security from potential crime and traffic congestion near gambling establishments;
- treatment needs of compulsive gamblers;
- additional infrastructure needs in areas near gambling establishments; and
- additional government oversight of legal gambling activities.

Research on gambling has not been very successful in measuring the the costs associated with legalized gambling.

Research on gambling has been more successful in measuring the economic benefits than in measuring the costs associated with legalized gambling. While some studies (for example Chadbourne et al, 1997 and Lesieur, 1998) have been able to identify many of the costs associated with legalized gambling and, more specifically problem and compulsive gambling, accurate estimation of the costs has not been achieved. There are several reasons why attempts to measure these costs have been unsuccessful.

Some of the costs are subjective and cannot be assigned a monetary value.

One reason for the lack of success is that a monetary value cannot be assigned to some social costs. Some of the costs associated with divorce or suicide, for example, are subjective. Some costs might remain hidden or be difficult to measure. While the number of divorces can be measured, costs associated with martial problems that do not result in divorce would be more difficult to measure.

It can be difficult to determine whether a particular consequence represents a cost to the private individual or to the general public.

It can also be difficult to determine whether a particular consequence represents a cost to a private individual or to the general public. Often costs, or consequences, are only observed for a group of people such as a county's residents. In these situations, private costs and social costs are co-mingled. For example, personal bankruptcy will include private consequences such as a poor credit rating and unpaid debt between loaner and borrower, and social consequences such as the higher interest rates paid by everyone resulting from the higher risk of loan defaults. A study by the state of Connecticut (1997) reported that a major problem with studies of the social costs of gambling "is the inability to distinguish with adequate precision between personal costs incurred by [compulsive] gamblers and their families as individuals, on one hand, and the actual additional costs that society in general must pay because of the occurrence of [compulsive] gambling."

Some studies do not make a distinction between personal consequences and public consequences (such as Lesieur, 1992; and Thompson, Gazel, and Rickman, 1996). The assumptions about what costs to include and the inability to separate the social costs from private costs affects the magnitude of any estimate.

Another difficulty is trying to determine whether the costs are directly and solely related to gambling.

Additionally, it can be difficult to determine whether identified costs are directly and solely related to gambling. For example, while crime and suicide data is available, the reporting systems do not collect data on the cause of these incidents. This makes it difficult to link the data to gambling and more specifically to problem gambling. Because problem and compulsive gamblers can

also have other disorders, it may be inappropriate to fully attribute their problems and the resulting social costs solely to their gambling. The National Gambling Impact Study Commission Report stated that "many of the consequences commonly attributed to problem gambling such as divorce, child abuse, depression and so forth may be the result of many factors" making it difficult to isolate the role gambling played in these events.

Even when there is a clear definition of social and private costs, there are significant impediments to measuring the social costs of legalized gambling. To summarize, these impediments are that:

- costs are difficult to conceptualize and categorize;
- some costs are hidden or cannot be accurately measured;
- costs can be difficult to attribute solely to gambling; and
- it may not be possible to isolate the additional costs from legalized gambling from the other forms of gambling.

This study only reports on the costs commonly associated with the problem and compulsive gambler and makes no attempt to quantify the total social costs of gambling.

Research into the social costs of problem gambling has been unable to successfully circumvent these difficulties. Given the difficulty of measuring social costs, this study will only report on the costs commonly associated with the problem and compulsive gambler. No attempt will be made to quantify the total social costs related to problem and compulsive gambling in the state.

Costs Associated With Problem and Compulsive Gamblers

In June 2003, a survey questionnaire was distributed to Gamblers Anonymous respondents in five areas across the state.

In June 2003, a survey questionnaire was distributed to Gamblers Anonymous (GA) respondents in five areas across the state: Florence, Lexington, Louisville, Pikeville, and Western Kentucky. The questionnaire was designed by LRC staff to elicit information from gamblers who have at some point in their lives had a serious gambling problem (see Appendix C).[1] The questionnaires were distributed with the assistance of the Kentucky Council on Problem Gambling. The Kentucky Council on Problem Gambling was able to contact the GA meeting leaders across the state for distribution of the questionnaire in order to maintain the respondent's anonymity. With cooperation from these two groups, a total of 55 completed questionnaires were returned.[2]

[1] The procedure of gathering cost data from a population of problem gamblers follows closely the survey instrument originally devised by Lesieur (1996) and implemented in the Wisconsin study (Thompson, Gazel, and Rickman, 1997) and the Connecticut study (Thompson and Gazel, 1998).

[2] It is not known how many Gamblers Anonymous members there are in the state because of the degree of anonymity associated with these meetings. It is, therefore, not possible to estimated the percentage of attendees who completed the questionnaires.

Respondents to the questionnaire have been attending GA meetings an average of five years. Gamblers Anonymous began in 1957 as a self-help group similar to Alcoholics Anonymous. Kentucky currently has eight active chapters. It is estimated that these chapters conduct 25 meetings each week. Gamblers Anonymous is a self-funded program that provides support for problem gamblers who wish to change their gambling behavior. The program offers peer support and helps problem gamblers by utilizing spiritual principles like the 12-Step Program of Alcoholics Anonymous. Participation in Gamblers Anonymous is voluntary.

Description of the Gamblers Anonymous Respondents

The information from the survey can be used to gain an understanding of some of the difficulties and costs associated with problem gambling, but may not be generalized to the total population of all problem and compulsive gamblers.

A survey of people attending Gamblers Anonymous meetings may not provide a representative sample of problem gamblers in the state. The problem gamblers responding to this survey have sought some form of treatment presumably because they have experienced problems in their lives significant enough for them to seek help. Thus, the respondents may be worse off than the typical problem gambler, or they could be from a more supportive family or social environment, or have some other reason that made them choose to seek treatment. Therefore, the GA sample population may differ from the rest of the population of problem gamblers. This means the results of the questionnaire, summarized below, cannot be generalized to the total population of problem and compulsive gamblers. This information can be used, however, to gain an understanding of some of the difficulties and costs, both private and public, associated with problem gambling.

Demographics of Gamblers Anonymous Respondents

The respondents to the survey were predominately white males with an average age of 49.

Similar to results from GA surveys conducted in Wisconsin and Connecticut, the respondents to this survey were predominately middle-income, white males. The average age of the respondents was 49. The ages ranged from 25 to 74. Eighty percent were males, which is a much higher percentage than in the general population. Ninety-three percent were white, which is consistent with Kentucky's population. The educational attainment level was somewhat higher than the general population with 33 percent having completed at least an undergraduate college education. The median family income was between $25,000 and $49,000, with 11 percent reporting a family income below $25,000. Sixty-two percent of the respondents were married, which is similar to the state's overall percentage.

Gambling History and Activities

On average, the onset of problem gambling began by the ninth year of gambling. The onset ranged from the very first year of gambling to as long as 56 years.

There are two points during a compulsive gambler's life that are of particular interest. The first is the age at which the individual first began gambling. The average age the GA respondents began gambling was 21, but four people began when they were 10 or younger, and three started after turning 50. Fifty percent of respondents started gambling before the age of 16. The second point of interest is the age when the person began exhibiting signs of problem gambling. On average, the onset of problem gambling began by the ninth year of gambling. The onset ranged from the very first year of gambling to as long as 56 years.

Casinos and electronic gambling devices were the most preferred types of gambling among GA respondents.

Tables 4.1 list the types of gambling most often played by these GA respondents. They listed casinos and electronic gambling devices (EGD) such as slot machines, as one of their preferred types of gambling. This is particularly interesting given that most casino/EGD gambling opportunities only became readily available in the mid-to late-1990s. Charitable and private betting were the least frequently played. Private betting is noncommercialized forms of gambling such as poker at a friend's house or wagering on sporting events. Private betting may be either legal or illegal. Of the private betting games, sport betting was the predominate type of gambling mentioned.

Table 4.1
Types of Gambling Most Frequently Played
by Gambling Anonymous Respondents

Type of Gambling	Most Frequently Played
Casinos/Electronic Gambling Devices	41%
Racetracks/Off Track Betting	21%
Lottery	20%
Charitable Games	9%
Private Betting, including sports, dice and cards	9%

Source: 2003 LRC Gamblers Anonymous Survey

Casino and horse racing were most often identified as the types of gambling causing serious problems.

Table 4.2 list the types of gambling GA respondents deemed to cause them the most serious problems. Casino/EGD and horse racing/off-track betting were listed as the types of gambling most respondents stated caused serious problems. The problem with casino-style gambling has occurred despite only recent exposure to this type of gambling at the riverboats. Thirty percent responded that the lottery and private betting also created serious problems.

Table 4.2
Types of Gambling Most Likely To Cause Problem Behaviors for Gamblers Anonymous Respondents

Type of Gambling	Serious Problem	Some Problem
Casinos/Electronic Gambling Devices	54%	15%
Racetracks/Off Track Betting	46%	13%
Lottery	37%	18%
Charitable Games	22%	22%
Private Betting, including sports, dice and cards	31%	6%

Source: 2003 LRC Gamblers Anonymous Survey

Problem Gambling Consequences

This section delves into consequences from problem gambling. Results from the GA questionnaire are used to describe some of the negative consequences from serious problem gambling. Because serious problem gambling places a financial strain on the gambler, a description of the sources of money for gambling is chronicled. This financial strain often leads to unpaid debt and ultimately may result in bankruptcy. Therefore, Kentucky's recent experience with bankruptcy resulting from access to casino and pari-mutuel gambling is also analyzed.

Borrowing and Stealing as a Source of Money for Gambling

Four of the 10 DSM-IV criteria for compulsive gambling are based on financial needs and responses to meet those needs. Since compulsive gambling may place financial strains on the gambler and his or her family, questions about the sources of money used for gambling were asked. The questions inquired about where money was borrowed, the amount of money owed, and whether the respondent stole money to fund gambling.

The sources most often accessed for gambling money were household cash, bank loans, and credit cards.

Questions regarding borrowing money asked the identity of specific borrowing sources when the money was intended solely for gambling. The sources most often accessed for gambling money were household cash, bank loans, and credit cards. Eighty-nine percent of the respondents had used a credit card as a source of gambling funds. Nearly 60 percent had cashed in assets such as retirement investments to finance gambling, and 46 percent sold valuables to pawn shops. Thirty percent had borrowed from a "loan shark" or bookie. One person stated he frequently sold

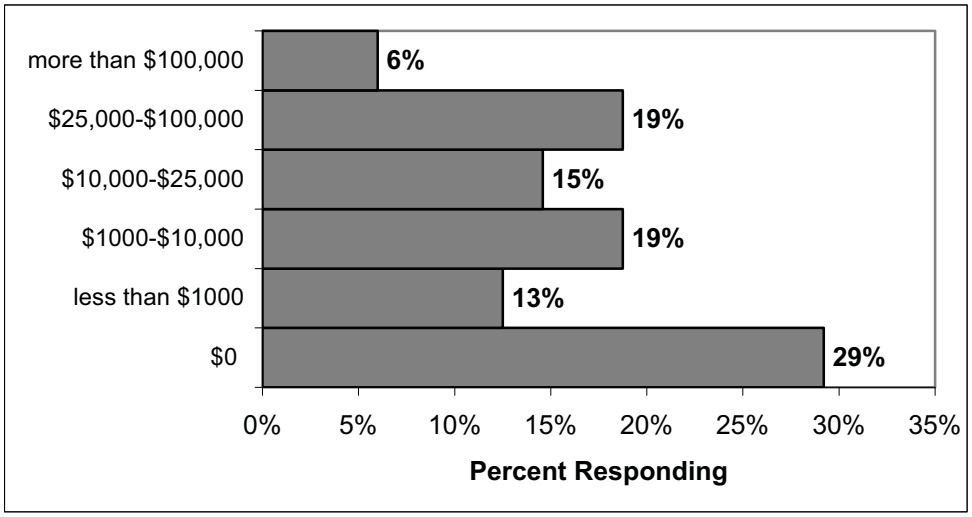
Much of the money borrowed from financial institutions will likely go unpaid.

plasma to pay for gambling. Much of the money borrowed from financial institutions such as credit cards and bank loans will likely go unpaid. Seventy percent of the respondents had accumulated more than $10,000 in gambling-related debts. The average amount owed was $47,600. The average amount of debt estimated that will go unpaid is $22,000.[3] Of those with gambling debts, 36 percent indicated they filed for bankruptcy to relieve that debt, and 19 percent had been sued because of unpaid gambling debts. The average amount of debt estimated to be relieved by personal bankruptcy proceedings was $85,000.

Some GA respondents engaged in illegal activities such as writing bad checks or embezzlement, to continue financing their gambling.

When pressures to pay off the loans grow, coupled with the continued need to keep gambling, some GA respondents engaged in illegal activities to continue financing their gambling. Seventy-five percent of them had written bad checks. Thirty-nine percent stole money from work. Of the 55 respondents, 27 percent had been arrested for theft, fraud, or embezzlement and 22 percent had been convicted at least once for a gambling-related offense. Figure 4.A shows the amount of money respondents estimated having stolen to help finance their gambling.

Figure 4.A
Estimated Total Amount Stolen for Gambling



Source: 2003 LRC Gamblers Anonymous Survey

The average amount of money stolen is estimated at $31,000.

The average amount stolen during all the time they were gambling is estimated at $31,000, and in the last 12 months of gambling it was estimated to be $13,000. Sixty-seven percent indicated having

[3] One observation was not included in the average debt owed or unpaid because it was much higher than the rest of the estimated debt owed. The debt owed by this individual was more than $700,000, and including this amount raised the average debt owed to $66,000 and debt unpaid to $32,000.

either unpaid debts, stolen money, or both. The combined amount of unpaid debts and money stolen averaged $60,000 per respondent and ranged from no money owed or stolen to more than $1.2 million for one individual.

Crime and Bankruptcy Resulting From an Increase in Gambling Availability

The literature linking crime and bankruptcy to gambling contains contradictory results.

The first part of this section provided insight from GA respondents about the financial strain that coincides with serious problem gambling. Because of the financial strain, the problem gambler might be faced with criminal charges for theft, fraud, or embezzlement; or could be sued by creditors or forced into bankruptcy because of gambling debts. The relationship of crime and bankruptcy and the access to legalized gambling has been, to a limited extent, investigated in the academic literature. The literature, however, contains studies with contradictory results. Often the results depend on the methodology and data used. In this section, a brief review of the research literature for both crime and bankruptcy is given, and an analysis of Kentucky's experience with bankruptcy and gambling access is discussed.

Crime and Gambling

The effect of gambling on crime rates is not a settled question. Some studies have found that gambling does lead to increased crime rates while others have found no direct relationship between the two. While progress has been made in the research, no clear answers are readily available. The studies linking crime to gambling have focused on a variety of crimes including the types of criminal activities cited by the GA respondents. Those studying the relationship between gambling, problem gambling, and crime have had several problems in isolating the effect from gambling.

The relatively high crime rates in cities with gambling may be similar to the rates in cities with other types of tourism.

One problem is that locations with more tourism tend to have higher crime rates than areas with less tourism. As Jeremy Wilson (2001) commented, tourists are excellent targets of crime because they often do things they normally would not do at home and carry larger amounts of cash. In short, tourists tend to take more risks than if they were in their home city. Therefore, if gambling establishments are similar to other tourist destinations, then any change in crime rates could be the result of an increase in tourism rather than from an increase in problem and compulsive gambling. Separating the effect on crime that is attributable to an increase in tourism and any unique effect stemming from gambling is very difficult. Another serious problem in the literature, as Earl Grinols and David Mustard (2001) noted, is that studies often have a small

Results from studies that only consider Las Vegas, Reno, and Atlantic City may not be generalized to other locations.

sample of cities and focus on Las Vegas, Reno, and Atlantic City. Using small samples in any statistical research project leads to less confidence in the results. In addition, studying only Las Vegas, Reno, and Atlantic City, unless these cities are similar to other geographical areas, may provide results that cannot be applied to other locations.

Publicly available crime data is often insufficient to evaluate an effect from gambling.

Further, publicly available crime data often suffers from misreporting and underreporting. If a person is a victim of a crime and never officially reports the crime, it will cause the crime rate to appear lower than it actually is. In addition, if a person is a victim of a number of crimes but only reports the most severe, then there is also a misreporting problem. Some researchers investigating gambling's impact on crime have collected new data by contacting individual police and sheriff departments firsthand. This can potentially help alleviate some data problems but does not completely solve the issue of underreporting.

It is hard to know all the factors that determine crime rates.

All of these issues aside, trying to fully explain what causes crime is itself inherently difficult. To start, it is hard to know all the factors that determine crime rates. Alongside this, it is challenging to obtain good, quantifiable measures of those factors known to deter or contribute to crime. If research does not take into account an important component affecting crime rates, whether because the data is not available or for any other reason, the results of the research might improperly measure the relationship between crime and the access to gambling (Grinols, 2001).

Studies continuing to examine the relationship between gambling and crime have not been able to produce definitive results.

The National Gambling Impact Study Final Report (1999) stated, regarding crime and legalized gambling, that "…insufficient data exists to quantify or define that relationship." This underscores the difficulty in trying to address the crime and compulsive gambling question. Work since this report was released has continued to be inconclusive. A number of researchers have attempted to address some of the problems in the literature.[4] Each makes contributions to the literature, but none has produced definitive results.

[4] See Earl Grinols and David Mustard (2001), Jeremy Wilson (2001) and Grant Stitt (2000)

Bankruptcy and Gambling

The impact of legalized gambling on personal bankruptcy is not clearly understood. Depending on the methodology and sample used, different results have been found.

Similar to crime, the impact of legalized gambling access on personal bankruptcy is not clearly understood. In the research literature, depending on methodology and the sample used, different results have been obtained.

In 1998, Congress directed the U.S. Treasury to investigate the relationship between gambling and bankruptcy. This action was taken in part because of the increase in legalized gambling occurring in the 1990s. The report reviewed the existing literature as well as performed new research. The study concluded that there is "no connection between bankruptcy rates and either the extent of or introduction of casino gambling" (U.S. Treasury, 1999). A number of researchers have found similar results since the Treasury's report, including studies by Lynda de la Vina and David Bernstien (2002) and Richard Thalheimer and Mukhtar Ali (2002).

The finding that gambling has no strong impact on bankruptcies is not universal. In 1997, SMR Research, a private consulting firm, released a study stating that counties with legal gambling had higher average bankruptcy rates than those without gambling. Mark Nichols et al. (2000) published research that examined eight different communities that adopted gambling in the 1990s. They determined that casino gambling resulted in a higher number of bankruptcies in five of the eight communities. Likewise, John Barron et al., in 2002, published research that concluded gambling did increase a county's bankruptcy rate.

Most studies that found gambling did not affect personal bankruptcy rates used an econometric research technique.

Research presents evidence that gambling may or may not affect bankruptcies. The stronger, though not definitive, evidence indicates gambling may not have a significant impact on county bankruptcy rates. Most studies that found gambling did not affect county bankruptcy rates applied an econometric research technique. This technique is a statistical procedure that allows the researcher to explicitly take into account other factors that can affect bankruptcy rates. When this technique is applied, gambling's effect on bankruptcies can be isolated from other factors such as the unemployment rate, demographics, and income. Most research using this technique found gambling does not have a strong impact on bankruptcy rates. The research of John Barron et al. (2002) is an exception to this. The Barron research did use an econometric technique and concluded that gambling does increase bankruptcy rates.

Past studies have limitations that could mask the relationship between gambling and bankruptcies.

Even with the use of an econometric technique, there are a number of problems that arise in the literature that prevents it from be definitive. One issue is that not all research efforts have attempted to control for different types of gambling. There are a number of legal gambling venues in the U.S. such as pari-mutuel, casino, and lotteries. Unless all gambling venues have the same impact on bankruptcies, not differentiating between them could lead to inaccurate results.

There also have been differences in the literature about how to measure the accessibility of gambling to an individual or county. Much of the literature arbitrarily assigns a 50-mile radius around a gambling establishment as a means of determining a county's access to gambling. An inaccurate assessment of gambling access could have an effect of misidentifying or even missing any effects of gambling on bankruptcy.

Another issue that has not been fully addressed in the literature is the length of time gambling opportunities have been present. Filing for bankruptcy may be considered an event of last resort. As such, it is not normally pursued until other options have been explored, potentially taking substantial amounts of time. If gambling has an impact on bankruptcies, the effect may only be apparent after a longer period of time. As a result, traditional methods used to isolate gambling's affect on bankruptcies could miss the impact altogether. This point about the role time plays has been made in the literature on gambling's impact on crime (Grinols and Mustard, 2001)**.** Ignoring the potential role time could play in the gambling and bankruptcy story could lead to incomplete conclusions.

The results from previous studies on gambling and bankruptcy may not be applicable to Kentucky.

Whether the results of other studies are directly applicable to Kentucky is another valid question as well. It is not clear that the experience of other localities, good or bad, is applicable to Kentucky. Gambling has a very long history in Kentucky as pari-mutuel betting has been legal for many decades. Thus, given this unique relationship to gambling, it is possible that expanded gambling could affect Kentucky differently from another state.

Effect on Kentucky County Bankruptcy Rates From Riverboat Casinos and Horse Racing

A new research effort was undertaken using only Kentucky data.

The current research literature does not provide a definitive answer to whether gambling impacts bankruptcies. Given the evidence that more than one-third of the GA survey respondents filed personal bankruptcy, a new research effort was undertaken. The goal was to provide a clearer answer to how bankruptcy rates in Kentucky are

affected by gambling. To do this, a number of issues in the literature were addressed and Kentucky data was exclusively used.

This research accounts for the role time may play in the relationship between when access to gambling occurs and bankruptcy rates.

This research took into account the role time may play in the relationship between gambling and bankruptcy rates. In doing this, any impact gambling has on bankruptcies over time was explicitly addressed. This provided a more complete analysis than has been performed previously. The results are specific to Kentucky.

Access to gambling is measured as the distance a county is from a gambling venue.

How a county's access to gambling is incorporated is also different from most of what is found in the literature. Similar to the Barron et al report, counties are broken into three groups: within 25 miles of the gambling facility, between 25 and 50 miles of a gambling facility, and more than 50 miles from a gambling facility. This method allowed different impacts, if any, to surface based on the distance of the county from the gambling location. Residents who live farther away from gambling activities would likely participate in these activities less. Therefore, a county within 25 miles of a gambling location may be affected differently from a county 55 miles from the facility.

Another important difference in this research as compared to other literature was that Kentucky data was exclusively used, making the results directly applicable to Kentucky. While there are advantages of using only Kentucky data, there was also a cost. Since only Kentucky was used, the amount of data was smaller than if other states had been included. In general, the more data the better. It was felt, however, that using only Kentucky data provided a sufficiently large enough quantity of data to generate valid results.

Two forms of gambling were separately examined: casino and pari-mutuel.

Two forms of gambling were examined: casino and pari-mutuel. Both were analyzed separately to allow any difference in the two to be discovered. It should be noted that the Kentucky state lottery, a substantial form of gambling in Kentucky, was ignored in this examination. Since the lottery is available to all Kentucky counties equally, it is assumed that access is equal across all counties. Therefore, no measurable difference in access to the lottery can be observed. It is the difference in access to gambling between counties that is the basis of comparison in bankruptcy rates.

During the 1990s there was an increase in the access to gambling in some Kentucky counties from casinos locating along the state's border and from the addition of a new horse track in Floyd County. Access to pari-mutuel racing, while different across Kentucky counties, has been available for some time. These differences in both access and type of gambling in different parts of Kentucky

provided an excellent opportunity to study gambling's impact on bankruptcies.

To uncover the effects of gambling on bankruptcy, standard econometric statistical techniques were employed. For more detailed explanations of the estimation technique, the underlying variables, and the specification can be found in Appendix E.

No evidence was found that riverboat casino gambling has had an impact on Kentucky county personal bankruptcy rates.

The results showed that gambling has mixed effects on bankruptcy in Kentucky depending on the form of gambling examined. No evidence was found that casino gambling significantly impacted bankruptcy rates. This was true for counties within 25 miles of a casino and for counties more than 25 miles away from a casino.

Counties within 25 miles of pari-mutuel gambling had higher bankruptcy rates, all else being equal.

For pari-mutuel gambling at horse racing tracks, however, the results were different. For counties that are *more than* 25 miles away from a horse track, there was no evidence that bankruptcy rates were affected by gambling. For counties *within* 25 miles, the results indicated that gambling at horse racing tracks did increase bankruptcy rates, all else being equal. The effect on bankruptcy rates was small, indicating that counties within 25 miles of a horse track had 0.7 more personal bankruptcies per 1,000 people.

These results do not imply that problem and compulsive gambling are more likely to occur from access to pari-mutuel wagering compared to casino-style gambling.

These results do not imply that problem and compulsive gambling are more likely to occur from access to pari-mutuel wagering compared to casino-style gambling. As noted earlier, there can be a gap in time between initial access to a form of gambling and the onset of problem and compulsive gambling. Pari-mutuel racing historically has been a part of the state's gambling environment, while casino gambling only became available in the mid-to late-1990s. It may be that, over time, bankruptcy rates will increase in counties near casinos relative to other counties. It may also be, however, that casinos have a distinctly different effect on the residents of nearby counties. Greater tourism coming to the area might provide economic benefits to these communities. These benefits could offset some of the negative consequences associated with problem gambling, resulting in no significant increase in personal bankruptcy rates.

Personal Hardships Associated with Problem Gambling

In addition to financial hardship, serious gambling problems can negatively impact gamblers and their families in other ways.

In addition to financial hardship, serious gambling problems can negatively impact the gambler and his or her family members in other ways. Family break-ups are common among compulsive gamblers (Leseiur, 1991). Leseiur's findings are consistent with the results of the survey conducted for this study, where 46 percent

of the GA respondents have been divorced or separated. This compares to 13.4 percent of all Kentuckians age 16 or older (U.S. Census Bureau Decennial Census, 2000). Of the GA respondents who have been separated or divorced, 71 percent (17 of 24 respondents) cited gambling as the cause. All but one of the respondents indicated having children, and the average number of children affected from these breakups was 2.4.

One-third of GA respondents indicated that they had lost employment directly due to their gambling.

In addition to family breakups, loss of employment can further exacerbate the compulsive gamblers' problems. Thirty-three percent responded that they had lost employment directly due to their gambling, and 70 percent missed work because of gambling. Of those who lost work because of gambling, 12 percent received Food Stamps because of low family income, and 17 percent used some of their unemployment benefits for gambling.

Two out of three respondents have "felt so low" they thought of committing suicide and nearly one in five attempted suicide.

Several surveys, including the National Opinion Research Centers national survey, have found significantly higher depression and suicide ideation in the compulsive gambling population. Suicide ideation consists of thinking about, planning, or attempting suicide. The responses to the Kentucky GA questionnaire were consistent with these national findings. The questionnaire asked about three components of suicide ideation, and Table 4.3 shows the degree of suicide ideation among the respondents. Two out of three respondents have "felt so low" they thought of committing suicide and nearly one in five attempted suicide. While these numbers are consistent with the most recent national survey, there is no current national data, according to the National Institute of Mental Health, available on suicide ideation for comparison to the general population.

Table 4.3
Suicide Ideation
Among Gamblers Anonymous Respondents

Thought about suicide	67%
Planned suicide	51%
Attempted suicide	18%

Source: 2003 LRC Gamblers Anonymous Survey

Comorbidity and Therapy

Just over half of the GA respondents indicated the presence of a coexisting problem, with the majority citing alcohol or drug abuse.

Some problem gamblers will seek professional help to deal with their problems. Professional help may consist of therapy, counseling, or possibly other forms of treatment. In some cases, treatment may not be specifically for gambling, but rather for related problems. As noted in Chapter 2, persons with serious gambling problems often have other problems such as substance abuse. It is this coexistence of multiple problems in the lives of serious problem and compulsive gamblers that confounds the discovery of social costs directly related to gambling.

Consistent with other studies, just over half of these GA respondents indicated the presence of a coexisting problem. All 55 respondents believed they were compulsive gamblers, and 51 percent believed they also had a problem with drugs, alcohol, depression, compulsive spending, or compulsive eating. The majority (75 percent) of those who indicated having a coexisting problem cited alcohol or drug use as a problem.

For those seeking help from a therapist for other disorders, less than half thought the therapist was knowledgeable about compulsive gambling.

In fact, 47 percent responded having sought therapy for alcohol and drug use, or mental illness. Of those seeking help from a therapist for other disorders, 82 percent discussed gambling with the therapist, but less than half thought the therapist was knowledgeable about compulsive gambling.

In addition to GA meetings, 44 percent have sought help from a therapist or counselor, but no conclusion could be drawn about the therapist's knowledge of compulsive gambling.[5] To pay for therapy, 58 percent used a combination of their own money and insurance, 21 percent paid entirely with their own money, and 21 percent had yet to pay for the treatment. Sixty-seven percent indicated they had insurance that would cover at least part of the cost for professional counseling, and 87 percent would go to a therapist or doctor who understood compulsive gambling if one was made available. The responses do not measure the willingness to pay for this availability nor do they imply that GA has been unsuccessful in its efforts. In fact, 83 percent of the respondents stated they have been successful at "staying clean" since joining Gamblers Anonymous.

[5] Four out of the 24 people who had sought treatment from a therapist responded that the therapist had no knowledge of compulsive gambling. The other 20 people did not respond to this question.

Chapter 5

Public Awareness of and Treatment Programs for Compulsive Gamblers

This chapter discusses efforts being made in Kentucky and other states to create awareness of and more treatment programs for problem and compulsive gambling. Kentucky's state government does not provide any specific funding for compulsive gambling awareness or treatment programs. There are some efforts being made to provide such programs; however, these efforts are primarily funded by the gambling industry, by groups that receive funds from the industry, or by gamblers themselves through programs such as Gamblers Anonymous.

Creating Awareness of Compulsive Gambling in Kentucky

Several methods are used to create awareness such as pamphlets and help-lines, but the effectiveness of these methods is not known.

Several methods are generally used to create awareness of problem and compulsive gambling. These include displays at gambling sites of "responsible gambling" placards, posters, and educational pamphlets; and advertising problem gambling help-lines, general media advertising, and educational programs for gambling employees and students. Many states and concerned parties, including those in the gambling industry, employ these methods. What is not known is which methods, if any, are effective in raising awareness about compulsive gambling. No definitive research into the most effective means of creating awareness and preventing compulsive gambling could be identified.

In Kentucky, there are no state funds appropriated specifically for problem and compulsive gambling awareness.

In Kentucky, no state funds are appropriated specifically for problem and compulsive gambling awareness. However, the Kentucky Lottery Corporation (a state-regulated corporation), the Charitable Gaming Commission, and live horse racing tracks in the state have undertaken some efforts at creating awareness of problem gambling.

The Kentucky Lottery Corporation and the Charitable Gaming Commission promote play responsibly messages.

The Kentucky Lottery Corporation and the Charitable Gaming Commission engage in activities to create awareness through the placement of placards and posters about responsible gambling wherever these types of games are played. The Kentucky Lottery Corporation also includes the "play responsibly" message when promoting lottery games.

The Kentucky Racing Commission reported that all race tracks in the state are engaged in some form of awareness campaign.

The Kentucky Racing Commission reported that all race tracks in the state are engaged in some form of awareness campaigns. All race tracks advertise the problem gambling helpline with posters or placards at the track. When space permits, the helpline is also advertised in the daily racing programs of individual race tracks. At Churchill Downs and its other facilities, a program has been instituted to raise awareness about problem and compulsive gambling for its employees.

The Kentucky Council on Compulsive Gambling, a nonprofit organization, was formed to heighten awareness of problem gambling.

The Kentucky Council on Compulsive Gambling, an affiliate of the National Council on Problem Gambling, produces the most comprehensive program for raising awareness of compulsive gambling. The council is a nonprofit organization formed to heighten awareness of problem gambling and to provide assistance to problem gamblers and their families. It works directly with many of the gambling entities in the state. The council engages in a number of activities that can be grouped into three main areas; developing and promoting a problem gambling helpline, producing publications, and providing education and training.

The council operates on a small budget ($80,000 in 2002) with funding from corporate and individual memberships, grants, conference receipts, and training seminars. About half of the Council's funding comes from 12 corporate sponsors: six Ohio riverboat casinos including Argossy Casino and Hotel, Casino Aztar, Belterra Casino and Resort, Caesars' Riverboat Casino, Grand Victoria Casino and Resort, and Harrah's Metropolis; four race tracks including Churchill Downs, Keeneland Association, Turfway Park, and Ellis Park; the Kentucky Lottery Corporation; and Caritas Peace Center.

There has not been an assessment of how effective the council's awareness programs, individually or collectively, have been.

While the council engages in a number of efforts to create awareness of compulsive gambling, there has not been an assessment on how effective these efforts, individually or collectively, have been. Therefore, LRC staff could not determine the overall effectiveness of the council's programs to educate the public; however, there has been a 70 percent increase in the last two years in the number of callers requesting assistance through the helpline. The helpline currently receives an average of 200 calls per month. This increase may be a result of the added promotion across the state about the availability of a toll-free problem gambling helpline. Likewise, there is no information available concerning the effectiveness of similar efforts in other states.

The Kentucky Lottery Corporation and the Kentucky Council on Compulsive Gambling are developing a pilot project to educate youngsters about the dangers of compulsive gambling.

The Kentucky Lottery Corporation is working with the Kentucky Council on Compulsive Gambling to develop a pilot project to educate Kentucky's youth regarding the dangers of compulsive gambling. The notion of educating students about problem and compulsive gambling seems appropriate based on the results of the Gamblers Anonymous questionnaire discussed in Chapter 4. Nearly 60 percent of these serious problem gamblers began gambling before turning 18.

Other States' Efforts

The Association of Problem Gambling Service Administrators has identified 16 states that provide funding specifically for compulsive gambling programs.

Several organizations have made efforts to enumerate the services and funding streams in each state for programs targeted to expanding education about and treatment for compulsive gambling. The Association of Problem Gambling Service Administrators (APGSA) has done some analysis of states that provide state funding specifically for compulsive gambling programs. The APGSA has identified 16 states that provide some funding for compulsive gambling programs. Appendix F presents data supplied by APGSA that identifies the state, state organization, annual budget, per capita funding, and the variety of services that the state provides in this area. This represents the best information readily available on other states' efforts.

A review of the 16 state-funded programs identified by APGSA indicates:

- per capita funding ranges between $0.003 to $1.04;
- 14 states use funds for a statewide helpline;
- 13 fund counselor training;
- 9 have instituted prevention programs;
- 13 are funding outpatient treatment; and
- 4 are providing funding for inpatient treatment.

Of the 16 states identified that provide public funding, 92 percent of the total funding is for actual service delivery, training, and research.

A study of problem gambling services in 14 of the 16 states that are members of the APGSA found that 92 percent of all funds are allocated to actual service delivery, training, and research. The study also found that government entities responsible for policy development contract predominately with nonprofit organizations to carry out the programs (Christensen, 2002).

As noted by the director of ASPGA, this information remains incomplete because of the difficulty in tracking state funding that is not specifically targeted to gambling programs. Therefore, it is not known if other states might be providing funds for problem and compulsive gambling services within broader programs. When funding has been provided, it is not known whether the actual source of the funds is from revenues derived from gambling activities, or from general revenue sources.

In 1995, Indiana enacted legislation that directed 2.5 percent of its riverboat casino admission taxes for the prevention and treatment of addictions including compulsive gambling.

In 1995, Indiana enacted legislation directing that 2.5 percent of its riverboat casino admission taxes be used for the prevention and treatment of addictions including compulsive gambling. These funds are used to:

- operate a state toll-free helpline;
- develop and implement state and community prevention plans (similar to Kentucky Agency for Substance Abuse Policy grants);
- fund the Compulsive Gambling Task Force and media messages; and
- provide training for treatment service providers.

Indiana added gambling treatment to the services available under its mental health and addiction services to low income citizens.

Indiana also added gambling treatment to the services available under its mental health and addiction programs for low-income citizens. Managed care providers for gambling services are now required to offer inpatient and intensive outpatient services, establish linkages with self-help groups such as Gamblers Anonymous, and provide financial management counseling. The amount of total costs associated with these treatment services is tracked separately by the state.

Treatment for Compulsive Gambling

Treatment Through Kentucky's Community Mental Health Mental Retardation Centers

Publicly-funded mental health and mental retardation services in Kentucky are provided through a network of regional mental health and mental retardation centers, often referred to as community mental health centers (CMHC). Mental health regions of the state are similar to the area development districts, and each region is administered by a board. Services are funded by state general fund dollars, federal funds and block grants, federal demonstration grants, and private funds. These quasi-public entities are permitted to raise funds for services.

None of the funding provided to Kentucky community mental health centers is targeted for the treatment of compulsive gambling.

Services offered by CMHCs include evaluation, assessment, individual and group counseling, and case management. Clinical services are provided for mental illness, substance abuse, brain injury, mental retardation, and other mental health conditions. The services are provided on a sliding fee scale, and many clients of the centers are Medicaid recipients. Medicaid provides approximately 36 percent of funding for CMHC services, while other state general fund appropriations account for approximately 43 percent, and private or other funds account for approximately 21 percent

(statewide averages for all centers). None of the funding provided to CMHCs is targeted for the treatment of compulsive gambling.

The toll-free helpline of the Kentucky Council on Problem Gaming is physically located at River Valley Behavioral Health. This CMHC is in the Owensboro area and provides staffing for the helpline.

The director of the Division of Substance Abuse reported that there are currently no screening questions pertaining to gambling on intake forms used at the CMHCs.

Staff interviewed Michael Townsend, director of the Division of Substance Abuse, Department for Mental Health/Mental Retardation, about treatment for compulsive gambling. He reported that there are currently no screening questions pertaining to gambling on intake forms used at the CMHCs. It would be possible to add questions but it would take about one year to institutionalize the changes.

Because of the lack of dedicated funding, a person who went to a CMHC for a gambling problem but did not have a coexisting alcohol or drug problem, could be referred elsewhere for treatment.

Townsend stated that most treatment for compulsive gambling falls to substance abuse professionals because of the similarities of the conditions and resulting impact on families. While there are some dedicated funds for substance abuse treatment, there is no specific source of funding for gambling treatment. CMHCs are independent agencies governed by regional boards. Many centers limit their services to mental retardation and severe mental illnesses. Compulsive gambling is not considered a severe mental illness. Therefore, a person who went to a CMHC for a gambling problem but did not have a co-occurring disorder, could be referred elsewhere for treatment or accepted as a client on a fee-basis if treatment expertise was available at that center.

As of April 2003, there were approximately 40 treatment professionals with specific problem gambling training or credentials in Kentucky. Twelve of these individuals have been identified as CMHC staff members, but there is not a trained or certified gambling counselor in each region of the state.

Survey of Kentucky Substance Abuse Counselors

Townsend and LRC staff, with assistance from the University of Kentucky Center for Alcohol and Drug Studies, made arrangements to conduct two short surveys for this study of substance abuse treatment professionals.

Two surveys of the state's substance abuse counselors were conducted in July 2003 to gauge the level of awareness about and training in treatment approaches for problem and compulsive gambling.

The two surveys of the state's substance abuse counselors were conducted in July 2003 for the purpose of gauging the level of awareness about and training in treatment approaches for problem and compulsive gambling. The first survey was taken at the annual Kentucky School of Alcohol and Other Drug Studies conference, sponsored by the Division of Substance Abuse. This survey asked substance abuse counselors to report on their awareness of compulsive gambling and what training, if any, they had in treating compulsive gambling. Most substance abuse treatment professionals in Kentucky attend this training event to meet the requirements of continuing education for their professional license or certification.[1]

The second survey was part of a statewide survey conducted by the University of Kentucky Center on Drug and Alcohol Research (with the gambling treatment results prepared by Walker and Stevenson, 2003).[2] This survey was of state-funded substance abuse facilities regarding the availability of dual diagnosis services. In both of the surveys the clients of these health care professionals are typically substance abusers.

Results from both surveys report comorbidity rates between substance abuse and gambling disorders consistent with other study estimates.

The results from both surveys reported comorbidity rates between substance abuse and gambling disorders consistent with other study estimates. It is possible that higher comorbidity rates would be reported if there were more substance abuse counselors across the state trained in diagnosing and treating compulsive gambling.

Results of the survey taken at the Alcohol and Other Drug Studies Conference include:

- Counselors reported an average of 8.6 years of experience in providing treatment services;
- 20 percent of the counselors have received some training about problem gambling; however, 50 percent of those received their first training within the past year;
- 20 percent routinely screen their clients for gambling problems (although not the same 20 percent who have received training).

Counselors were asked to estimate the percentage of their current clients who are compulsive gamblers or problem gamblers, and those that have problems with both substance abuse and gambling:

[1] An estimated 200 counselors attended the Kentucky School and 109 questionnaires were returned.

[2] Data was collected from 13 of 14 mental health regions in the state with 129 out of 243 substance abuse sites responding.

- 70 percent of the counselors indicated that no more than 5 percent of their cases involved a gambling disorder;
- 20 percent of the counselors reported more than 5 percent of their caseloads involved a substance abuse and a gambling disorder.

The survey of counselors at substance abuse sites estimated that an average of 7.4 percent of clients have a coexisting gambling problem.

The results above are similar to those found in the Center on Drug and Alcohol Research survey. In this survey, 67 percent of professionals working in state-funded substance abuse centers reported having 5 percent or fewer clients with a gambling disorder along with a coexisting substance abuse problem. The statewide average of clients estimated to have a coexisting gambling problem was 7.4 percent. This is slightly lower than the finding by Korn and Shaffer (2002) that between 9 and 16 percent of clients of substance abuse facilities have a gambling disorder.

Over two thirds of the state funded substance abuse facilities surveyed did not have a clinician who treats problem gambling disorders.

Over two-thirds (69 percent) of the sites surveyed did not have a clinician who treats problem gambling disorders. The distribution of clinicians who treat gambling disorders varied by region. Five of the 14 regions reporting had two or fewer gambling counselors in the region. The Cumberland River region had the most counselors with 14, the Four Rivers region was next with seven counselors. There was no indication from the survey why these regions have developed more counselors to diagnose and treat gambling disorders than other regions.

The results of the two surveys indicated that awareness and training specific to compulsive gambling among substance abuse professionals is limited and most training has just recently begun.

The two surveys were consistent in their findings. Both indicated a similar rate of comorbidity between substance abuse and gambling disorders among substance abuse clients. The results indicated that awareness and training specific to compulsive gambling among substance abuse professional is limited and most training has just recently begun. As noted above, only 20 percent of these counselors reported they routinely screen their clients for gambling problems.

The lack of specialized training or certification for treatment for compulsive gambling among CMHC staff may be of concern since some Kentuckians rely on the CMHC for their mental health services. The number of specialists may be affected by the lack of dedicated funding for treatment of compulsive gambling.

Certification for Treatment of Compulsive Gambling

Three agencies offer national certification for providers of treatment for compulsive gambling.

Three agencies offer national certification for providers of treatment for compulsive gambling:

- the National Council on Problem Gambling;
- the American Academy of Health Care Professionals in Addictive Disorders (American Academy); and
- the American Compulsive Gambling Counselor Certification Board (American Certification Board).

Each certification agency requires gambling-specific education, training, supervised practice, and a passing score on a written examination. Specific requirements differ among these agencies (see Appendix G).

In 1999, there were two professionals in Kentucky who were certified by the National Council on Problem Gambling.

The National Council on Problem Gambling reported that there were more than 500 professionals certified nationwide by the council. Their national database of counselors showed two nationally certified professionals in Kentucky in 1999, the most recent update of the database.

There are no professionals in Kentucky who are certified in compulsive gambling by the American Academy.

The American Academy certifies professionals in the area of addictions, including alcohol, drug, and sex addiction; eating disorders; and compulsive gambling. It certified 1,500 professionals in alcohol and drug addiction nationwide, compared to 15 certified in compulsive gambling. This agency reported 12 certified alcohol and drug addiction counselors in Kentucky and none certified in compulsive gambling.

There were seven professionals certified in compulsive gambling by the American Certification Board.

The American Certification Board is the oldest certification organization. Dr. Curt Barrett, professor emeritus at the University of Louisville, was elected vice-president of the board in 2002. The Kentucky Council on Problem Gambling reported that in August 2003 there were seven American Board-certified counselors in Kentucky, an additional 20 counselors in the process of certification, and one National Council-certified counselor.

Kentucky has no certification or licensing requirements for the treatment of compulsive gambling.

In addition to national certification boards and councils, some states offer state certification or have licensure requirements that must be met regardless of national certification. Kentucky has no specific requirements for treatment for compulsive gambling, but does have certification and licensure requirements for alcohol and drug counselors.

Compulsive Gambling Treatment by Private Sector Counselors

As of this report there were 40 practitioners in Kentucky who have some specialized training or certification for treatment of compulsive gambling. Twenty-eight of these were not affiliated with a community mental health center.

As of this report there were 40 practitioners in Kentucky who have some specialized training or certification for treatment of compulsive gambling. Twenty-eight of them were not affiliated with a community mental health center. Of these 28:

- 5 were associated with the Methodist Hospital in Henderson;
- 4 were in a practice at the Morton Center in Louisville;
- 3 worked with other government entities or health care facilities (schools, courts, hospitals).
- 16 were in private practice.

Most private practice offices were in the Jefferson County area, two in the Northern Kentucky area (Wilder and Warsaw), two in the Lexington area, one in Russell Springs, and one in Murray. As noted above only seven of the total 40 practitioners have national certification and 20 more are working towards their national certification.

Types of Treatment

According to professional clinicians compulsive gambling is difficult to treat since no root determinant has been established.

According to professional clinicians, compulsive gambling is difficult to treat since no root determinant has been established; therefore, no single method of treatment has been developed (U.S. National Gambling Impact Study Commission Final Report, 1999).

Three general types of treatment are available to compulsive gamblers: inpatient (or residential), outpatient, and self-help (such as Gamblers Anonymous).

The treatment of compulsive gambling by professional clinicians follows similar approaches taken with other psychiatric disorders. Treatment usually begins with a psychological evaluation and a historical accounting of the compulsive gambling behavior. Three general types of treatment are available: inpatient (or residential), outpatient, and self-help (such as Gamblers Anonymous). Typically, inpatient treatment is often suggested to provide intensive therapy when the effects of the gambling have become severe. Inpatient and outpatient clinical treatment will usually include group or individual psychotherapy. Some treatment practices may include drug therapy using anti-depressant drugs (The WAGER, 2003). Often outpatient therapy will be coupled with self-help group treatment as provided by Gamblers Anonymous.

Treatment Cost

Cost for treatment varies according to the type of treatment provided and who provides the treatment. A private treatment center in Kentucky stated that outpatient treatment usually lasts for one year with an average total cost of $4,600. Indiana reported that outpatient treatment using public funds averaged $2,400 per person.

When inpatient treatment is provided, it is usually followed by several months of intensive outpatient treatment. Inpatient treatment generally lasts 30 days. Thirty days of inpatient treatment are estimated to cost between $6,000 and $16,000 (estimates based on inpatient treatment costs in private facilities in Illinois and Louisiana). Currently, there are no inpatient treatment facilities for compulsive gamblers in Kentucky.

Another approach to treatment is the 12-step abstinence program originally devised by Alcoholics Anonymous. Gamblers Anonymous uses a 12-step abstinence program and does not require any payment to attend meetings or participate in its program.

Gamblers Anonymous

Kentucky currently has eight active Gamblers Anonymous chapters.

Gamblers Anonymous (GA) began in 1957 as a self-help group similar to Alcoholics Anonymous (AA). GA draws on the spiritual principles utilized by individuals recovering from other compulsive addictions, like the 12-Step Program of AA. There are chapters in each state and in 37 countries. Kentucky currently has eight active chapters. It is estimated that these chapters conduct 25 meetings each week.

The only requirement for membership in Gamblers Anonymous is a desire to stop gambling.

The only requirement for membership is a desire to stop gambling. There are no dues or fees for Gamblers Anonymous membership; it is self-supporting through members' contributions. GA is not allied with any sect, denomination, political entity, organization or institution. It does not endorse nor oppose any cause. Its stated primary purpose is to help compulsive gamblers stop gambling.

GA offers a set of 20 questions to help a person determine whether he or she is a compulsive gambler. It is noted in the GA literature that a compulsive gambler will answer "yes" to at least seven of these questions. Many of these questions reflect the diagnostic criteria of the DSM-IV discussed in Chapter 2. The GA literature

promotes the concept that compulsive gambling is a progressive illness.

GA has an affiliate program called Gam-Anon for families and others affected by a compulsive gambler.

GA has an affiliate program called Gam-Anon for families and others affected by a compulsive gambler. This also is loosely based on AA's family program, Al-Anon. There are seven Gam-Anon meetings occurring each week in Kentucky.

A distinct feature of GA is that it asks members to discuss legal, financial, and other issues and develop a plan to address them.

A distinct feature of GA is the Pressure Relief Meeting. It is designed to help with financial recovery, but it does not involve a financial bailout or loan. It is a budgeting session held with a few GA members who have achieved recovery in this area. The member is asked to honestly compile a list of all debts, bills, expenses, income, and assets. Legal, financial, employment, and personal issues are discussed, and a plan is formed to provide order, stability, and purpose to the member. GA literature states that an important aspect of this meeting is to provide hope and alleviate the financial pressures that may cloud recovery. The plan is reviewed and adjusted over time.

A review of GA meeting schedules from 1997 to 2003 showed that the number of meetings grew from 11 per week to at least 25 per week.

A review of GA meeting schedules from 1997 to 2003 showed that the number of meetings grew from 11 per weekly to at least 25 per week. An interview with one of the GA leaders indicated that he would expect the number of meetings to rise dramatically if professional treatment facilities for compulsive gambling were made available. This response would be very similar to the increase in AA meetings that occurred in the 1980s as a result of the growth of treatment centers dedicated alcohol disorders.

Gambling Court

Another form of treatment is a gambling court, which borrows from the successes in drug courts for substance abusers.

Another form of treatment, administered through the auspices of a gambling court, borrows from the successes in drug courts for substance abusers. There is at least one gambling court in the U.S., which began in August 2001, in Amherst, New York. Judge M. Farrell presented his experience as the judge overseeing this gambling court at the 2003 National Conference on Problem Gambling. He noted that crimes associated with compulsive gambling, such as fraud, theft, and larceny, will often place the compulsive gambler in direct contact with the legal system. As noted in Chapter 4, just over 25 percent of the GA members responded that they had been arrested for gambling-related crimes.

In the gambling court, defendants are arraigned on formal charges, credit reports are prepared, assessments provided, and plea negotiations are made.

In his gambling court, defendants are arraigned on formal charges, credit reports are prepared, assessments provided, and plea negotiations are made. He prefers post-plea negotiation so that

incarceration can be immediately imposed if the defendant does not comply with the contractual, individualized treatment program. The program includes screening, assessment, and treatment for mental health, substance abuse, domestic and family violence, consumer debt, individual and family counseling, and participation in Gamblers Anonymous. The average time to complete the program has been approximately 10 months.

Farrell reported that, to date, the results have been positive, and many participants have reported abstinence from gambling and improvements in their personal lives. He noted that judicial supervision of participation is a key element for success of most participants. There was no information provided, however, on the cost of establishing or maintaining a gambling court.

It is possible that the concepts of therapeutic justice, rehabilitation, restitution, and accountability that are applied to drug-related crimes may be useful for gambling-related crimes.

Drug courts appear to be continuing to expand in Kentucky and the nation. It is possible that the concepts of therapeutic justice, rehabilitation, restitution, and accountability that are applied to drug-related crimes may be useful for gambling-related crimes.

A Public Health Approach to Gambling

A public health approach similar to that employed with alcohol is being advocated for gambling by some (Shaffer and Korn, 2002).

Chapter 2 highlighted the fact that many similarities between problem gambling and alcoholism exist. In terms of prevention and treatment of compulsive gambling, a public health approach similar to that employed with alcohol is being advocated for gambling by some (Shaffer and Korn, 2002).

A public health approach is based on health promotion, prevention, and harm reduction principles.

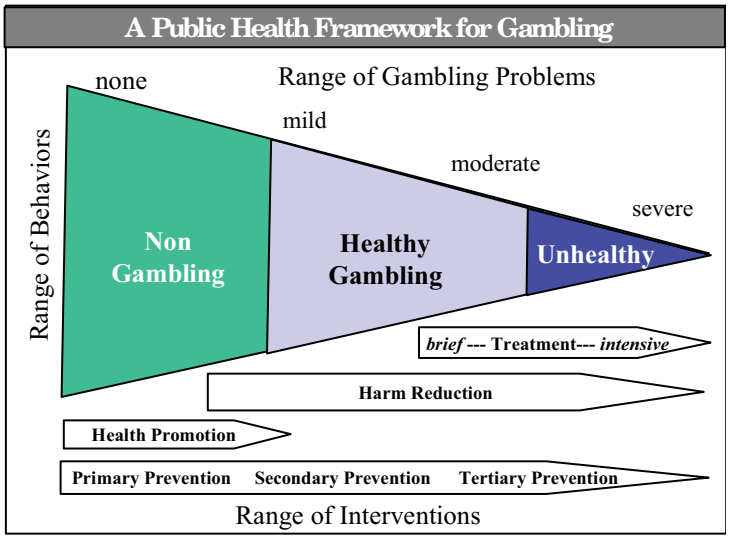
A public health approach focuses on broad impacts rather than specific behaviors of an individual. Public health actions are based on health promotion, disease prevention, and harm reduction principles. For example, public health approaches to the harmful effects of alcohol are evidenced in the warning labels on alcoholic products, alcohol awareness campaigns, “drink responsibly” campaigns, and educational and prevention campaigns directed at school-age children.

Concerns about problem gambling are beginning to be considered through a public health perspective (Korn, 2002; Korn and Shaffer, 2002; Shaffer, 2003). The classic public health model of host-agent-environment, is usually applied to infectious diseases. For example, West Nile virus involves the host (person infected), the agent (the virus), and the environment (birds, mosquitos, and mosquito breeding areas). All three are connected to spread the disease, and actions can be directed at any of the three to prevent

transmission of the disease: the person can stay indoors, the transmission of the virus can be reduced by controlling the mosquito population, and standing water can be removed.

Applying this model to gambling involves the host as the individual who chooses to gamble and who, because of individual attributes, may be at risk for problems; the agent is gambling activities (lotteries, slot machines, horse racing, bingo); and the environment is both the local, community environment and the broader social, cultural, and political context in which gambling occurs. Strategies could be formed to impact the individual (awareness and treatment); to impact gambling venues (regulatory and licensing requirements); and to impact the environment (limiting gambling venues, community awareness of problem gambling, mental health professionals specializing in gambling treatment). Figure 5.A below displays a public health perspective on gambling behavior.

Figure 5.A



Source: Shaffer (2003)

A public health strategy does not focus only on problem gambling, but includes addressing positive benefits of gambling such as social interaction and skill building.

Applying a public health strategy involves addressing gambler characteristics, gambling activities, and the social settings (both locally and nationally) with different levels of intervention. It is not restricted to focusing only on problem or compulsive gambling, and includes positive benefits of gambling such as social interaction, adult play, and skill building. Skill building includes memory enhancement, problem solving, mathematics, and improved concentration. Communities may also experience economic benefits.

The public health approach addresses a continuum of behaviors from no gambling to compulsive gambling; a range of problems

from none to severe; and a range of interventions from health promotion and primary prevention to intensive treatment.
The following principles are cited as public health goals related to gambling (Korn, 2002)

- Prevention of gambling-related problems in individuals and groups at risk of problem gambling;
- Promotion of informed and balanced attitudes, behaviors, and policies about gambling and gamblers by individuals and communities; and
- Protection of vulnerable groups from gambling-related harm.

The public health framework emphasizes the importance of education, awareness, prevention and treatment of compulsive gambling.

The public health framework emphasizes the importance of education, awareness, prevention, and treatment of compulsive gambling. As noted earlier, the privately funded Kentucky Council on Compulsive Gambling has undertaken several efforts to create awareness about compulsive gambling in the Commonwealth. The effectiveness of its awareness programs, as well as those recently put in place by Kentucky's gambling industries, have not been evaluated. In fact, no research has been identified that evaluates the effectiveness of gambling awareness campaigns.

The availability of treatment for compulsive gambling by licensed professionals appears to be limited in Kentucky. Specific training in the treatment of compulsive gambling, however, is becoming more available to Kentucky clinicians. There are no publicly funded treatment programs in the state specifically targeting the compulsive gambler. Often the primary resource for treatment is Gamblers Anonymous.

A common theme in comments from Gamblers Anonymous attendees was a need to improve awareness about the risk of gambling and the need for treatment options.

Comments from Gamblers Anonymous attendees were consistent with findings in this chapter regarding limited awareness about compulsive gambling and sparse treatment options. The final part of the Gamblers Anonymous questionnaire, reported on in Chapter 4, was an open-ended comment section. The most common theme in these comments was the need to improve both the awareness of problems that may arise from gambling and the treatment options available to compulsive gamblers. The following comments stand as examples:

"There must be education on the dangers of gambling and there should be an inpatient facility … for treatment of compulsive gamblers."

"Some sort of treatment center would be definitely needed to help … get a handle on … addiction/illness."

"Kentucky needs a place someone can get help for any gambling addictions. There needs to be much more publication on how gambling can turn into an addiction for someone."

Works Cited

American Psychiatric Association. *Diagnostic and Statistical Manual of the Mental Disorders (DSM-III) (3rd ed.)*. Washington, DC: APA, 1980.

American Psychiatric Association. *Diagnostic and Statistical Manual of the Mental Disorders —Revised (DSM-III-R) (3rd ed.)*. Washington, DC: APA, 1987.

American Psychiatric Association. *Diagnostic and Statistical Manual of the Mental Disorders (DSM-IV) (4th ed.)*. Washington, DC: APA, 1994.

Australia's Productivity Commission. *Australia's Gambling Industries, Report No. 10*. AusInfo, Canberra, 1999.

Barron, John M., Michael E. Staten, and Stephanie M. Wilshusen. "The Impact of Casino Gambling on Personal Bankruptcy Filing Rates." *Contemporary Economic Policy* 20 (2002). 440-455.

Barron, J. "Making Diagnosis Meaningful: Enhancing Evaluation and Treatment of Psychological Disorders." American Psychological Association, 1998.

Berman, Linda, and Mary-Ellen Siegel. *Behind the 8-Ball: A Guide for Families of Gamblers*. New York: Fireside/Parkside, 1992.

Blaszczynski, A. "Pathways to Pathological Gambling: Identifying Typologies." *The Electronic Journal of Gambling Issues,* 1 (2000).

Blaszczynski, A., and Z. Steel. "Personality Disorders Among Pathological Gamblers." *Journal of Gambling Studies*, 14(1), (1998). 51-71.

Breen, R.B., and M. Zimmerman. "Rapid Onset of Pathological Gambling in Machine Gambling." *Journal of Gambling Studies* 18 (2002). 31-43.

Breiter, H.C., et al. "Functional Imaging of Neural Responses to Expectancy and Experience of Monetary Gains and Losses." *Neuron* 30 (2001). 619-630.

Chadbourne, C., P. Walker, and M. Wolfe. *Gambling, Economic Development, and Historic Preservation*. Chicago, IL: American Planning Association, 1997.

Christensen, T. "Problem Gambling Service Delivery Networks." University of Omaha. Aug. 25, 2003 < www.unomaha.edu/~wwwpa/project/christensen>.

Curran, D., and F. Scarpitti. "Crime in Atlantic City: Do Casinos Make a Difference." *Deviant Behavior* 12 (1991). 431-449.

Custer, R.L., and L. F. Custer. "Characteristics of the Recovering Compulsive Gambler: A Survey of 150 Members of Gamblers Anonymous." Paper presented at the Fourth National Conference on Gambling. Reno, NV, 1978.

Custer R.L., and H. Milt, eds. *When Luck Runs Out: Help for Compulsive Gamblers and Their Families.* New York: Facts on File. 1985.

Davis, Gary, and Dennis Brissett. *Comparing the Pathological and Recreational Gambler: An Exploratory Study*. Minnesota Department of Human Services. 1995.

Derevensky, J.L., and R. Gupta. "Prevalence Estimates of Adolescent Gambling: A Comparison of the SOGSRA, DSM-IV-J, and the GA 20 Questions." *Journal of Gambling Studies* 16 (2000). 227–251.

Division of Addictions at Harvard Medical School. "Location, Location, Location: Casino Accessibility and Prevalence Rates." *Weekly Addiction Gambling Education Report (The WAGER)* 8(9), 2003.

Eadington, William R. "Contributions of Casino Style Gambling to Local Communities," *Annals of the American Academy of Political and Social Sciences* Vol. 556 (1998). 53-65.

Eadington, William R. "The Economics of Casino Gambling." *Journal of Economic Perspectives* 13(3) (1999). 173-192.

Gerstein (nee Toce), Marianna, D. Gerstein, and R. Volberg. Presentation titled "A Hierarchy of Gambling Disorders in the U.S. Population." Fifth European Conference on Gambling Studies and Policy Issues. Barcelona, Spain: Oct. 2002.

Gotestam, K.G., and Agneta Johansson. "Characteristics of Gambling and Problematic Gambling in the Norwegian Context A DSM-IV-based Telephone Interview Study." *Addictive Behaviors* 28 (2003). 189-197.

Grinols, Earl L., and David B. Mustard. "Measuring Industry Externalities: The Curious Case of Casinos and Crime." 2001. Sept. 2003 <http://www.terry.uga.edu/people/dmustard/casinos.pdf>.

Gupta, R., and J. L. Derevensky. "Adolescent Gambling Behavior: A Prevalence Study and Examination of the Correlates Associated with Problem Gambling." *Journal of Gambling Studies* 14(4) (1998). 319-345.

Gupta, R., and J. L. Derevensky. "Adolescents with Gambling Problems: From Research to Treatment." *Journal of Gambling Studies* 16(2-3) (2000). 119-134.

Klotter, James C. "Two Centuries of the Lottery in Kentucky." *The Register of the Kentucky Historical Society* 87(4) (1989). 410-411.

Korn, David. "Examining Gambling Issues From a Public Health Perspective." *Electronic Journal of Gambling Issues.* June 2002.

Ladouceur, R., D. Dub´e, , and A. Bujold. "Gambling Among Primary School Students." *Journal of Gambling Studies* 10(4) (1994). 363-370.

Ladouceur, R., et al. "Pathological Gambling and Related Problems Among Adolescents." *Journal of Child and Adolescent Substance Abuse* 8 (1999). 55-68.

Lesieur, H.R., and S. B. Blume. "The South Oaks Gambling Screen (SOGS): A New Instrument for the Identification of Pathological Gamblers." *American Journal of Psychiatry* 144 (1987). 1184-1188.

Lesieur, H.R., and S. B. Blume. "When Lady Luck Loses: Women and Compulsive Gambling." *Feminist Perspectives on Addictions*. Nan van den Bergh (ed.). New York: Springer, 1991.

Lesieur, H.R., and R. J. Rosenthal. "Pathological Gambling: A Review of the Literature," *Journal of Gambling Studies* 7 (1991). 5-40.

Lesieur, Henry. "Costs and Treatment of Pathological Gambling." *Annals of the American Academy of Political and Social Science* (1998). 153-171.

Lindner, R.M. "The Psychodynamics of Gambling." *Annals of the American Academy of Political and Social Science* 269 (1950). 93-107.

Moore, T., and T. Jadlos. *The Etiology of Pathological Gambling: A Study to Enhance Understanding of Causal Pathways as a Step Towards Improving Prevention and Treatment.* Wilsonville, OR: Oregon Gambling Addiction Treatment Foundation, 2002.

Morgan, T., Kofoed, L., J. Buchkoski, and R. D. Carr. "Video Lottery Gambling: Effects on Pathological Gamblers Seeking Treatment in South Dakota." *Journal of Gambling Studies*, 12(4) (1996). 451-460.

Murray, John B., "Review of Research on Pathological Gambling." *Psychological Reports* 72 (1993). 719-810.

National Opinion Research Center. *Gambling Impact and Behavior Study.* Prepared for the National Gambling Impact Study Commission, 1999.

National Research Council. *Pathological Gambling: A Critical Review*. Washington D.C.: National Academy Press, 1999.

Nichols, Mark W., B. Grant Stitt, and David Giacopassi. "Casino Gambling and Bankruptcy in New United States Casino Jurisdictions." *The Journal of Socio-Economics* 29 (2000). 247-261.

Petry, N.M. "How Treatments for Pathological Gambling Can be Informed by Treatments for Substance Abuse Disorders." *Experimental and Clinical Psychopharmacology* 10(3) (2002). 1874-1192.

Radden, J. "Recent Criticism of Psychiatric Nosology: A Review." *Philosophy, Psychiatry, and Psychology* 1(3) (1995). 193-200.

Shaffer, H.J., and M. M. Hall. "Estimating the Prevalence of Adolescent Gambling Disorders: A Quantitative Synthesis and Guide Toward Standard Gambling Nomenclature. *Journal of Gambling Studies* 12(2) (1996). 193-214.

Shaffer, Howard J., Matthew N. Hall, and Joni Vander Bilt. *Estimating the Prevalence of Disordered Gambling Behavior in the United States and Canada: A Meta-Analysis.* Boston, Mass: President and Fellows of Harvard College, 1997.

Shaffer, Howard J. "Rethinking Addiction: How Gambling and Other Behavioral Addictions are Changing the Concept and Treatment of Alcohol and Substance Abuse Disorders" *Academy News Issue 2*, American Academy of Health Care Providers in Addictive Disorders, (2003).

Shaffer, Howard J. *A Public Health Perspective on Gambling: The Four Principles.* Illinois Coalition to Curb Problem Gambling. American Gaming Association Responsible Gaming Lecture Series, Chicago. Feb. 25, 2003. June 25, 2003 <http://www.hms.harvard.edu/doa/html/handouts/publichealth4principals.pdf >.

Shaffer, Howard J., and David Korn. "Gambling and Related Mental Disorders: A Public Health Analysis." *Annual Review of Public Health* 23 (2002). 171-212.

Sweeting, Patricia D., and Joan L. Weinberg. *The Secret Invisible Addiction: Co-morbidity of Substance Abuse and Gambling*. Paper presented at the 2002 American Association of Integrative Medicine, Duke University School of Medicine. Sept. 27, 2002. Sept. 5, 2003 <http://www.fullspectrumrecovery.com/articles/uploaded/Gambling+The%20Secret%20Invisib.pdf >.

Stinchfield, R., R. Govoni, and G. R. Frisch. *Critical Review of Problem Gambling Screening and Assessment Instruments.* Manuscript submitted for publication. 2001.

Stinchfield, R., et al. *Gambling Treatment Outcome Monitoring System (GAMTOMS): Final Report and User Manual.* Saint Paul, MN: Compulsive Gambling Program, Mental Health Division, Minnesota Department of Human Services, 2001.

Stitt, Grant. "Effects of Casino Gambling on Crime and Quality of Life in New Casino Jurisdictions, Final Report." National Institute of Justice Project 98-IJ-CX-0037, 2001.

Thalheumer, Richard, and Mukhtar Ali. "Personal Bankruptcy and its Relationship to Pari-Mutuel Wagering and Casino Gambling." Department of Equine Business, University of Louisville. Working Paper 02-01: April 2002.

The WAGER. Division of Addictions at Harvard Medical School. "Treatment for Pathological Gambling: A Pharmacological Approach." *Weekly Addiction Gambling Education Report* 7(23), 2003.

Thompson, William N., Ricardo Gazel, and Dan Rickman. *The Social Costs of Gambling in Wisconsin.* Wisconsin Policy Research Institute, 1996.

Thompson, William N., Ricardo C. Gazel, and Dan Rickman. "Social and Legal Costs of Compulsive Gambling." *Gaming Law Review* 1 (1997). 81–89.

Thompson, William N., Ricardo Gazel, and Dan Rickman. "Social Costs of Gambling: A Comparative Study of Nutmeg and Cheese State Gamblers." *Gaming Research and Review* 5(1) (1999). 1-16.

United States. Department of the Treasury. *A Study of the Interaction of Gambling and Bankruptcy,* 1999.

United States. General Accounting Office. *Impact of Gambling: Economic Effects More Measurable Than Social Effects* (Report to the Honorable Frank R. Wolf GGD-00-78). Washington, D.C.: United States General Accounting Office, 2000.

United States. National Gambling Impact Study Commission (NGISC). *National Gambling Impact Study Commission Final Report,* 1999.

United States Surgeon General's Report on Mental Health, 1999.

Vina, Lynda de la, and David Bernstein. "The Impact of Gambling on Personal Bankruptcy Rates." *The Journal of Socio-Economics* 31 (2002). 503-509.

Volberg, R.A. "Prevalence Studies of Problem Gambling in the United States," *Journal of Gambling Studies* 12(2) (1996). 111-128.

Volberg, R.A. *Gambling and Problem Gambling in Mississippi: A Report to the Mississippi Council on Compulsive Gambling*. Social Science Research Center Mississippi State University, 1997.

Volberg, R.A. *When the Chips are Down.* The Century Foundation Press, New York, 2001.

Volberg, R. (1998). "Gambling and Problem Gambling among Adolescents in New York." Report to the New York Council on Problem Gambling. Aug. 1998. Albany, NY.

Walker, Douglas M., and A. H. Barnett. "The Social Costs of Gambling: An Economic Perspective." *Journal of Gambling Studies* 15(3) (1999). 181-212.

Walker, D.M. "Methodological Issues in the Social Cost of Gambling Studies." *Journal of Gambling Studies* 19(2) (2003). 149-184.

Walker, Robert, and Erin Stevenson. *Gambling Treatment Survey: A Special Report for the Kentucky Division of Substance Abuse and the Kentucky Legislative Research Commission*. Prepared by the University of Kentucky Center on Drug and Alcohol Research, 2003.

Wharton Econometric Forecasting Associates (WEFA Group). "A Study Concerning the Effects of Legalized Gambling on the Citizens of the State of Connecticut." Co-authored by Henry Lesieur and William Thompson. Eddyston, PA: WEFA, June, 1997.

Wilson, Jeremy M. "Riverboat Gambling and Crime in Indiana: An Empirical Investigation." *Crime and Delinquency* 47 (2001). 610-640.

Wray, I., and M. Dickerson. "Cessation of High Frequency Gambling and 'Withdrawal' Symptoms." *British Journal of Addiction* 76 (1981). 401-405.

Appendix A

Recent Kentucky Gambling Legislation

Summary of Legislative Changes to Pari-Mutuel Wagering 1988 - 2003		
Year	**Bill**	**Summary of Legislation**
1988	HB 956	Authorizes inter-track wagering, which is pari-mutuel wagering on simulcast horse races from an in-state host race track by patrons at an in-state receiving race track; authorizes telephone account wagering, which is pari-mutuel wagering from a holder of an account set up for this purpose with specific tracks.
1990	HB 536	Amends the process for awarding inter-track wagering dates to race tracks.
1992	HB 749	Authorizes simulcast facilities, which are facilities designed to allow pari-mutuel wagering on horse races by patrons at a remote facility who can not attend live racing.
1994	HB 898	Authorizes interstate whole card simulcasting, which is pari-mutuel wagering by patrons on simulcast horse races from a race track located in another state or foreign country by patrons at a receiving race track or simulcast facility.
1998	HB 566	Requires that the commission from pari-mutuel wagers at simulcast facilities be redistributed in a prescribed manner; permits a race track to own or lease a noncontiguous facility within a 60-mile radius of the race track of ownership under certain conditions.
1998	SB 120	Limits inter-track wagering in a geographic area containing more than one race track within a 50-mile radius of another track to simulcasting and pari-mutuel wagering of the same breed of horse as the receiving track is licensed to race.
2000	SB 152	Excludes the payment of the 1 percent excise tax on pari-mutuel wagering for economic development purposes if agreement of the local governing body and the race track establishing the facility; excludes a host track from the excise tax imposed on pari-mutuel wagering if the race track hosts a one-day international horse racing event that distributes in excess of $10 million in purses; excludes a noncontiguous track facility established on or after January 1, 1999, from the excise tax on pari-mutuel wagering if facility is established and operated by a licensed race track which has a total annual handle on live racing of $250,000 or less.
2003	HB 389	Allows a race track licensed to conduct quarter horse racing to receive simulcasts and conduct interstate pari-mutuel wagering on certain quarter horse races and allows all other race tracks to receive simulcasts and conduct interstate pari-mutuel wagering on quarter horse races; provides for separate commission splits; provides that when a quarter horse race is run at a Kentucky race track, the commission to the Kentucky Quarter Horse Purse Program shall be a certain percentage from the host track's purse share.

Source: LRC staff analysis of legislation passed by the Kentucky General Assembly.

Legislation to Expand or Restrict Gambling in Kentucky 1994 - 2003

Year	Act	Description	Pass?
1994	HB 206	Omnibus bill to regulate charitable gaming.	Yes
	HB 898	Authorize interstate whole card simulcasting.	Yes
	SB 307	Allow track to receive simulcasting of no more than two full cards of racing from another state.	Yes
1996	HB 5	Omnibus revision to charitable gaming statutes which specifies that charitable gaming shall not include slot machines, electronic video gaming devices, wagering on live sporting events, nor simulcast broadcasts of horse races.	Yes
	SB 82	Allow chambers of commerce to conduct one charitable gaming activity per year.	No
	SB 387	Repeal of the state lottery.	No
	SB 388	Ban advertising of the state lottery that invites any participation in the state lottery.	No
1998	HB 251	Prohibit promotional advertising of the state lottery but permit certain advertising designed to inform the public of information on lottery games.	No
	HB 263	Omnibus revision to charitable gaming statutes which adopts more stringent standards for the conduct of "casino nights," a type of special limited charity fundraising event.	Yes
	HB 395	Amend definition of "track" to permit a track to have a noncontiguous facility within a 25-mile radius of track.	No
	HB 566	Permit a race track to own or lease a noncontiguous facility within a 60-mile radius of the race track of ownership under certain conditions.	Yes
	SB 120	Limit inter-track wagering in a geographic area containing more than one track within a 50-mile radius of another track to simulcasting and pari-mutuel wagering of the same breed of horse as the receiving track is licensed to race.	Yes
	SB 222	Repeal of the state lottery.	No
	SB 437	Change the definition of "track" to permit a track to have noncontiguous facilities within a 60-mile radius of the track, provided they are not within a 60-mile radius of another track or within 40 miles of a simulcast facility.	No
2000	HB 294	Permit a charitable organization that has established and maintained it place of business in a county for at least one year to conduct a raffle drawing in a county other than the one in which the organization's place of business is located.	Yes
	HB 965	Amend the Constitution to permit the General Assembly to allow video lottery terminals and provide for certain uses of the revenue.	No
	HB 1007	Amend the Constitution to permit the General Assembly to exempt motor vehicles from taxation, allow video lottery terminals, and provide for certain distribution of revenue.	No
	SB 155	Prohibit the Kentucky Lottery Commission from approving or using games involving video lottery terminals or similar devices without specific legislative authorization.	No
2001	HB 248	Prohibit charitable organizations from selling pulltabs where bingo sessions are held.	No
2002	HB 114	Establish a new lottery scratch-off game to benefit Kentucky veterans program trust fund.	No
	HB 588	Establish a new lottery scratch-off game to benefit firefighters disability trust fund.	No
	HB 743	Omnibus revisions to charitable gaming statutes to change department to regulatory commission; increase bingo payout from $5,000 to $7,500; allow progressive bingo game with prize limit of $10,000; allow combined bingo game with prize limit of $50,000.	No
	HB 768	Authorize and implement electronic gaming at horse race tracks only; create Kentucky Gaming Commission to oversee.	No

	HB 872	Create the multi-jurisdictional simulcasting and interstate wagering totalizator hub authorization act.	No
2003	HB 45	Establish a new lottery scratch-off game to benefit the Kentucky veterans trust fund.	No
	HB 260	Delete requirements basing the number of bingo games a facility can hold on the class of city in which the facility is located.	No
	HB 277	Establish a new lottery scratch-off game, with proceeds to be deposited in the Support Education Excellence in Kentucky fund.	No
	HB 389	Allow a track licensed to conduct quarter horse racing to receive simulcasts and conduct interstate pari-mutuel wagering on certain quarter horse races and allow all other tracks to receive simulcasts and conduct interstate pari-mutuel wagering on quarter horse races.	Yes
	HB 439	Establish a new lottery scratch-off game to advertise Kentucky tourism.	No
	HB 536	Establish licensing aspects of electronic gaming at tracks as part of state lottery.	No
	HB 537	Establish appropriations aspects of electronic gaming at tracks as part of state lottery.	No
	HB 559	Amend Constitution to permit General Assembly to authorize gambling at tracks.	No
	SB 124	Establish a new lottery scratch-off game for the Kentucky veterans assistance program.	No

Source: LRC staff analysis of Final Legislative Records from 1994, 1996, 1998, 2000, 2001, 2002, and 2003.

Appendix B

Compulsive Gambling Survey

June, 2003

Screened for Kentuckians 18 years old and older. Random selection based on most recent birthday.

Hello. You are being invited to participate in a research study. The purpose of this study is to help evaluate gambling behaviors. This study is being conducted by the Survey Research Center at the Urban Studies Institute at the University of Louisville.

Please remember that your participation in this study is voluntary. The survey should take approximately 5 to 10 minutes to complete. You may decline to answer any question. There are no risks or benefits to you for participation; however, the knowledge gained may benefit others. The results are completely anonymous.

First, I have a few questions so that we can classify your responses. At no time will they be used to identify anyone.

Demographics:

1. What is your age?_____
2. Gender: Male_____ Female_____
3. What is your race and/or ethnicity?
   A. White_____
   B. Black_____
   C. Asian_____
   D. Hispanic_____
   E. Other_____
4. What is your marital status?
   Married_____ Widowed_____ Divorced_____ Never married_____
5. Do you have any children? _____ If yes how many? _____
6. What is the highest level of education you have completed?
   A. Some high school_____
   B. High School_____
   C. Some college _____
   D. College_____
   E. Post Graduate_____
7. Are you currently working for pay? Yes___ No___ If yes, how many hours per week do you work?
   _____

8. Including all sources of income and all salaries from employment and investments, what is your annual income before taxes?

   A. $0 - $9,999 _____

   B. $10,000 - $24,999 _____

   C. $25,000 - $49,999 _____

   D. $50,000 - $74,999 _____

   E. $75,000 - $99,999 _____

   F. $100,000 or more _____

Next are some questions about different types of gambling activities. Your responses will remain completely anonymous and will only be used in combination with other individual answers.

Gambling Activities:

9. Please indicate *how often* you have wagered money in the past **12 months** on each of the following gaming activities. Indicate WEEKLY, MONTHLY, A FEW TIMES, or NEVER*; also *how much money*, on average, do you wager each time you participate in each of these gaming activities.

   A. KENTUCKY STATE LOTTERY

   Weekly _____

   Monthly _____

   A few times_____

   Never_____

   How much is wagered each time, on average?_____

   B. CHARITABLE GAMING
   (Bingo, Pulltabs, Raffles, etc.)
   Weekly _____

   Monthly _____

   A few times_____

   Never_____

   How much is wagered each time, on average?_____

   C. CASINOS ON KENTUCKY'S BORDERS
   (Aztar, Harrah's, Caesar's, Belterra, Argosy, Grand Victoria, Tri-State Racetrack)

   Weekly _____

   Monthly _____

   A few times_____

   Never_____

   How much is wagered each time, on average?_____

D. OTHER CASINOS
(Las Vegas, Atlantic City, Mississippi, etc.)

Weekly _____

Monthly _____

A few times_____

Never_____

How much is wagered each time, on average?_____

E. *KENTUCKY RACETRACKS – LIVE RACING (because each track is open only a few weeks out of the year answer daily, weekly, monthly, once or twice a year, or never)
Daily (when open)_____

Weekly (when open) _____

Monthly (when open)_____

Once or twice a year (when open)_____

Never_____

How much is wagered each time, on average?_____

F. OFF TRACK BETTING (Simulcast)

Weekly _____

Monthly _____

A few times_____

Never_____

How much is wagered each time, on average?_____

G. PRIVATE OR NON-COMMERCIAL
(sporting events, card games, dice, etc.)

Weekly _____

Monthly _____

A few times_____

Never_____

How much is wagered each time, on average?_____

H. INTERNET GAMING
Weekly _____

Monthly _____

A few times _____

Never_____

How much is wagered each time, on average?_____

I. OTHER
(out of state lotteries, out of state racetracks, day trading stocks, etc.)
Weekly _____

Monthly _____

A few times_____

Never_____

How much is wagered each time, on average?_____

Since some people experience troubles with gambling, the next set of questions are designed to help determine what problems are associated with gambling. Please answer each question as honestly, accurately and openly as possible. The results may help in developing policies for the prevention and treatment of gambling problems. Your responses will remain completely anonymous. Any information that might identify you will not be included in any report or public communication and will only be reported in combination with answers from other individuals.

Gambling Behavior (past 12 months): Please indicate if you have experienced any of the following related to gambling in the past 12 months.

10. After losing money gambling, do you often return another day in order to get even? Yes _____ No_____
11. Have you found that you need to gamble increasing amounts of money in order to achieve the excitement you desire? Yes _____ No_____
12. Do you gamble as a way to escape from problems or as a way to relieve anxiety, depression, guilt or feelings of helplessness? Yes _____ No_____
13. Have you ever tried, but were unsuccessful in cutting back, controlling or stopping gambling? Yes _____ No_____
14. Have you ever felt restless or irritable whenever you have cut down or stopped gambling? Yes _____ No_____
15. When not gambling, are you preoccupied with reliving past gambling experiences, such as handicapping or planning your next gambling venture, or thinking of ways to get money with which to gamble? Yes _____ No_____
16. Have you lied to those you care about to conceal the extent of your gambling involvement? Yes _____ No_____
17. Have you written bad checks, committed forgery, fraud, theft, or embezzlement to finance gambling? Yes _____ No_____
18. Have you jeopardized or lost a significant relationship, job, educational or career opportunity because of gambling? Yes _____ No_____
19. Do you rely on others to provide money to relieve a desperate financial situation caused by gambling? Yes _____ No_____
20. Have you every sought help to cut back or stop gambling? Yes _____ No_____

The interview is complete. Thank you very much for your assistance.

Appendix C

LRC Gambling Survey: Unweighted versus Weighted Sample

	Unweighted Sample %	Weighted Sample %	2000 Census %
Gender			
Male	40.5%	48.1%	48.0%
Female	59.5%	52.0%	52.0%
Age			
18-24	6.5%	13.2%	13.2%
25-54	53.4%	58.1%	58.0%
55 plus	37.1%	28.7%	28.8%
Race			
White	91.0%	90.0%	90.9%
Black	7.5%	8.1%	6.8%
Other	1.5%	1.8%	2.3%

source: 2003 LRC Gambling Survey administered by the University of Louisville's Urban Studies Institute, and U.S. Census Bureau 2000 decennial census.

Appendix D

Gamblers Anonymous Survey

The purpose of this survey is to find out different costs associated with problem gambling. This project is being conducted by the Kentucky Council on Problem Gambling for the Kentucky Legislative Research Commission. The results may help public officials develop policies and help fund various assistance programs. Please be as honest and accurate and open as possible (try not to exaggerate or conceal). *The survey results will be completely anonymous. Please do not put your name anywhere on the survey, or identify yourself in any way.* Place the finished survey in the collection envelope. Your participation is voluntary; do not feel that you have to answer any questions or all the questions. The information will only be used in a combined sense for the purpose of building a better understanding of the costs associated with problem gambling.

1. Please indicate which of the following types of gambling gave you a problem in your lifetime. For each type, mark one answer: "not a problem," "some problem but not serious," or "serious problem."

	Not a problem	Some problem, but not serious	Serious problem
a. Kentucky Lottery	0( )	1( )	2( )
b. Charitable Gaming (bingo, pulltabs, etc.)	0( )	1( )	2( )
c. Casinos on Kentucky's Border	0( )	1( )	2( )
d. Other Casinos (Las Vegas, Atlantic City, etc.)	0( )	1( )	2( )
e. Kentucky Racetracks – Live Racing	0( )	1( )	2( )
f. Off Track Betting- Simulcast	0( )	1( )	2( )
g. Sport betting with a bookie	0( )	1( )	2( )
h. Played the stock, options and/or commodities market	0( )	1( )	2( )
i. Internet Gambling	0( )	1( )	2( )
j. Private or non-commercial gambling (sports, cards, dice, etc.)	0( )	1( )	2( )
k. Some form of gambling not listed (please specify):_____	0( )	1( )	2( )

For questions **2** and **3** please indicate which type of gambling you played most frequently. Indicate a second choice only if you played it frequently as well.

2. First choice _____

3. Second choice (if applicable) _____

4. Estimate what percent of your total gambling losses were caused by gambling at

Casinos _____ Racetracks (live) _____ Off Track (simulcast) _____ Lotteries _____

Charitable Gaming _____ Sports betting _____ All Other _____

5. At about what age did you start gambling?____ years old ____ do not remember
6. At what age did you first experience problems with gambling? ____ years old
7. Where did you obtain or borrow money to gamble with or to pay gambling debts? (check "yes" or "no" for each)

a. household money	0( ) no	1( ) yes
b. spouse	0( ) no	1( ) yes
c. relatives or in-laws	0( ) no	1( ) yes
d. banks, loan companies, credit unions	0( ) no	1( ) yes
e. credit cards	0( ) no	1( ) yes
f. loan sharks	0( ) no	1( ) yes
g. cashed in stocks, bonds, other securities	0( ) no	1( ) yes
h. sold personal or family property	0( ) no	1( ) yes
i. borrowed on your checking account (passed bad checks)	0( ) no	1( ) yes
j. a credit line with a bookie	0( ) no	1( ) yes
k. a credit line with a casino	0( ) no	1( ) yes
l. pawn shop	0( ) no	1( ) yes

8. How much money would you estimate you owed as a direct result of your gambling (do not include borrowing for legitimate purposes, such as for cars). Or indicate the amount that showed up on your GA pressure relief form?

0 ( ) nothing
1 ( ) under $1,000 5 ( ) $25,000-49,999
2 ( ) $1,000-4,999 6 ( ) $50,000-99,999
3 ( ) $5,000-9,999 7 ( ) $100,000-249,999
4 ( ) $10,000-24,999 8 ( ) $250,000 or more

8a. Please put a more accurate amount here: $_____
8b. How much of the amount estimated in **8a** was because of gambling in the last twelve months of your gambling? $_____
8c. Estimate how much of the total debt in **8a** will go unpaid (for example include any debt forgiven by filing bankruptcy, or debt that was charged-off by the creditor).
$_____
9. If you stole or obtained money or things through illegal activities and used it to gamble or pay gambling-related debts, what was the approximate value of what you stole?

0 ( ) nothing
1 ( ) under $1,000 5 ( ) $25,000-49,999
2 ( ) $1,000-4,999 6 ( ) $50,000-99,999
3 ( ) $5,000-9,999 7 ( ) $100,000-249,999

4 ( ) $10,000-24,999 8 ( ) $250,000 or more

9a. Please put a more accurate amount here: $_____

9b. How much estimated in **9a** was in the last twelve months of your gambling?
$_____

10. How much money do you estimate you lost in your lifetime as a result of gambling (total losses minus total winnings)? This would include money you earned, borrowed, stole, etc.

00 ( ) nothing 06 ( ) $50,000-99,999
01 ( ) under $1,000 07 ( ) $100,000-249,999
02 ( ) $1,000-4,999 08 ( ) $250,000-499,999
03 ( ) $5,000-9,999 09 ( ) $500,000-999,999
04 ( ) $10,000-24,999 10 ( ) $1,000,000-9,999,999
05 ( ) $25,000-49,999 11 ( ) $10,000,000 or more

10a. Please put a more accurate amount here: _____

11. How much would you estimate you lost (losses minus winnings) in the last year you gambled (include money from all sources)?

0 ( ) nothing
1 ( ) under $1,000 5 ( ) $25,000-49,999
2 ( ) $1,000-4,999 6 ( ) $50,000-99,999
3 ( ) $5,000-9,999 7 ( ) $100,000-249,999
4 ( ) $10,000-24,999 8 ( ) $250,000 or more

11a. Please put a more accurate number here: _____

Questions **12 – 19** are some general background questions and will only be used in a combined sense so that no individual could be identified.

12. Your age is: _____

13. Your sex is: 0 ( ) male 1 ( ) female

14. What is your religion?

1 ( ) Catholic
2 ( ) Protestant (specify denomination: _____)
3 ( ) Eastern Orthodox
4 ( ) Jewish
5 ( ) other (please specify): _____

15. What is your race and/or ethnicity?

1 ( ) Black (Afro-American)
2 ( ) White (Caucasian)
3 ( ) Asian-American
4 ( ) Hispanic-American
5 ( ) Native American/American Indian
6 ( ) other (specify on this line:) _____

16. What is your marital status?

1 ( ) single 4 ( ) divorced
2 ( ) married 5 ( ) widowed
3 ( ) separated 6 ( ) cohabiting (living with someone, but not legally married)

17. If you were ever separated or divorced, was gambling a factor?

0 ( ) never separated or divorced
1 ( ) separated or divorced, but gambling not a factor
2 ( ) yes, separated due to gambling
3 ( ) yes, divorced due to gambling

18. How many children do you have? _____

19. What is your occupation (please select the category that best represents your occupation)?

1 ( ) Executive, Professional, & Managerial
2 ( ) Accountant, Analyst, Technical Support
3 ( ) Administrative Support (Clerical)
4 ( ) Private Household (Homemaker, Cleaning)
5 ( ) Protective Service (Police, Security, etc.)
6 ( ) Sales, Service or Retail
7 ( ) Precision Production, Craft & Repair
8 ( ) Machine Operator or Assembler
9 ( ) Transportation & Material Moving
10 ( ) General Labor
11 ( ) Farming, Forestry & Fishing
12 ( ) Armed Forces

20. Have you ever lost or quit a job due to gambling? 1 ( ) yes 0 ( ) no
20a. If yes, how long did you stay unemployed ? _____ months
21. Have you ever missed time from work due to gambling? 1 ( ) yes 0 ( ) no
21a. If yes, on average, how many hours in a month were missed? _____ hours
22. Have you ever received unemployment benefits? 1 ( ) yes 0 ( ) no
22a. If yes, was this lost of employment related to gambling? 1 ( ) yes 0 ( ) no
22b. Did you ever use your unemployment benefits to gamble? 1 ( ) yes 0 ( ) no
23. Have you ever stolen anything from work in order to gamble or to pay gambling debts? 1 ( ) yes 0 ( ) no
24. Have you ever received food stamps? 1 ( ) yes 0 ( ) no
24a. If yes, did you receive food stamps because of low income caused by gambling? 1 ( ) yes 0 ( ) no
24b. Did you ever gamble with food-stamps or money received for food stamps? 1 ( ) yes 0 ( ) no
25. Have you ever received Federal or State income assistance(welfare)? 1 ( ) yes 0 ( ) no
25a. If yes, was this because of low income due to gambling? 1 ( ) yes 0 ( ) no
25b. Did you ever gamble with welfare money? 1 ( ) yes 0 ( ) no
26. Have you ever received Social Security income? 1 ( ) yes 0 ( ) no
26a. Did you ever gamble with Social Security money? 1 ( ) yes 0 ( ) no

27. How many years of education do you have?

1 ( ) 8th grade or under
2 ( ) 9 to 11 grades
3 ( ) high school or GED
4 ( ) some college or associate degree
5 ( ) 4 year college degree
6 ( ) post-graduate degree

28. What is the approximate (current) income of your family (all income earners you live with combined)?

1 ( ) less than $15,000
2 ( ) $15,000-24,999
3 ( ) $25,000-49,999
4 ( ) $50,000-74,999
5 ( ) $75,000-99,999
6 ( ) $100,000 or more

Questions **29 – 37** relate to your experiences with the legal system.

29. How many times have you been arrested by the police?
0( )Never 1( )Once 2( )Twice 3 or more( )

30. How many of these arrests were related to your gambling?
0( )Never 1( )Once 2( )Twice 3 or more( )

31. How many times have you been sued to collect gambling related debts?
0( )Never 1( )Once 2( )Twice 3 or more( )

32. How many times have you been tried in court because of gambling related offenses?
0( )Never 1( )Once 2( )Twice 3 or more( )

33. How many convictions have you had because of gambling related offenses?
0( )Never 1( )Once 2( )Twice 3 or more( )

34. Have you ever been placed on court ordered probation? 1 ( ) yes
0 ( ) no

34a. If placed on probation, was this for a gambling-related offense? 1 ( ) yes
0 ( ) no

34b. What was the offense? _____

35. Have you ever been incarcerated? 1 ( ) yes
0 ( ) no

35a. If incarcerated, was this for a gambling related offense? 1 ( ) yes
0 ( ) no

35b. What was the offense? _____

36. How much time have you served in jail or prison for gambling related offenses?
_____months

37. Have you ever filed bankruptcy? 1 ( ) yes
0 ( ) no

37a. If yes, estimate the amount of doubt forgiven in the bankruptcy. $_____

Questions **38 – 47** relate to other problems that may be associated with problem gambling and possible therapy for problems with gambling.

38. Do you believe that you have (or had) a problem with ...?

a. compulsive gambling	1 ( ) yes	0 ( ) no
b. alcohol	1 ( ) yes	0 ( ) no
c. illegal or prescription drugs	1 ( ) yes	0 ( ) no
d. an eating disorder (anorexic, bulimic, etc.)	1 ( ) yes	0 ( ) no
e. compulsive shopping or spending	1 ( ) yes	0 ( ) no
f. have another problem	1 ( ) yes	0 ( ) no

If yes, what is the problem? _____

39. Have you ever felt so low you thought of committing suicide? 1 ( ) yes
0 ( ) no

40. Have you ever felt so low you planned how to commit suicide? 1 ( ) yes
0 ( ) no

41. Have you ever attempted suicide? 1 ( ) yes
0 ( ) no
42. How long have you been in Gamblers Anonymous? ____ years ____ months ____ days
43. Have you been able to stay "clean" and stop all gambling since coming to Gamblers Anonymous? 1 ( ) yes 0 ( ) no
44. Have you ever been to a therapist or doctor specifically for treatment of your gambling
problem? 1 ( ) yes 0 ( ) no
44a. If yes, estimate the total cost for the therapy? $_____
44b. How much did the therapist or doctor know about compulsive or problem gambling?
0 ( ) nothing
1 ( ) some
2 ( ) the therapist or doctor was quite knowledgeable

44c. How did you pay for this therapy?
1 ( ) out of pocket for all of it
2 ( ) insurance paid all of it
3 ( ) combination of insurance and out of pocket (co-pay, coinsurance, etc.)
4 ( ) it is still not paid for
45. Have you ever been to a therapist or doctor for treatment of alcohol, drugs, or mental health
problems? 1 ( ) yes 0 ( ) no
45a. If yes, did the therapist or doctor talk to you about your gambling? 1 ( ) yes 0 ( ) no
45b. If yes, how much did the therapist or doctor know about compulsive gambling?
0 ( ) nothing
1 ( ) some
2 ( ) the therapist or doctor was quite knowledgeable
46. Do you have insurance that would cover professional (counseling or psychological) help?
1 ( ) yes 0 ( ) no
47. If there were therapists or doctors who understood compulsive gambling and it was made available, would you go to them for help? 1 ( ) yes 0 ( )no

If you have any comments on this survey, please indicate them here. Thank you for participating.

_____

Appendix E

Econometric Analysis

The current literature on gaming's effect on bankruptcy is not conclusive. Because of this and because a significant contribution is believed to be possible through new research, an empirical investigation was undertaken. This section outlines this new research.

Gaming's impact on bankruptcy is investigated at the county level, specifically Chapter 7 and Chapter 13 nonbusiness bankruptcies. Looking at county-level data is standard in the literature reviewed. While a smaller geographical unit, even down to individual level observations, would be preferred, such data is not readily available. As the dependent measure of county bankruptcy, the literature commonly uses a simple rate per 1,000 people.[1] This method has the advantages of being intuitive and making it easy to compare two counties completely different in size. This is the measure selected for the current research. In addition, using a rate per 1,000 people makes the results of this study more comparable to the current body of literature.

The data used is for Kentucky alone, covering years 1989 to 2000. It is drawn from a variety of sources. Table A.1 provides a listing of data sources employed. While exclusively using Kentucky data presents some weaknesses, it is reasoned that the sample and variation is sufficient to obtain valid results. In total, there are 120 counties in Kentucky observed, with lags, over roughly nine years. This should provide a large enough sample for significant results. In addition, since the data is Kentucky data, there is no question as to the applicability to Kentucky. With no clear and definitive results in the literature, there is a significant concern over the generality of results over geographic areas. The strength of using Kentucky alone is that it should alleviate this problem. This is of special importance given that the primary purpose of this research: to inform the Kentucky General Assembly.

The impact on bankruptcy by two forms of gaming is investigated: casino and pari-mutuel. Kentucky has a long history with pari-mutuel gambling while casino gambling is a newer development. While there are no casinos within Kentucky's boundaries, a number opened along its border during the 1990s. This represents a completely new gaming venue and as such, an increase in gambling access. Along with this introduction of casino gambling, a new horse track opened in Floyd County in 1994, further expanding gaming access in the state. These developments offer a unique natural experiment to researchers. Exploiting both time and cross sectional variation, any effect

[1] Thalhiemer and Ali (2002) are a notable exception. They use the log of bankruptcies as the dependent variable and the log of population as a control

of gaming on bankruptcy rates should be obtainable. Especially of note is that the results are directly relevant to Kentucky since it is Kentucky's experience that is being used.[2]

The independent variables of interest are the gaming access measures. There have been a number of different classification measures used to measure gaming access in the literature. The most basic method used groups counties in two segments: those within 50 miles and those outside of 50 miles of the establishment.[3] If gaming has a different effect in a county 2 miles from a gaming location as opposed to a county 49 miles away, this difference is lost. It is not known if there are substantial differences. However, allowing the gaming variables to enter the model in a less restrictive manner should address this issue.

Thalheimer and Ali (2002) propose a different measure of access to gaming. Their measure is a more "continuous" method, based on the distance a county is from a gaming location and a certain rate of "decay." A problem with this measure is that is assumes the effect of gaming, if any, will always be in the same direction, though at a declining rate, for all counties. Thus, either gaming positively or negatively impacts bankruptcies. The only difference between counties is in the magnitude of the effect. This could be a proper specification but there is no prior reason to expect that this is the case.

Another method in the literature is used by Barren et al (2002). They incorporate a three-county classification: 1) the county has gaming within its borders, 2)the county is within 50 miles of the gaming facility, and 3) the county is greater than 50 miles from the facility. This form is general enough to allow both different magnitudes and directions of effects.

The current research employs a technique similar to Barren et al (2002). Each county is classified in one of three groups: within 25 miles of a gaming facility, between 25 and 50 miles of the gaming facility, and more than 50 miles from the gaming facility. This is done for both casino gaming and pari-mutuel gaming establishments. The difference in parameterization from Barren et al (2002) stems from two main reasons. This first is that Kentucky has small counties by most state measures. In addition, there are only casinos outside, but near, Kentucky's counties. Thus, using a 0-25 miles, 25-50 miles, and more than 50 miles classification achieves the goal of allowing different magnitudes of effects to surface given the uniqueness of the data.

Thus, with this measure of gaming access set up, there are four primary gaming variables: *c25, c50, h25,* and *h50.* These are standard dichotomous variables that are equal to one if true, and zero otherwise:

> *c25* equals one if the county is within 25 miles of a casino
> c*50* equals one if the county is between 25 and 50 miles of a casino.
> *h25* and *h50* are identical types of measures except for horse tracks.

[2] It should be noted that the Kentucky State Lottery was ignored in this research because its introduction predated the sample used. Thus, any effect it may have on bankruptcy is unobtainable with the current sample since all counties have equal access to the lottery.
[3] A method used by the National Opinion Research Center

In addition to allowing gaming to impact county bankruptcies in both the type of gaming and through a discrete measure of distance, time lags of these four variables are included. This is done to separate out any effects that may occur through time. It is not obvious beforehand that a gaming establishment's effects on bankruptcy, if any, should appear immediately or should stay the same through time. Rather, for example, it is possible that any effect on bankruptcy could be time cumulative and thus distinctly not immediate. By including time lags, any effects through time are individually separated out. In total, one- and two-year lags are included. Additional time lags could potentially be useful but given the data constraints of having only data from 1989 to 2000 and the fact that most of the casino's did not become operational until the second half of the 1990s, two lags were the most that was felt could be utilized.[4]

Thus, the model estimated :

$$BankRate_{i,t} = \beta_1 + \beta_2 c25_{i,t} + \beta_3 c25_{i,t-1} + \beta_4 c25_{i,t-2} + \beta_5 c50_{i,t} + \beta_6 c50_{i,t-1} + \beta_7 c50_{i,t-2} + \beta_8 h25_{i,t} + \beta_9 h25_{i,t-1} + \beta_{10} h25_{i,t-2} + \beta_{11} h50_{i,t} + \beta_{12} h50_{i,t-1} + \beta_{13} h50_{i,t-2} + \phi X_{i,t} + \varepsilon$$

$BankRate_{i,t}$, the dependent variable, is the number of bankruptcies per 1,000 people in county *i* at time *t* and $X_{i,t}$ is a matrix of control variables expected to effect the bankruptcy rate. These are listed in Table A.2.

Generalized Least Squares estimation was employed after testing for the appropriateness of random effects using the Bruesh Pagan test for random effects.

RESULTS

The results of the estimation are different based on the form of gaming examined. In general, casinos' impact on the bankruptcy rate is not statistically different from zero. This is true for the contemporaneous effect as well as both lags. There is no significant effect detected on bankruptcies from the introduction of casinos.

The results are somewhat different for pari-mutuel gaming at horse tracks. There is evidence that a county within 25 miles of a track, holding all else constant, does have a higher rate of bankruptcy than other counties. The effect is found in the contemporaneous period and not in the lagged variables, implying that there is not different effects through time. There is no evidence that bankruptcy rates are higher for counties between 25 and 50 miles of the horse track.

The regressions results for the variables of interest can be found in Table A.3

[4] Grinohls and Mustard (2001) introduce this idea of lags in the gambling and crime literature.

Table A.1
Data Sources

Sources
Bureau of Economic Analysis
U.S. Census Bureau
U.S. Court Administrators, compile by Economy.com
Kentucky Cabinet of Health Services, Annual Vital Statistics Reports 1988 – 2000
Federal Reserve Board of Governors
U.S Bureau of Labor and Statisitics

Table A.2
Controls

Variable	Description
adultpop	Adult population
pct18to34	Percent of population between 18 and 34
pct35to44	Percent of population between 35 and 44
pct45to54	Percent of population between 45 and 54
pct55to64	Percent of population between 55 and 64
debtdpi_1	Amount of Personal debt divided by disposable personal income
Popgrow	County population growth rate
pciadult	Per capita adult income
pciadult2	Per capita adult income squared
pcigrow	Per capita adult income growth
pctblack	Percent black
urate_1	Lagged unemployment rate
divrate2_1	Lagged divorce rate
bra1994	Dichotomous variable for Bankruptcy Reform Act of 1994

Table A.3
Results

	Coef.	z	P>|z|
adultpop	2.28E-06	0.95	0.342
pct18to34 *	12.99499	3.24	0.001
pct35to44 *	21.65664	3.94	0.000
pct45to54 *	15.42641	2.76	0.006
pct55to64	12.77745	1.38	0.167
debtdpi_1 *	68.70824	21.58	0.000
popgrow *	-4.76826	-2.35	0.019
pciadult *	0.293674	5.83	0.000
pciadult2 *	-0.00547	-6.53	0.000
Pcigrow	-0.10659	-0.83	0.405
Pctblack *	12.43637	4.49	0.000
Pctmale *	-15.0154	-1.98	0.048
urate_1	0.000678	0.04	0.966
divrate2_1	33.0359	1.76	0.079
bra1994	0.088861	0.71	0.475
c25	0.007148	0.04	0.971
c25_1	-0.27734	-1.09	0.274
c25_2	-0.04192	-0.19	0.846
c50	-0.20746	-1.1	0.271
c50_1	0.085421	0.35	0.727
c50_2	0.245152	1.17	0.244
h25 *	0.711185	2.01	0.045
h25_1	-0.19328	-0.43	0.667
h25_2	-0.01439	-0.04	0.967
h50	0.50559	1.29	0.197
h50_1	0.117232	0.23	0.816
h50_2	-0.16505	-0.42	0.671
constant	-18.3242	-4.28	

*significant at the 5% level

Appendix F
State-Funded Compulsive Gambling Programs
SERVICES PROVIDED

State	***Dept/Div***	***Annual Budget***	***Per Capita Funding***	*Public Awareness*	*Counselor Training*	*Counselor Certification*	*Helpline*	*Prevention*	*Outpatient*	*Inpatient*	*Other*
Arizona	Arizona Lottery	$500,000	0.9	♦			♦				
Connecticut	Department of Mental Health and Addiction	$1,500,000	0.44	♦	♦	♦	♦	♦	♦		
Illinois	Department of Human Services Office of Alcohol and Substance Abuse	$2,000,000	0.16	♦	♦		♦	♦	♦		Research
Indiana	Division of Mental Health	$3,500,000	0.58	♦	♦		♦	♦	♦	♦	
Iowa	Department of Public Health Iowa Gambling Treatment Program	$2,000,000	0.432	♦	♦		♦	♦	♦		
Kansas	Department of SRS Division of Health Care Policy	$100,000	0.04	♦	♦		♦		♦		
Louisiana	Department of Health and Hospitals Office for Addictive Disorders	$2,000,000	0.45	♦		♦	♦	♦	♦	♦	♦
Maryland	Department of Health and Mental Hygiene Alcohol and Drug Abuse Administration	$21,000	0.003	♦	♦		♦				
Massachusetts	Department of Public Health Bureau of Substance Abuse	$1,200,000	0.19	♦	♦	♦	♦		♦		Research
Minnesota	Department of Human Services	$1,500,000	0.33	♦	♦		♦	♦	♦	♦	Assessment of Felons

Table F Continued

State-Funded Compulsive Gambling Programs

SERVICES PROVIDED

State	***Dept/Div***	***Annual Budget***	***Per Capita Funding***	*Public Awareness*	*Counselor Training*	*Counselor Certification*	*Helpline*	*Prevention*	*Outpatient*	*Inpatient*	*Other*
Missouri	Department of Mental Health Division of Alcohol and Drug Abuse	$452,486	0.08		♦	♦			♦		
Nebraska	Department of Health and Human Services Division of Mental Health, Substance Abuse and Addiction Services	$700,000	0.41	♦	♦	♦	♦	♦	♦		
New York	Office of Mental Health OMH-Special Clinical Services	$2,554,000	0.13	♦	♦		♦	♦	♦		
Oregon	Office of Mental Health and Addiction Services	$3,215,464	1.04	♦	♦	♦	♦	♦	♦	♦	
Washington	Department of Social and Health Services, Division of Alcohol and Substance Abuse	$500,000	.08		♦				♦		
West Virginia	West Virginia Lottery	$1,500,000	.83	♦			♦				

Source: Data provided by the Association of Problem Gambling Service Administrators.

Appendix G

Counselor Certification

American Compulsive Gambling Counselor Certification Board

Initial certification from this board requires:

- No history or evidence of addictive disorders involving gambling, drugs, or alcohol for at least two years prior to application for certification;
- 142 clock hours within a five-year period of approved, specific education that includes attendance at a minimum of 15 self-help group meetings;
- 180 hours of practice under a qualified supervisor;
- 750 hour of paid or volunteer experience under qualified supervision within three years prior to application for certification; and
- A passing score on a written examination.

First and second year recertification requirements include 24 clock hours of continuing education and 12 clock hours specifically addressing alcoholism, drug abuse or addiction, psychology or sociology. Third year recertification and all subsequent recertifications require ten clock hours addressing compulsive gambling and 12 clock hours specifically addressing alcoholism, drug abuse or addiction, psychology or sociology.

National Gambling Counselor Certification Board

Criteria for National Certified Gambling Counselor-I (NCGC-I) certification include:

- 30 contact hours of approved gambling specific training or education;
- 300 contact hours of related training or education (chemical dependency, social work, counseling, psychology); and
- at least 100 hours as a gambling counselor in an approved setting supervised by a NGCCB clinical consultant and 50 hours of this may be volunteer work; and
- a passing score on a written examination.

Certification for NCGC-II requires:

- Minimum of 2000 hours (or one year full time employment) as a gambling counselor in an approved setting with a NGCCB clinical consultant and 1000 hours may be volunteer work experience;
- 60 hours of approved gambling specific training or education; and
- 300 contact hours of related training or education (chemical dependency, social work, counseling, psychology).

Recertification is required every three years with evidence of 60 hours of approved continuing education, with 30 of these hours specific to gambling and 15 hours, or 50% of the 30 hours must be conferences on recent research and treatment approaches.

American Academy Of Health Care Providers in the Addictive Disorders

An applicant must first be a Certified Addiction Specialist (CAS) before applying for Gambling Specialist certification. Minimum requirements for CAS include:

- A Masters or Doctorate degree from an accredited health care training program;
- Three years of post-graduate supervised experience in direct care to addicted persons;
- 120 hours of clinical training in basic counseling skills;
- 60 hours of training in a specialty area;
- Passing score on an examination.

Professionals with other degrees or without a degree must have five years of supervised experience in direct care to addicted persons in addition to the previous requirements. Recertification is required each year with evidence of 20 hours of continuing education.

Gambling Specialist designation requires:

- Certified Addiction Specialist designation;
- Documented clinical supervision;
- 60 hours of pathological gambling specific clinical training; and
- A passing score on an examination.