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# Gambling and problem gambling among seniors in Florida : report to the Florida Council on Compulsive Gambling, Inc.

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# GAMBLING AND PROBLEM GAMBLING AMONG SENIORS IN FLORIDA

*Report to the Florida Council on Compulsive Gambling, Inc.*

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April 21, 2003

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## EXECUTIVE SUMMARY

In the United States, there has been both an explosion in access to gambling, and an explosion in the senior population as the baby boom generation ages. As seniors seek out recreational activities, an increasing number spend their time and money gambling. However, very little research has been done on the overall impact of this massive new recreational influence on older Americans.

This report presents the findings of a statewide survey of gambling participation and gambling-related problems among older adults in Florida. Building on the work of the Florida Council on Compulsive Gambling's (FCCG) "National Think Tank on Older Adults and Gambling," the main goals of this study were to improve methods to identify gambling problems among seniors, assess the prevalence of problem gambling among seniors in Florida, and assist the Florida Council on Compulsive Gambling in targeting services for senior problem gamblers in Florida.

Problem gambling is a broad term that refers to all of the patterns of gambling behavior that compromise, disrupt or damage personal, family or vocational pursuits. Pathological gambling lies at one end of a continuum of problematic gambling involvement. According to the National Research Council (1999), pathological gambling is a treatable mental disorder characterized by loss of control over gambling, chasing of losses, lies and deception, family and job disruption, financial bailouts and illegal acts.

### **Methods**

The present study was completed in two phases. The first phase included a literature review, analysis of data on senior gambling and problem gambling in other studies, and consultation with researchers and clinicians working with senior gamblers. The second phase included development of the questionnaire for the Florida Senior Survey, collection of the data, analysis and interpretation, and reporting.

The primary measure of problem gambling in the survey was the NORC DSM-IV Screen for Gambling Problems (NODS), a screen based on the most recent psychiatric criteria for pathological gambling. The NODS is somewhat more restrictive than other problem gambling screens because it requires that some problematic behaviors (Preoccupation, Lying and Loss of Control) last for an appreciable length of time. Use of the NODS ensured that the results of the Florida Senior Survey could be compared with results of an earlier FCCG survey of problem gambling in Florida (Shapira et al, 2002). Given growing concerns that existing measures of problem gambling do not perform well among seniors, questions were added to assess problematic aspects of gambling believed to be specific to seniors.

The sample for the survey included 1,260 residents of Florida aged 55 and over. Quotas for gender, age, ethnicity and region of the state were used to ensure that the sample was representative of the senior population in Florida. The response rate for the survey was 25%. Although lower than desired, the response rate is unlikely to have had a substantial impact on the estimates of gambling participation and problem gambling prevalence among these respondents. Response rates for telephone surveys in general have declined in recent years as technological barriers to recruitment proliferate. Seniors may be even less likely than younger adults to participate in telephone surveys

due to fears associated with fraudulent telephone schemes and perceived increased vulnerability.

### ***Gambling Among Seniors in Florida***

- The majority of respondents in gambling surveys acknowledge participating in one or more gambling activities over their lifetime. The present survey found that gambling rates among seniors in Florida are similar to rates in the Florida population aged 18 and over with 25% gambling weekly and an additional 40% having gambled in the past year. However, nearly twice as many seniors had never gambled (18%) compared with the general population in Florida.
- The types of gambling that Florida seniors are most likely to have ever tried are playing lottery games, gambling at a casino, betting on horse or dog races or Jai Alai, betting privately and playing bingo. The types of gambling that Florida seniors are most likely to do on a monthly or weekly basis are playing lottery games, wagering privately, playing bingo and gambling at a casino.
- According to the Florida Office on Planning and Budgeting (1997), retirees account for 34% of all the casino gamblers who visit casinos more than four times a year, and the typical Floridian gambler is “between 50 and 70 years old, retired or a blue-collar job worker, with an average household income of \$20,000-\$30,000 a year.”
- Nongamblers and infrequent gamblers among Florida seniors are most likely to be female, Hispanic or Black, and widowed. Monthly and weekly gamblers are most likely to be male, White and married. Monthly and weekly gamblers are also most likely to live in South Central or South Florida and to have served in the military.
- Nongamblers and infrequent gamblers are most likely to say that morality is an important reason for not gambling, followed by the fear of losing money. Monthly and weekly gamblers are most likely to say that entertainment or fun is an important reason for gambling, followed by the desire to win money. Weekly gamblers are far more likely than less frequent gamblers to say that excitement or challenge is an important reason for gambling.
- About half of all senior gamblers in Florida say that gambling at a casino is their favorite type of gambling. Another quarter indicate that playing the lottery is their preferred type of gambling.
- Seniors who have served in the Armed Forces are significantly more likely than seniors without military experience to have ever gambled and to gamble monthly or weekly, particularly on the lottery, at casinos and on pari-mutuel events.

### ***Problem Gambling Among Seniors in Florida***

- As noted above, the NODS was used to assess at-risk, problem and pathological gambling among Florida seniors. Based on this screen, 0.8% of seniors in Florida can be classified as lifetime pathological gamblers—meaning that they endorsed five or more of the 10 scored items included in this screen. Another 1.0% of Florida seniors can be classified as lifetime problem gamblers (scoring 3 or 4 points) and a



further 8.0% can be classified as at-risk gamblers (scoring 1 or 2 points on the NODS).

- Among seniors in Florida, 0.4% can be classified as past-year pathological gamblers—meaning that they endorsed five or more of the 10 scored items as having occurred in the last 12 months. Another 0.7% of Florida seniors can be classified as past-year problem gamblers and 3.7% can be classified as past-year at-risk gamblers.
- Prevalence rates are based on samples rather than the entire population. In generalizing from a sample to the population, it is conventional to present ranges based on the low and high ends of the confidence interval that surrounds estimates based on samples. This is done to reflect uncertainties about the precision of these estimates. Confidence intervals can vary widely and are dependent on both the prevalence rate and the size of the sample.
- The most recent census identified 4.4 million adults in Florida aged 55 and over. Based on the lifetime NODS, there are as few as 14,000 and as many as 56,000 Florida residents aged 55 and over who can be classified as lifetime pathological gamblers. Another 20,000 to 68,000 Florida seniors can be classified as lifetime problem gamblers and between 284,000 and 415,000 Florida seniors can be classified as lifetime at-risk gamblers.
- Based on the past-year NODS, there are as few as 4,000 and as many as 31,000 Florida seniors who can be classified as past-year pathological gamblers. Another 9,000 to 52,000 Florida seniors can be classified as past-year problem gamblers and between 118,000 and 205,000 Florida seniors can be classified as past-year at-risk gamblers.
- Among Florida seniors, past-year problem gambling prevalence rates are highest among men, Blacks and Hispanics, divorced and separated individuals, and among those working part-time.
- Past-year problem gambling prevalence rates are substantially higher among monthly and weekly gamblers than in the senior population as a whole. Prevalence rates are highest among past-year horse, dog and Jai Alai bettors, casino gamblers, those wagering privately and bingo players.

### ***Comparing Non-Problem and Problem Senior Gamblers***

- Senior problem gamblers in Florida in need of services are most likely to be male, aged 65 to 74 and Hispanic or Black. They are most likely to live in South Central or South Florida and to be retired or disabled.
- Senior problem gamblers in Florida are significantly more likely than non-problem and at-risk gamblers to gamble monthly or more often on the lottery, at a casino and on horse or dog races or Jai Alai. They are also more likely to wager privately and on non-casino bingo than at-risk and non-problem gamblers.

- When they gamble at a casino, senior problem gamblers in Florida are significantly more likely than non-problem and at-risk gamblers to play slot machines or video games (e.g. video poker). Senior problem gamblers who play the lottery are significantly more likely to purchase daily or instant tickets rather than Lotto or Powerball tickets. Although the Powerball game is not sold in Florida, seasonal visitors, many of whom are seniors, can purchase Powerball tickets in Georgia.
- Senior problem gamblers in Florida are significantly more likely than at-risk and non-problem gamblers to say that excitement or challenge, distraction, and escape from feelings are important reasons to gamble. They are significantly more likely than at-risk and non-problem gamblers to consume alcohol once a week or more often and to use non-prescription drugs once a month or more often. Finally, senior problem gamblers in Florida are significantly more likely than at-risk and non-problem gamblers to rate their physical health only fair or poor, to have experienced the death of someone close in the past year and to be depressed.
- On the basis of these data, we can hypothesize that senior problem gamblers, and at-risk gamblers to a lesser degree, appear to be coping with a range of personal losses which leave them more depressed than non-problem gamblers and may lead them to self-medicate, not only with non-prescription drugs and alcohol but also with gambling.
- Compared with seniors calling the FCCG Problem Gambling Helpline, senior problem gamblers in the community are substantially more likely to be male, Black or Hispanic and over the age of 65. Senior problem gamblers in the community are also substantially more likely than seniors calling the HelpLine to gamble once a month or more often on pari-mutuel events and the lottery.
- Florida seniors aged 55 to 74 are more likely to gamble once a week or more often than adults aged 18 to 54 or adults aged 75 and over. Seniors in Florida are more likely than Florida adults aged 18 to 54 to gamble monthly or weekly at casinos.

### ***Improving Methods to Identify Senior Problem Gamblers***

- A primary purpose of the Florida Senior Survey was to assess the performance of the NODS, the primary problem gambling screen used in this survey, and to identify additional questions that would improve the performance of the NODS in this population.
- Examination of the performance of the NODS in the Florida Senior Survey established that the lifetime version of this screen has good internal consistency and construct validity, is very homogeneous, and effectively discriminates between problem and non-problem senior gamblers in Florida.
- Two of the seven items added to the problem gambling section of the questionnaire were endorsed by 95% of the respondents who endorsed any of these items. These two questions assess borrowing using credit cards to gamble and experiencing feelings of shame related to gambling.

- Fourteen of the 39 seniors who endorsed one or more of the new items (36%) did not endorse any of the lifetime NODS items. These questions appear to tap dimensions of problematic gambling not included in the NODS and suggests that there may be value in including these two items in future surveys of senior gambling.
- Further analysis identified nine items in the problem gambling section of the questionnaire that “captured” nearly all seniors who scored on any of these questions. This set of items has been dubbed the Florida Senior Problem Gambling Screen (FSPGS). Future research is needed to improve our understanding of the FSPGS and its relationship to gambling problems among seniors.

### ***Directions for the Future***

The impacts of problem gambling can be high, for families and communities as well as for individuals. Pathological gamblers experience physical and psychological stress and exhibit substantial rates of depression, alcohol and drug dependence and suicidal ideation. The families of problem and pathological gamblers experience physical and psychological abuse as well as harassment and threats from bill collectors and creditors. Other significant impacts include costs to creditors, insurance companies, social service agencies and the civil and criminal justice systems. A particular concern with senior problem gamblers is that their financial losses are more devastating than for younger people because they have less time to recoup losses.

Given the rates of at-risk, problem and pathological gambling among seniors in Florida, it will be important to target services for this sub-group in the population. While treatment services are important, it would also be sensible to focus resources on less-severely affected senior gamblers, whose behavior may be more amenable to change.

In developing and refining services for senior problem gamblers in Florida, decision-makers may wish to give consideration to public education and prevention activities targeted toward senior at-risk, problem and pathological gamblers, as well as toward specific venues where seniors are most likely to gamble. Additional recommendations include development of a range of age-appropriate alternative activities for seniors that provide entertainment, excitement and a place to socialize at an affordable cost, expanding training opportunities to educate professionals working with seniors in assessing for gambling problems in this population and where to refer, establishment of a vendor training program to ensure awareness of senior problem gambling among gaming operators and employees, development of government initiatives to address problem gambling among seniors in Florida, establishment of treatment services for senior problem gamblers, evaluation of services and monitoring to identify changes in the prevalence of gambling and problem gambling among seniors in Florida and to refine ongoing efforts.

## INTRODUCTION

Since the 1960s, the availability of gambling has grown ten-fold in the United States. Today, a person can make a legal wager of some sort in every state except Utah and Hawaii; 38 states have lotteries, 28 states have casinos and 22 states have off-track betting (National Gambling Impact Study Commission, 1999; North American Association of State & Provincial Lotteries, 2003). This explosion in the availability of legal gambling has occurred at the same time as an explosion in the senior population, as the “Baby Boom” generation ages. Although increasing numbers of older adults spend their time and money gambling, little research has been done to investigate the impacts of this massive new recreational influence on older Americans.

The present study builds on the work of the “National Think Tank on Older Adults and Gambling,” a forum organized and hosted in June 2001 by the Florida Council on Compulsive Gambling (2001a). The main goals of the present study were to improve methods to identify gambling problems among seniors, assess the prevalence of problem gambling among seniors in Florida, and assist the FCCG in targeting services for senior problem gamblers in Florida.

This report is organized into several sections for clarity of presentation. The *Introduction* includes a definition of the terms used in the report, a review of the research literature on gambling and problem gambling among seniors, and background information on gambling and problem gambling in Florida. The *Methods* section addresses the details of conducting the survey. The next four sections present findings from the survey in the following areas:

- gambling among seniors in Florida;
- prevalence of problem gambling among seniors in Florida;
- comparing non-problem and problem senior gamblers in Florida; and
- the performance of the problem gambling screens used in this survey.

### ***Defining Our Terms***

Gambling is a broad concept that includes diverse activities, undertaken in a wide variety of settings, appealing to different sorts of people and perceived in various ways by participants and observers. Failure to appreciate this diversity can limit scientific understanding and investigation of gambling and gambling problems. Another reason to note the differences between various forms of gambling arises from accumulating evidence that some types of gambling are more strongly associated with gambling-related problems than others (Abbott & Volberg, 1999).

People take part in gambling activities because they enjoy them and obtain benefits from their participation. For most people, gambling is generally a positive experience. However, for a minority, gambling is associated with difficulties of varying severity and duration. Some regular gamblers develop significant, debilitating problems that also

typically result in harm to people close to them and to the wider community (Abbott & Volberg, 1999).

Pathological gambling was first included in the third edition of the Diagnostic and Statistical Manual (DSM-III) of the American Psychiatric Association (1980). Each subsequent revision of this manual has seen changes in the diagnostic criteria for pathological gambling. The essential features of pathological gambling are presently defined as:

- a continuous or periodic loss of control over gambling;
- a progression, in gambling frequency and amounts wagered, in the preoccupation with gambling and in obtaining monies with which to gamble; and
- a continuation of gambling involvement despite adverse consequences (Cox et al, 1997).

A formal diagnosis of pathological gambling is arrived at by an appropriately qualified and experienced clinician. To make a diagnosis, a clinician must determine that a patient has met five or more of the ten diagnostic indicators associated with pathological gambling. Table 1 presents the diagnostic criteria for pathological gambling (American Psychiatric Association, 1994: 618):

**Table 1: Diagnostic Criteria for Pathological Gambling**

Persistent and recurrent maladaptive gambling behavior as indicated by five (or more) of the following:	
Preoccupation	Preoccupied with gambling (e.g. preoccupied with reliving past gambling experiences, handicapping or planning the next venture, or thinking of ways to get money with which to gamble)
Tolerance	Needs to gamble with increasing amounts of money in order to achieve the desired excitement
Withdrawal	Restless or irritable when attempting to cut down or stop gambling
Loss of Control	Has repeated unsuccessful efforts to control, cut back or stop gambling
Escape	Gambles as a way of escaping from problems or relieving dysphoric mood (e.g. feelings of helplessness, guilt, anxiety or depression)
Chasing	After losing money gambling, often returns another day in order to get even ("chasing" one's losses)
Lying	Lies to family members, therapist or others to conceal the extent of involvement with gambling
Illegal Acts	Committed illegal acts, such as forgery, fraud, theft or embezzlement, to finance gambling
Risked Relationship	Has jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling
Bailout	Relies on others to provide money to relieve a desperate financial situation caused by gambling
The gambling behavior is not better accounted for by a Manic Episode.	

The term problem gambling is used in a variety of ways. In some situations, its use is limited to those whose gambling-related difficulties are less serious than those of pathological gamblers. In other situations, it is used to indicate *all* of the patterns of gambling behavior that compromise, disrupt or damage personal, family or vocational pursuits (Cox et al, 1997; Lesieur, 1998). From this perspective, pathological gambling can be regarded as one end of a continuum of gambling-related problems. Problem gamblers, as well as individuals who score even lower on problem gambling screens (at-risk gamblers) are of concern because they represent much larger proportions of the population than pathological gamblers. These groups are also of interest because of the possibility that their gambling-related difficulties may become more severe over time.

## ***Research on Gambling and Problem Gambling Among Seniors<sup>1</sup>***

There is a small but growing research literature on gambling and problem gambling among seniors. Much of this research is based on small samples which limits the generalizability of the findings. Another limitation is that variation in the gambling opportunities in different jurisdictions where research has been carried out is seldom taken into account. A third limitation is that the cutoff for defining adults as “senior” varies which affects the comparability of results as well as generalizability. In spite of limitations, findings from these studies are helpful in placing the results of the present study in a larger context. The published research falls into two major areas: (1) gambling participation and (2) gambling problems. Our review of the literature is presented in the same order.

### **Seniors and Gambling Participation**

Studies going back to the 1970s have established that chronological age is negatively related to gambling involvement (Kallick et al, 1976; Li & Smith, 1976). One survey in Iowa found that adults aged 65 and over were far less likely than their younger adult counterparts to participate in more than one or two gambling activities. Based on these data, the researchers predicted that gambling would decrease as the American population aged although the popularity of games attractive to older adults (i.e. lottery, bingo) would remain stable or increase (Mok & Hraba, 1991). It should be noted that this study was conducted before the legalization of riverboat casino gambling in Iowa and the broad expansion of gambling in the United States.

The most recent U.S. national study of gambling behavior and impacts found that adults aged 65 and over remain significantly less likely than younger adults to have ever gambled. Although seniors are still less likely to gamble, the proportion of seniors who have ever gambled doubled over the last 25 years (from 35% to 80%). Most of this increase was due to increased participation in lottery and casino gambling. This survey also found that the percentage of women (who make up the majority of the senior population) who had ever gambled rose by 22%—more than twice the increase observed among men (Gerstein et al, 1999).

For an increasing number of older and retired adults, gambling has become an important source of recreation and entertainment. In a survey of adults in Ontario, 63% of a small sample of respondents aged 65 and older (N=180) reported playing the lottery, 10% played bingo, 9% played cards, 6% wagered on horse races and 6% gambled at casinos (Smart & Ferris, 1996). A recent survey of adults aged 62 and over in Oregon found that 58% of the respondents reported past-year gambling, with males more likely to report playing the lottery and casino gambling than females (Moore, 2001). Another survey of adults aged 60 and over in Manitoba found gambling to be a common activity among seniors, with 75% of participants having gambled in the past year. The types of gambling these seniors were most likely to have done in the past year included lottery, charitable gambling and playing slot machines at casinos (Wiebe, 2002).

In Florida, retirees account for 34% of all the casino gamblers who visit casinos more than four times a year, and the typical resident gambler is “between 50 and 70 years old, retired or a blue-collar job worker, with an average household income of \$20,000-

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<sup>1</sup> This literature review was prepared with the assistance of Dennis McNeilly, Psy.D.

\$30,000 a year” (Office on Planning and Budgeting, Executive Office of the Governor of Florida, 1997).

A study of gambling as a social activity for active senior citizens (aged 65 and over) in Iowa and Nebraska found that bingo and casino gambling were the most frequent social activities among 6,957 active senior citizens represented in a survey of senior and retirement center activity directors (McNeilly & Burke, 2001). Another study involving interviews with senior center activity directors in central Massachusetts found that a majority of the senior centers sponsored monthly gambling bus trips to a casino or dog track, with an average of 50 people participating per bus trip (Higgins, 2001).

**Problem Gambling Among Seniors**

There is an emerging body of research on the prevalence of problem gambling among seniors. Table 2 presents information on problem gambling prevalence rates among seniors in four different jurisdictions. While all of the studies involved telephone interviews with randomly selected people in the general population and used the same measure of gambling problems, variation in methods, demographics and the availability of different types of gambling means that this comparison should be viewed with caution.

**Table 2: Prevalence Rates Among Seniors\***

	Sample Size	Age Cutoff	Total Prevalence %	Probable Pathological %	Ratio PP:Total %
Oregon	1512	62	1.2	0.3	25
Alberta	800	60	1.8	0.4	22
Manitoba	1000	60	2.8	1.2	43
Nevada	449	55	3.8	1.8	47

\* Data from Moore (2001), Howardresearch (2000), Wiebe (2002) and Bernhard et al (2000).

Table 2 shows that problem gambling surveys of older adults vary in terms of sample size as well as in the age used for inclusion in the sample. Combined prevalence rates range from 1.2% among seniors aged 62 and over in Oregon to 3.8% among seniors aged 55 and over in Las Vegas. It is interesting that the ratio of probable pathological gambling to the overall prevalence rate ranges widely from a low of 22% in Alberta to a high of 47% in Nevada.

Little is known about the psychiatric profile of older problem gamblers. A recent study of older Connecticut adults seeking treatment for gambling problems (N=49, aged 56 to 75) found that these treatment seekers were most likely to be female and to have only started gambling regularly after the age of 55 (Petry, 2002). Some have observed that it takes less time for older adults to reach a crisis stage in their gambling compared with younger adults—one to three years compared to eight or more years (Fowler, 1997).

Problematic impacts of gambling on retired and older adults have primarily been documented in clinical case reports that highlight diagnostic and treatment concerns (Gafner & Uetz, 1990; McNeilly & Burke 2002; Stegbauer, 1998). These case reports draw attention to the difficulties of accurately diagnosing gambling problems within this age group. For example, in a report on a small group of patients with Parkinson’s disease and pathological gambling, Spanish researchers found that 10 of these 12 patients (including all of the oldest individuals) returned to pathological gambling

behavior after beginning treatment for Parkinson's disease. The researchers suggest that pathological gambling in this group may be a side-effect of medication (Molina, et al, 2000). Parkinson's disease is characterized by reductions in dopamine function and it is possible that medications to increase dopamine levels may diminish impulse control which may, in turn, lead to problematic gambling behavior (Bergh, Eklund, Sodersten, & Nordin, 1997; Foti & Cummings, 1997).

In the only published study of gambling among older African-American females (N=80, aged 60 to 91 years old), attendees at a South Central Los Angeles senior center were interviewed about their gambling. This study found a relationship between gambling involvement and psychological well-being, anxiety, obsessive-compulsive symptoms, perceived health status, religiousness and stressful life events. Heavy to pathological gamblers had significantly lower levels of subjective well being, higher anxiety levels, more obsessive-compulsive symptoms, greater numbers of stressful life events, and lower levels of religiousness, perceived health status and a sense of control over their future (Bazargan, Bazargan & Akanda, 2000).

### ***Measuring Gambling Problems Among Seniors***

State governments began funding services for individuals with gambling problems in the 1980s. As a first step toward establishing these services, policy makers sought information about the number of people who might seek help for their gambling problems and what they looked like. In responding to these questions, researchers adopted methods from the field of psychiatric epidemiology to investigate the prevalence of gambling problems.

In the 1980s, few tools existed to measure gambling problems and only one, the South Oaks Gambling Screen (SOGS), had been rigorously developed and tested for performance (Lesieur & Blume, 1987). The SOGS was first used in a prevalence survey in New York State in 1986 (Volberg & Steadman, 1988). Since then, the SOGS or variants of the original screen have been used in problem gambling prevalence surveys in more than 45 jurisdictions in the United States, Europe, Canada and Asia (Abbott & Volberg, 1996, 2000; Bondolfi, Osiek & Ferrero, 2000; Productivity Commission, 1999; Shaffer, Hall & Vander Bilt, 1999; Sproston, Erens & Orford, 2000; Volberg et al, 2001).

Over the 15 years since its publication, there have been a variety of modifications and revisions to the SOGS. These include changes to the wording of specific items, to the response categories, to the order in which the items are asked, and to the scoring of the items (Lesieur 1994). In 1991, the original SOGS was expanded to assess both lifetime and current prevalence of problem and probable pathological gambling in a national survey in New Zealand (Abbott & Volberg, 1996). In this revised version of the instrument, dubbed the SOGS-R, respondents who endorse any of the original items on a lifetime basis are asked whether this behavior or experience has occurred in the past 12 months. The SOGS-R is the modification of the original screen most widely used in population research.

With the publication of revised psychiatric criteria for pathological gambling in 1994, development began on a number of new screens for problem and pathological gambling (Cunningham-Williams et al, 2000; Fisher, 2000; Gerstein et al, 1999; Shaffer et al, 1994; Welte et al, 2002; Stinchfield, 2003). The most widely used screen based on the new psychiatric criteria is the National Opinion Research Center DSM-IV Screen for



Gambling Problems (NODS) (Gerstein et al, 1999). Another new screen, the Canadian Problem Gambling Index (CPGI), used in the majority of recent Canadian prevalence surveys, is made up of items taken from both the SOGS and the DSM-IV (Ferris & Wynne, 2001).

Although there are fewer items in the NODS than in the SOGS, and the maximum score is lower, the NODS is actually more restrictive in assessing problem gambling behaviors than the SOGS or other screens based on the DSM-IV criteria. This is because of limits placed on several of the criteria, in keeping with approaches taken in alcohol and drug abuse research. For example, in assessing Preoccupation, the NODS asks if the periods when respondents spent a lot of time thinking about gambling or about getting money to gamble have lasted 2 weeks or longer. Similarly, the NODS asks if respondents have tried, but not succeeded, in controlling their gambling three or more times (Loss of Control). Respondents are also asked if they have lied to others about their gambling three or more times (Lying). Only positive responses to these latter items are included in the final NODS score.

### **Improving Measures of Gambling Problems Among Seniors**

One of the main goals of the present study was to improve methods to identify gambling problems among older adults. Researchers and clinicians have expressed concerns about the adequacy and applicability of existing conceptualizations and measures of problem gambling to seniors (Wiebe, 2002; Windsor Problem Gambling Research Group, 2003). Based on results from a survey of older adults in Manitoba, Wiebe (2002) concluded that the SOGS might not be the most appropriate tool for assessing problem gambling among older adults. This conclusion was based on the lack of endorsement for “borrowing” questions (which make up half of the scored items on the SOGS) among respondents in Manitoba.

Researchers have argued that some of the items used to measure problem gambling and pathological gambling, such as lying to family members or others to conceal the extent of involvement in gambling or jeopardizing a significant relationship, may not apply to seniors who do not live near family or have lost a spouse and many of their close friends. The social isolation experienced by many seniors means that problem gamblers in this age group may be less likely to make claims of winning at gambling, to have been criticized by others, to have felt the need to hide evidence of their gambling, to have had arguments about their gambling with people they care about or borrowed from someone and not paid them back as a result of their gambling.

Many seniors may not chase their losses in ways common to younger at-risk and problem gamblers and, since many are retired, they are less likely to have lost time from work due to gambling. Seniors may be less likely to feel guilty about their gambling if this is one of the few activities that interests them or distracts them from physical or emotional pain. Finally, senior problem gamblers may be less likely than younger problem gamblers to engage in illegal acts to finance gambling since they are likely to have more discretionary funds with which to gamble. On the other hand, seniors on fixed incomes may quickly find themselves in difficult financial straits due to gambling.

To assess how well the most widely-used problem gambling screens perform among older adults, we examined data from four state-wide surveys (Volberg, 2001a, 2001b, 2002, 2003a). Table 3 presents rates of endorsement of past-year items from the SOGS

among respondents who had ever gambled. As Wiebe (2002) found among seniors in Manitoba, endorsement rates for the majority of the borrowing items from the past-year SOGS are extremely low among seniors in the United States. However, as Table 3 demonstrates, endorsement of these items among younger adults is also very low.

**Table 3: Comparing Responses to Past-Year SOGS Items by Age**

	18 – 54 (N=3848) %	55+ (1856) %	Difference
Spend more than intended	10.7	7.4	-3.3
Felt guilty	4.3	2.5	-1.8
Claimed to win	2.2	0.9	-1.3
Hidden evidence of gambling	1.2	0.2	-1.0
Borrowed / household	1.7	0.9	-0.8
Been criticized	3.1	2.4	-0.7
Borrowed / spouse	1.8	1.1	-0.7
Had arguments about gambling	1.0	0.4	-0.6
Borrowed / relatives	0.8	0.3	-0.5
Borrowed and not paid back	0.6	0.2	-0.4
Bounced checks	0.5	0.1	-0.4
Sold personal property	0.5	0.2	-0.3
Missed work or school	0.5	0.2	-0.3
Wanted to stop but couldn't	1.4	1.2	-0.2
Borrowed / banks	0.4	0.2	-0.2
Borrowed / loan sharks	0.4	0.2	-0.2
Cashed in securities	0.3	0.4	+0.1
Tried to win back money ("chasing")	1.0	1.1	+0.1
Felt had a problem	0.9	1.2	+0.3
Borrowed / credit cards	2.5	2.9	+0.4

Table 3 shows that, as predicted, older adults are less likely to endorse a range of items from the SOGS, including feeling guilty about their gambling, claiming to win at gambling, hiding evidence of their gambling from loved ones, being criticized, and having arguments about gambling. Older adults are also less likely to indicate that they have spent more time or money gambling than intended or borrowed money from a variety of sources to gamble or pay gambling debts.

Using data from the same surveys, Table 4 on the following page presents endorsement rates for individual items from the lifetime NODS among respondents who had ever gambled. Again as predicted, adults aged 55 and older are less likely than younger adults to acknowledge to lying family and friends about their gambling, "chasing" their losses, jeopardizing relationships with family or friends due to gambling and committing illegal acts to get money with which to gamble. Contrary to predictions, however, older adults are just as likely as younger adults to have ever tried to stop gambling, gambled to escape from uncomfortable feelings, lied to others about their gambling, and missed job or career opportunities. Most importantly, the smaller differences between older and younger adults in Table 4 compared with Table 3 suggest that the NODS does a better job of identifying gambling problems across the lifespan.

**Table 4: Comparing Responses to Lifetime NODS Items by Age**

	18 – 54 (N=3848) %	55+ (1856) %	
Lied to family, friends	3.7	2.4	-1.3
Return another day to get even (“chasing”)	6.8	5.8	-1.0
Serious problems with family or friends	1.4	0.5	-0.9
Needed a bailout	1.2	0.5	-0.7
Increasing amounts or size of bets	2.5	1.9	-0.6
Tried to stop but couldn’t	1.8	1.2	-0.6
Restless or irritable when tried to stop	1.7	1.1	-0.6
Committed illegal acts	0.8	0.2	-0.6
Escape personal problems	3.4	2.9	-0.5
Period of 2 weeks getting money	1.2	0.7	-0.5
Period of 2 weeks thinking/planning	2.9	2.6	-0.3
Missed job/career opportunities	0.7	0.4	-0.3
Tried to stop 3+ times	1.1	1.0	-0.1
Lied 3+ times	1.6	1.6	---
Relieve uncomfortable feelings	2.6	2.8	+0.2
Ever tried to stop	6.6	6.8	+0.2

The data presented here provide support for the view that some items from the most widely-used problem gambling screens may be less applicable to seniors than to younger adults. Given concerns about the performance of existing measures of problem gambling among seniors, questions were added to the present survey to assess other problematic aspects of gambling specific to seniors. The results of this effort are detailed below (see *The Florida Senior Problem Gambling Screen* on Page 44).

***Gambling and Problem Gambling in Florida: Background<sup>2</sup>***

Throughout the world, gambling participation and attitudes toward gambling are linked to the communities in which these behaviors occur and to the norms and values of members of those communities. Differences have been found in the types of gambling preferred by middle-class and blue-collar gamblers, by white and black Americans and by men and women (Dixey, 1996; Drake & Cayton, 1945; Henslin, 1967; Hraba & Lee, 1996; Light, 1977; Zola, 1964). It is equally important to note that individual and community definitions of gambling can vary widely. For example, a recent Gallup poll found that 52% of respondents defined stock market investment as a form of gambling; at the same time, 22% did not consider buying state-sponsored lottery tickets to be gambling (Gallup, 1999).

**Gambling in Florida**

There have been legal opportunities to gamble in Florida since 1926, when wagering on Jai Alai was first permitted. Wagering on horse and dog races followed in the early 1930s. The era of modern, commercial gambling began in Florida in 1979 when the Seminole Indians were permitted to hold high-stakes bingo games. Six years later, the Seminoles added video lottery terminals (VLTs) although these machines are the subject of an ongoing dispute between the Seminoles and the State of Florida. In 1984, “cruises to nowhere” began departing from Florida ports. In 1988, voters approved a state lottery

<sup>2</sup> This section contains information provided by the Florida Council on Compulsive Gambling (FCCG) and Christiansen Capital Advisers.

in Florida and, in 1996, simulcasting and card rooms at pari-mutuel facilities were legalized.

Florida residents can presently gamble legally on a full range of lottery games, at six casinos in Native American territory, 20 casino “cruises to nowhere,” on races and card games at 18 greyhound dog tracks, six thoroughbred and harness tracks and six Jai Alai frontons as well as at numerous bingo halls. Gross gaming revenues in Florida in 2000 were \$1.62 billion with nearly three-quarters (71%) of this amount generated by the Florida Lottery and about one-quarter (23%) generated by pari-mutuel operations. Bingo and charitable gambling contribute 3% each to gross gaming revenues in Florida and card rooms account for less than 1% of these revenues. Florida ranked 3<sup>rd</sup> in the nation in gross revenues for pari-mutuels, 4<sup>th</sup> for lottery, 5<sup>th</sup> for bingo, 6<sup>th</sup> for charitable games and 7<sup>th</sup> in the nation for card rooms.

In 2000, the State of Florida collected \$957 million in gambling tax revenues, primarily from the state lottery (93%) but also from pari-mutuel operations and card rooms. Bingo and charitable gambling are permitted by local ordinance and these revenues flow to municipalities and charitable organizations. Newspaper accounts indicate that the Seminole Tribe made \$300 million in profits from its six casinos and conservative estimates for annual revenues for cruise ships in Florida are \$6 million per vessel. The State of Florida does not have regulatory authority over tribal casinos or cruise ships and receives no revenues from these operations.

### **Problem Gambling in Florida**

In the first statewide survey of gambling and problem gambling in Florida, researchers from the University of Florida interviewed 1,504 residents aged 18 and over (Shapira et al, 2002). The questionnaire included sections assessing gambling participation, two problem gambling screens and items assessing the impacts of gambling, alcohol and drug use, mental health and demographics. Based on the NODS, the lifetime prevalence of problem and pathological gambling among adults in Florida was estimated to be 1.6%, representing nearly 200,000 Florida adults. Past-year prevalence was estimated to be 1.1%, representing approximately 135,000 of the 12.3 million Florida residents aged 18 and over.<sup>3</sup>

### **Problem Gambling Services in Florida**

Although a growing number of states fund services for problem gamblers, the major sources of help for problem gamblers and their families remain the self-help group, Gamblers Anonymous, and not-for-profit state councils on problem gambling. Between 1985 and 2001, the number of Gamblers Anonymous and Gam-Anon chapters in Florida grew from 10 to more than 50. The Florida Council on Compulsive Gambling (FCCG) was established in 1988 and has operated a statewide helpline since 1992 with funding from the Florida Lottery. In the HelpLine’s tenth year of operation, 2001-2002, the FCCG received nearly 7,000 calls from Florida residents seeking help or information. This represents a 69% increase in calls to the HelpLine over the previous year (Florida Council on Compulsive Gambling, 2002).

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<sup>3</sup> The University of Florida research team calculated the NODS prevalence rates for problem and pathological gambling among adults in Florida incorrectly. The present author examined differences between the original and corrected NODS rates and determined that they were relatively minor in scope. The FCCG opted to utilize the original NODS prevalence rates for comparison purposes in this document to alleviate reader confusion when reviewing the two studies.

With recent additional funds from the Florida Lottery, FCCG now conducts training in the diagnosis and treatment of problem gambling and has registered 24 health care professionals in Florida as eligible to provide treatment. FCCG also provides educational training for government agencies, law enforcement authorities and gaming operators and operates an extensive prevention and education program. FCCG sponsors and conducts research and oversees adolescent, senior and impaired professional outreach programs.

## METHODS

This study of gambling and problem gambling among seniors in Florida was completed in two phases. In the first phase of the project, Dr. Rachel Volberg of Gemini Research and Dr. Dennis McNeilly of the University of Nebraska reviewed published and unpublished research reports on the topic of senior gambling and problem gambling. Dr. Volberg also examined problem gambling scores of seniors and younger adults from problem gambling surveys in Arizona, Florida, Nevada, North Dakota and Oregon. All of these surveys included both the SOGS-R and the NODS, the two problem gambling screens most widely used in problem gambling population research. Finally, Dr. Volberg spoke with a range of experts with experience working with or conducting research on seniors with gambling problems about the issues specific to this age group and how best to assess such topics in a survey.

In the second phase of the project, Dr. Volberg worked with FCCG's Executive Director and Program/Grant Consultant and Kerr & Downs Research, the organization responsible for data collection, to develop the questionnaire and sample design. The questionnaire was finalized after numerous iterations and a pretest with 50 randomly selected Florida residents aged 55 and over. Once the questionnaire was programmed for computer-aided administration, staff from Kerr & Downs completed telephone interviews with a sample of 1,260 residents of Florida aged 55 and over. Interviews were carried out between October 14, 2002 and November 29, 2002. The data were turned over to Gemini Research in early December for analysis and preparation of this report.

### **Questionnaire**

The questionnaire for the Florida Senior Problem Gambling Survey was composed of five major sections (see *Appendix A* for a copy of the questionnaire). The first section included questions about 11 different types of gambling available to residents of the state. For each type of gambling, respondents were asked whether they had ever tried this type of gambling, whether they had participated in the past year, and, if so, how often they had done so in the past 12 months.

In the second section of the questionnaire, respondents who had never gambled, infrequent gamblers who had not gambled in the past year, and past-year gamblers who had not gambled more than five times were asked several questions about their reasons for not gambling. Respondents who gambled weekly or monthly as well as past-year gamblers who had gambled more than five times were asked to identify their favorite gambling activity, who they usually gambled with, the distance they usually traveled to gamble, reasons for gambling, and their spending on gambling.

The third section of the questionnaire was composed of the lifetime and past-year NODS. As noted above, the NODS is based on the most recent psychiatric criteria for pathological gambling. The NODS is also more restrictive than other problem gambling screens since respondents must provide an indication that some problematic behaviors (Preoccupation, Lying and Loss of Control) have lasted for an appreciable length of time. The third section of the questionnaire included seven additional items that it was believed would be helpful in identifying senior problem gamblers. The fourth and fifth sections of the questionnaire were composed of items designed to identify the impacts of gambling problems, including tobacco, alcohol and drug use as well as physical and emotional health status. The final

section of the questionnaire included questions about the demographic characteristics of each respondent.

### **Translation of the Questionnaire**

Census data show that 16% of the Florida population is Hispanic or Latino. To enable interviews to be completed with Hispanic and Latino seniors who did not speak English, it was necessary to translate the questionnaire. The questionnaire was translated into Spanish by specialists at Kerr & Downs Research. Interviewers were instructed to arrange to conduct the interview in Spanish if the person spoke Spanish or indicated that they wanted to complete the interview in that language. Although only 41 (3%) of the interviews were conducted in Spanish, sample quotas ensured that the proportion of Hispanic seniors was representative of the population in Florida.

### **Pretest**

The questionnaire was pre-tested with a group of 50 randomly selected residents of Florida aged 55 and over. The pretest had two goals—to examine the performance of the new problem gambling items and to test respondent comprehension and the programming of the questionnaire. It was not possible to examine the performance of the problem gambling items since only three respondents endorsed any of these items. The programming of the questionnaire worked well and no changes were necessary prior to fielding the full survey.

### ***Sample Design***

To ensure a representative sample of Florida seniors, quotas were established for gender, age, ethnicity and geographic region of the state based on 2000 census data. All interviews were conducted at the Kerr & Downs Research facilities by trained interviewers with supervision and random monitoring for technique and adherence to procedures. Interviews were conducted afternoons and evenings on weekdays and weekends. Up to 5 callbacks were made to complete an interview with an eligible respondent.

### **Sample Disposition and Response Rate**

Table 5 presents detailed information about the disposition of the sample for the Florida Senior Problem Gambling Survey. Over the course of the study, a total of 10,911 unduplicated numbers were called. At the end of the study, 447 of these numbers were deemed inactive (i.e. the maximum number of attempts to reach them had been made), leaving 10,464 numbers. Of these, 1,495 were not valid numbers for the study, leaving a total of 8,969 potentially eligible households. Of these, 895 were persistently unavailable (i.e. the maximum number of attempts had been made without reaching anyone) or the number was blocked, leaving a total of 8,074 households with which contact was made. Of these, 3,097 households were either determined not to be eligible or eligibility was unable to be determined in the course of the study. Of the 4,977 households determined to be eligible, 1,260 completed the interview and 3,717 refused to be interviewed, either hanging up immediately or once the questions had begun.

**Table 5: Disposition of Florida Senior Sample**

<b>Total Numbers</b>	<b>10945</b>	<b>100.0</b>
<b>Status Unresolved (no response after 5 attempts)</b>	<b>447</b>	<b>4.1</b>
<b>Invalid Sample</b>	<b>1529</b>	<b>14.0</b>
Duplicate Numbers	34	
Not in Service (Disconnected)	889	
Non-Residential	90	
Fax Machine/Modem	140	
Language Barrier - Non-Spanish	308	
Hearing Problem	68	
<b>Total Non-Contacts</b>	<b>895</b>	<b>8.2</b>
No Answer (Non-Contacts)	668	
Blocked Number	53	
Out-of-Town (for entire duration of project)	49	
Busy Signal	125	
<b>Contacts Not Interviewed</b>	<b>3097</b>	<b>28.3</b>
Answering Machine/Voice Mail	1360	
Non-Qualified Respondent	900	
Over Quota	791	
Region Closed	46	
<b>Total Contacts</b>	<b>4977</b>	<b>45.5</b>
Completed Survey	1260	
Refused to Participate	3527	
Terminated by Respondent	190	

There are a variety of ways to calculate completion or response rate. One definition is the number of completed interviews divided by the number of units in the sample known to be eligible (i.e. the number of completes divided by the number of refusals from eligible units). Using this method, a response rate of 25% and a refusal rate of 75% were achieved in the Florida Senior Problem Gambling Survey.

The response rate achieved in this study is toward the lower range. Survey research professionals in the United States and Canada have found that response rates for telephone surveys in the general population have declined in recent years as individuals in the general population become increasingly reluctant to participate in this type of research and as technological barriers proliferate (e.g. answering machines, caller id). Older adults may be even less likely to participate in telephone surveys due to fears associated with fraudulent telephone schemes and perceived increased vulnerability.

### **Characteristics of the Sample**

Like the response rate, information about the characteristics of a sample is useful in assessing the validity and reliability of the results of a survey. While a fully random design is the most desirable approach to obtaining a representative sample of the population, this approach often results in under-sampling demographic groups with low rates of telephone ownership or greater than usual reluctance to participate in survey research. To determine how well the sample represents the total population, it is helpful to examine how closely the achieved sample matches the known demographic characteristics of the



population. Table 6 shows key demographic characteristics of the achieved sample in Florida compared with the 2000 Census.

**Table 6: Comparing the Achieved Sample to the General Population**

		2000 Population %	Achieved Sample %	Weighted Sample %
Gender		(100)	(100.0)	(100.0)
	Male	45	40.7	45.3
	Female	55	59.3	54.7
Age		(100)	(97.3)	(97.4)
	55 – 64	36	34.2	34.3
	65 – 74	33	34.2	34.2
	75 – 84	23	24.9	24.8
	85 +	8	6.8	6.7
Ethnicity		(100)	(99.0)	(99.0)
	White	68	65.7	65.5
	Black	12	13.8	13.9
	Hispanic	16	14.9	15.1
	Other	3	5.6	5.6
Region		(100)	(100.0)	(100.0)
	North Central	19	19.8	19.8
	North East	8	8.2	8.3
	North West	6	6.8	6.8
	South Central	28	28.4	28.4
	South	39	36.8	36.8

Table 6 shows that the achieved sample was in fact quite representative of the senior population in Florida, as determined by the Census Bureau. The greatest difference between the sample and the known population was in the proportion of men included in the final sample. Although the difference was small (less than 5%), the achieved sample was weighted to achieve a fully representative sample for analysis.

**Statistical Analysis**

Once the data were delivered to Gemini Research, all of the variables were checked carefully for correct skip procedures. The data were analyzed using Statistical Package for the Social Sciences, Version 10.0 (SPSS 10.0). Numerous analytic variables were constructed from the raw data, including generalized gambling participation levels, scores on the problem gambling screens, levels of alcohol and drug use, experience of depression, and help-seeking. Chi-square analysis and analyses of variance were used to test for statistical significance.

## GAMBLING AMONG SENIORS IN FLORIDA

This chapter examines gambling participation among seniors in Florida. To assess the full range of gambling activities available to Florida residents, the instrument for the survey included questions about 11 different wagering activities. All respondents were asked if they had ever gambled or bet money on the following activities:

- casino games
- gaming machines outside of a casino
- lottery games
- illegal numbers games
- horse races, dog races or Jai Alai
- bingo outside of a casino
- private games (cards, dice or dominoes in someone's home or at a club or organization, or a game of skill such as golf, pool or bowling)
- the outcome of sports or other events with friends, co-workers, a bookie or some other person
- Internet or World Wide Web
- speculative investments (trading stocks, bonds or mutual funds, including trading in commodities and futures and placing puts and calls)
- any other kind of gambling (e.g. raffles, sweepstakes, baby pools, pull-tabs, betting on a dogfight or cockfight)

### ***Gambling Among Florida Seniors***

In every recent survey of gambling and problem gambling, the majority of respondents acknowledge participating in one or more gambling activities. In the present case, 82% of Florida seniors acknowledged participating in one or more of the activities included in the questionnaire. Although the range of gambling activities included in the questionnaire was much greater, a separate survey found that 88% of Florida adults aged 18 and over had ever gambled (Shapira et al, 2002).

Table 7 on the following page shows lifetime, past-year, monthly and weekly participation for all of the types of gambling included in the Florida senior survey. Lifetime participation among Florida seniors was highest for lottery play, casino gambling, and betting on horse or dog races or Jai Alai. Between 40% and 70% of Florida seniors acknowledge having ever participated in these activities. Lifetime participation rates were much lower for all other types of gambling. Only about one in

four Florida seniors acknowledged having ever made private bets or having played non-casino bingo or non-casino gaming machines. Only one in five Florida seniors had bet on sports; one in six had wagered on “other” gambling activities; and one in eight had wagered on speculative investments.

Past-year participation rates among Florida seniors were highest, again, for lottery play, casino gambling and pari-mutuel activities. Past-year participation in all other activities was 10% or lower. Nearly all of the monthly and weekly gambling participation among Florida seniors is explained by lottery play.

**Table 7: Gambling Participation Among Seniors in Florida**

	Lifetime Participation (1260) %	Past-year Participation (1260) %	Monthly Participation (1260) %	Weekly Participation (1260) %
Lottery	65.9	55.9	32.9	20.6
Casino	57.8	22.6	3.2	1.4
Pari-mutuel	46.2	11.5	1.7	0.8
Private	26.0	10.0	4.8	2.7
Non-casino bingo	23.4	8.9	3.7	2.2
Non-casino gaming machines	22.7	5.5	1.0	0.5
Sports	20.4	9.9	2.4	0.7
Other	16.9	8.3	1.2	0.7
Speculative investments	12.0	8.0	2.4	1.4
Illegal numbers	5.1	0.7	0.4	0.3
Internet	0.9	0.6	0.2	0.1
Total	81.6	65.3	38.9	25.3

Endorsement of the usually residual “Other” category was much higher in this sample than in other gambling surveys. Seniors who said that they had done some other type of gambling in the past year were significantly less likely than those who did not endorse this item to be retired and to be members of minority groups. These respondents were significantly more likely to be Catholic or Jewish and to have attended college. This analysis suggests that endorsement of this item is most closely related to participation in raffles and sweepstakes. However, seniors who had done some other type of gambling in the past year were significantly more likely to have engaged in many other gambling activities in the past year, including the lottery, casino games, non-casino machines, pari-mutuel, private and sports wagering, bingo and speculative investments.

**Patterns of Gambling Participation**

Gambling participation is not distributed evenly throughout the population. To understand patterns of gambling participation, it is helpful to examine the demographic characteristics of respondents who wager at increasing frequency. To analyze levels of gambling participation, we divided the Florida senior respondents into five groups:

- **non-gamblers** who have never participated in any type of gambling (18% of the total sample);
- **infrequent gamblers** who have participated in one or more types of gambling but not in the past year (16% of the total sample);

- **past-year gamblers** who have participated in one or more types of gambling in the past year but not on a regular basis (26% of the total sample);
- **monthly gamblers** who participate in one or more types of gambling once a month or more often (14% of the total sample); and
- **weekly gamblers** who participate in one or more types of gambling on a weekly basis (25% of the total sample).

Table 8 shows that there are numerous significant differences in the demographic characteristics of these different groups of seniors in Florida as well as differences in the number of gambling activities these groups have ever tried.

**Table 8: Demographics of Senior Gamblers in Florida**

		Non-Gamblers (231) %	Infrequent Gamblers (206) %	Past-year Gamblers (332) %	Monthly Gamblers (172) %	Weekly Gamblers (318) %
Gender	Male	34.6	38.3	48.5	39.0	57.7
.000	Female	65.4	61.7	51.5	61.0	42.3
Age	55 – 64	29.9	30.3	34.2	36.1	39.0
.000	65 – 74	31.7	27.8	35.4	34.9	38.3
	75 – 84	25.4	32.8	23.6	25.4	20.4
	85 +	12.9	9.1	6.8	3.6	2.2
Ethnicity	White	45.7	70.2	72.7	70.0	67.0
.000	Black	22.2	15.1	10.1	11.2	12.4
	Hispanic	26.5	10.2	13.2	10.0	14.6
	Other	5.7	4.4	4.0	8.8	6.0
Region	North Central	19.0	18.9	20.5	17.4	21.4
.034	North East	12.1	10.7	7.6	4.1	6.9
	North West	6.5	9.2	8.8	7.6	3.1
	South Central	30.6	26.2	27.8	26.2	29.9
	South	31.9	35.0	35.3	44.8	38.7
Marital Status	Married	48.7	54.6	56.1	53.8	62.7
.036	Widowed	36.0	30.7	27.1	27.5	20.4
	Divorced/Separated	10.1	10.7	11.6	15.2	13.4
	Never Married	5.3	3.9	5.2	3.5	3.5
Education	Elementary / Some HS	22.3	10.3	10.6	10.7	10.9
.000	HS Grad	36.2	32.4	27.9	30.2	33.2
	Some College	20.1	28.9	33.9	33.1	33.5
	BA Degree	15.6	12.3	18.5	15.4	13.4
	Graduate Study	5.8	16.2	9.1	10.7	8.9
Employment	Working Full Time	15.0	16.3	20.0	18.2	19.6
.170	Working Part Time	8.0	6.9	10.5	12.9	10.9
	Keeping House	7.1	4.9	6.5	8.2	4.5
	Retired / Disabled	68.1	70.0	61.5	57.6	64.4
	Unemployed	1.8	2.0	1.5	2.9	0.6

**Table 8: Demographics of Senior Gamblers in Florida (cont'd)**

		Non-Gamblers (231) %	Infrequent Gamblers (206) %	Past-year Gamblers (332) %	Monthly Gamblers (172) %	Weekly Gamblers (318) %
Income adequacy	Can't make ends meet	8.3	5.1	2.1	4.5	3.8
.000	Have just enough	26.5	27.7	17.8	20.5	18.7
	Enough w/little extra	44.6	43.5	47.6	42.3	34.9
	Always have extra	20.6	23.7	32.5	32.7	42.6
Retirement funds	Very important	54.3	55.7	51.5	51.9	53.3
.951	Somewhat important	18.8	20.0	17.6	18.8	18.6
	Not important at all	26.9	24.3	30.8	29.2	28.2
Residence	Full year in Florida	95.7	90.8	92.1	92.4	89.5
.127	Less than full year in FL	4.3	9.2	7.9	7.6	10.5
Religion	Protestant	53.3	56.5	50.5	45.4	44.2
.000	Catholic	24.4	15.0	26.7	30.1	34.0
	Jewish	2.7	4.4	5.5	8.0	4.3
	Fundamentalist	10.2	10.0	4.5	6.1	3.0
	Other/None	9.3	14.5	12.9	10.4	14.5
Armed Forces Service		14.8	28.2	31.1	27.3	42.5
.000						
Mean Gambling Activities		0.0	2.5	3.4	4.2	4.3
.000						
Interviewed in Spanish		9.5	0.5	1.8	2.3	2.5
.000						

Pearson Chi-Square \* p≤.05 \*\* p≤.01 \*\*\* p≤.001

Table 8 shows that non- and infrequent gamblers are quite similar in terms of gender, age, residence in the state, marital status, employment status, income and religion. These two groups are different in terms of ethnicity, education and military experience. Table 8 also shows that monthly and weekly gamblers are quite similar. There are no significant differences in these two groups with regard to age, ethnicity, marital status, education, income and religion. However, weekly gamblers are more likely than monthly gamblers to be men with military experience.

Overall, non- and infrequent gamblers are significantly more likely than other seniors to be female, non-White, widowed and to have little disposable income. Non- and infrequent gamblers are significantly less likely than other seniors to have graduated from high school and to have served in the armed forces. Finally, non- and infrequent gamblers are significantly older than other seniors in Florida. With few exceptions, the differences between monthly and weekly gamblers, on the one hand, and past-year gamblers, on the other, are very small. However, monthly and weekly gamblers are more likely to live in South Florida (e.g. Dade, Broward and Palm Beach counties) than less frequent gamblers.

### **Gender, Ethnicity and Gambling Among Seniors<sup>4</sup>**

The results of numerous gambling surveys have shown that gender, age and ethnicity are the strongest demographic predictors of gambling in general as well as of participation in specific types of gambling (Gerstein et al, 1999; Volberg, 2001c, 2003b;

<sup>4</sup> For this analysis, respondents who indicated that they belonged to a racial or ethnic group other than White, Black or Hispanic were excluded due to the small size of the group.

Volberg, Toce & Gerstein, 1999). To examine this issue among Florida seniors, we started by looking at the age at which respondents first acknowledged gambling. Regardless of ethnicity, senior men in Florida report starting to gamble at a significantly younger age than senior women (25 years old vs. 37 years old). Among men, Whites admit starting to gamble at the youngest age and Hispanics at the oldest age (24 and 29 years old). The opposite is true among women, with Hispanics starting to gamble at the youngest age and Whites at the oldest age (34 and 38 years old).

Only about half of the senior respondents provided information about both the age when they started gambling and their current age (N=616). These data were used to examine differences in the gambling “careers” of men and women. Among senior men, the average gambling career (from the age they first started gambling to the present) is 43 years. Among senior women, the average gambling career is 31 years, a significantly shorter period of time (F=90.11, p=.000).

**Table 9: Gambling Participation by Gender and Ethnicity**

	Lifetime	Past Year	Monthly	Weekly
Total	81.6	65.3	38.9	25.3
White		**	**	***
Male	89.3	74.9	45.4	33.0
Female	85.5	65.4	36.6	20.3
Black	***	***	**	**
Male	84.3	67.9	42.9	32.1
Female	57.8	38.2	24.7	13.5
Hispanic				
Male	71.4	61.2	35.1	29.6
Female	63.3	51.1	31.9	19.8

Pearson Chi-Square \* p≤.05 \*\* p≤.01 \*\*\* p≤.001  
 Level of significance indicated above gender comparison for each ethnic group.

Table 9 presents rates of lifetime, past-year, monthly and weekly gambling in the Florida senior sample as a whole as well as by gender and ethnicity. Table 9 shows that, regardless of ethnicity, senior men are more likely than senior women to have ever gambled, to have gambled in the past year and to gamble regularly (i.e. monthly or weekly). Differences in gambling participation by gender are greatest among Blacks and smallest among Whites.

Differences in gambling participation become even clearer when we examine specific types of gambling. Table 10 on the following page presents differences in past-year participation in the top six gambling activities among seniors in Florida. Past-year data were selected because low rates of monthly and weekly participation for most types of gambling made it difficult to detect differences between men and women. Table 10 shows that White men are significantly more likely than White women to have played the lottery, wagered on a horse or dog race or Jai Alai, and bet privately on games of skill and on sports in the past year. In contrast, White women are significantly more likely than White men to have played bingo in the past year. Black men are far more likely than Black women to have participated in nearly every gambling activity.

**Table 10: Past-year Gambling by Gender and Ethnicity**

	Lottery	Casino	Pari-mutuel	Private	Sports	Bingo
White	**		*	**	***	*
Male	63.7	26.8	15.5	14.6	19.4	7.9
Female	53.5	23.8	11.0	8.9	5.6	12.3
Black	***	*		*		
Male	62.7	22.6	12.0	10.7	13.3	---
Female	34.8	11.2	6.7	2.2	3.3	2.2
Hispanic					**	
Male	56.1	17.3	7.1	9.2	9.2	8.2
Female	45.6	15.4	5.5	5.5	1.1	8.9

Pearson Chi-Square \* p≤.05 \*\* p≤.01 \*\*\* p≤.001  
 Level of significance indicated above gender comparison for each ethnic group.

Differences in gambling participation between Hispanic men and women are far less pronounced than for other ethnic groups. Hispanic men are only slightly more likely than Hispanic women to have played the lottery or wagered privately. They are significantly more likely to have wagered on sports events, although sports wagering is lower among Hispanics than across other ethnic groups. Interestingly, Hispanic men and women are equally likely to have been to a casino, a racetrack or fronton and to have played bingo in the past year.

### **Gambling Preferences**

For several types of gambling, respondents who acknowledged gambling in the past year were asked about their preferences for particular games. These types of gambling included lottery, casino, pari-mutuel and non-casino gaming machines.

Lottery. Respondents who had played the lottery in the past year (N=707) were asked what kind of tickets they usually purchased. The great majority (81%) reported they usually bought Florida Lotto tickets. One in ten (10%) said that they usually played a daily game, such as Cash 3, Play 4, Fantasy 5 or Mega Money. Only 6% of these respondents said they typically bought instant scratch tickets.

Casino. Respondents who had gambled at a casino in the past year (N=284) were asked what casino game they usually played. The majority (70%) said that they generally played slot machines at the casino. Another 22% said that they usually played card games and 4% reported playing table games such as roulette or craps.

These respondents were also asked what city or location they usually visited when they went to a casino. The largest proportion (27%) reported usually visiting a casino in Florida, one-quarter (26%) said Nevada and another 23% identified Mississippi as the city or location they usually visited when they went to a casino. Nearly six in ten of the respondents who said they usually visited a casino in Florida (58%) indicated that these were floating “cruises to nowhere” rather than land-based casinos.

Pari-mutuel. Only respondents who acknowledged betting on horses, dogs or Jai Alai in the past month (N=45) were asked which of these pari-mutuel activities they preferred. Four in ten of these respondents (41%) preferred betting on horse races, 31% responded dog races and only 7% said Jai Alai. Ten of these respondents (22%) indicated they had no preference at all.

**Non-Casino Gaming Machines.** Respondents who had gambled on non-casino gaming machines in the past year (N=72) were asked where they usually played such machines. Nearly one in four (23%) said they usually played non-casino gaming machines on cruise ships although it is unclear whether these were day cruise casinos sailing from Florida or longer cruises with a casino on board. One in five (20%) said they usually played these machines in bars, taverns, restaurants, lounges, convenience or grocery stores. One in eight (12%) indicated they played these machines in a bingo or pool hall and 9% had gambled on machines at a racetrack.

Only seniors who had ever gambled five or more times were asked to identify their favorite type of gambling (N=693). Nearly half of these respondents (49%) indicated that gambling at a casino was their favorite type of gambling. Another 25% said that the lottery is their favorite gambling activity. One in ten seniors (10%) expressed a preference for private wagering, 8% favored pari-mutuel wagering and 5% identified bingo as their favorite gambling activity.

**Motivations for Gambling**

Another important question in gambling studies is why people choose to gamble. In the Florida senior survey, respondents who had never gambled or gambled infrequently<sup>5</sup> were asked whether any of several different reasons to not gamble was “very important,” “somewhat important” or “not at all important.” Non-gamblers were most likely to say that morality was a very important reason for not gambling. Infrequent gamblers were most likely to say that losing money and inconvenience were important reasons for not gambling. There were no significant differences between senior men and women in their reasons for not gambling. However, White and Hispanic seniors were significantly more likely than Black seniors to state that losing money was an important reason not to gamble.

Respondents who had gambled five or more times in their lifetime were asked why they generally gambled, and to indicate whether any of several different reasons was “very important,” “somewhat important,” or “not at all important.” Table 11 presents information on the proportion of respondents who indicated that each of these reasons was “very important” or “somewhat important.”

**Table 11: Reasons for Gambling**

Reasons for Gambling	Infrequent Gamblers (55) %	Past-year Gamblers (332) %	Monthly Gamblers (172) %	Weekly Gamblers (318) %	Sig.
Entertainment or fun	61.8	65.3	70.2	76.7	.008
To win money	58.2	60.5	69.0	71.1	.016
Excitement or challenge	40.0	33.6	43.9	56.2	.000
Support good causes	41.1	49.7	54.4	52.8	.302
Inexpensive entertainment	36.4	42.9	50.3	49.4	.114
Convenience	27.8	31.4	41.5	41.4	.015
As a distraction	21.4	12.0	25.7	25.2	.000
To be with people	30.9	23.6	27.5	27.2	.545
Escape feelings	7.1	4.3	8.8	10.1	.037

<sup>5</sup> Respondents who had gambled in the past year but had not gambled five or more times in their lifetime were included in the group that was asked their reasons for not gambling.



Table 11 shows that the majority of seniors gamble for entertainment although monthly and weekly gamblers are significantly more likely to endorse this reason than less frequent gamblers. Winning money becomes an increasingly important reason for gambling as participation increases, as do excitement or challenge and convenience. Although endorsement rates are relatively low, monthly and weekly gamblers are significantly more likely to say that distraction and escape from feelings are somewhat or very important reasons for gambling.

Given the differences in gambling participation by gender and ethnicity identified above, differences in reasons for gambling associated with these important demographic variables were examined. Senior women are significantly more likely than men to say that being with other people, supporting good causes and inexpensive entertainment are important reasons for gambling. Table 12 examines differences in reasons for gambling among seniors from different ethnic groups.

**Table 12: Reasons for Gambling By Ethnicity**

Reasons	White (611)	Black (95)	Hispanic (109)	Sig.
Entertainment or fun	72.8	51.1	70.9	.000
To win money	63.8	73.4	70.0	.115
Support good causes	51.1	37.9	58.3	.012
Inexpensive entertainment	41.7	47.0	49.1	.539
Excitement or challenge	44.1	40.4	53.2	.138
Convenience	38.8	26.6	35.8	.073
To be with people	27.5	16.8	21.1	.046
As a distraction	18.1	20.2	24.5	.281
Escape feelings	6.6	5.3	10.9	.204

Table 12 shows that there are no significant differences among seniors from different ethnic groups in their views that winning money and inexpensive entertainment are important reasons for gambling. However, Blacks are significantly less likely than other seniors to say that entertainment or fun and supporting good causes are important reasons for gambling. Whites are significantly more likely than other seniors to say that being with other people is an important reason for gambling.

It has been suggested that seniors with discretionary income gamble for different reasons than seniors without such resources. Differences in reasons for gambling were examined among respondents who indicated that they were unable or just able to make ends meet (N=170) compared with those who sometimes or always had money left over (N=610). This analysis found very few differences between these two groups in their reasons for gambling. However, seniors with little or no disposable income were significantly more likely to say that distraction and escaping feelings were important reasons for gambling.

### ***Gambling and Military Experience***

We noted above, in relation to Table 8, that there is a strong relationship between military experience and monthly or weekly gambling. This is at least partly explained by the relationship between gambling and gender—with senior men far more likely than senior women to have ever served in the Armed Forces and to have gambled.

Further analysis shows that seniors with military experience (N=377) are primarily male (95%) and White (72%). These seniors are somewhat older than other respondents in the survey. They are significantly less likely to live in Florida year-round but more likely to be married, to have attended college, to be retired and to have adequate household incomes. Nearly half (48%) of seniors with military experience gamble on a monthly or weekly basis compared with 35% of seniors without such experience.

Seniors who have served in the Armed Forces are significantly more likely than other respondents in the survey to have played the lottery, gambled at a casino, bet on a horse race, dog race or Jai Alai game, wagered privately and on sports in the past year and to have made speculative investments. They are significantly less likely to have gambled on bingo in the past year. In spite of their greater gambling involvement, the prevalence of problem and pathological gambling among seniors who have served in the Armed Forces is not significantly different than prevalence rates among seniors without such experience.

### ***Gambling and Retirement***

Another relationship worth exploring is that between gambling and retirement. Six in ten (60%) of the respondents in the Florida senior survey indicated that they were retired. There were no significant differences between Florida seniors who were retired and those who were not in terms of gender, ethnicity, region of the state where they lived or education. Eight in ten (82%) retired Florida seniors were aged 65 and over, compared with only 40% of those who were not retired. Retired individuals were significantly more likely to be widowed than those who were not and significantly less likely to spend the entire year in Florida.

Retired individuals in the Florida Senior Survey were significantly less likely than those who were not to have played the lottery in the past year and to have gambled on "Other" activities (mostly raffles and sweepstakes). There were no differences in overall gambling participation or in past-year participation for any other gambling activities. Finally, the prevalence rate of problem and pathological gambling among retired individuals (1.5%) was significantly lower than among those who were not retired or who had retired previously but now worked parttime (2.3%) ( $p=.035$ ).

## PROBLEM GAMBLING AMONG SENIORS IN FLORIDA

Prevalence is a measure of the number of individuals in the population with a disorder at one point in time. In prevalence surveys, individuals are classified as problem or pathological gamblers on the basis of their responses to a previously established number of items from a valid and reliable problem gambling screen.

As discussed above (see *Measuring Gambling Problems Among Seniors* on Page 6), there is mounting evidence that the SOGS—the oldest and most widely used problem gambling screen—may not be the best tool for assessing this disorder among older adults. Although the NODS is more restrictive, recent research indicates that this screen, like others based on the DSM-IV criteria, is more accurate than the SOGS (Lesieur & Rosenthal, 1998; Stinchfield, 2003). Consideration of data from several statewide surveys support the argument that the NODS may do a better job of identifying gambling problems across many different sub-groups in the population. Building on this foundation, the NODS was selected as the primary measure of problem and pathological gambling prevalence in the Florida Senior Survey.

### **Prevalence Rates**

Table 13 presents information about the proportion of the total sample (N=1,260) who scored on an increasing number of items on the lifetime and past-year NODS. Table 13 also summarizes the prevalence of problem and pathological gambling based on established criteria for discriminating between respondents without gambling-related difficulties and those with mild, moderate and severe problems (Gerstein et al, 1999).

**Table 13: Scores on Lifetime and Past-Year NODS**

Number of Items	Lifetime (1260)	Past-year (1260)
<b>Non-Gamblers</b>	<b>18.4</b>	<b>18.4</b>
<b>Non Problem Gamblers</b>	<b>71.8</b>	<b>76.8</b>
1	6.7	3.1
2	1.3	0.6
<b>At Risk</b>	<b>8.0</b>	<b>3.7</b>
3	0.9	0.5
4	0.2	0.2
<b>Problem</b>	<b>1.0</b>	<b>0.7</b>
5	0.4	0.2
6	0.2	0.1
7	0.2	0.1
8	0.1	---
9	---	---
10	---	---
<b>Pathological</b>	<b>0.8</b>	<b>0.4</b>
<b>Combined Problem/Path</b>	<b>1.8</b>	<b>1.1</b>

### **Explaining Confidence Intervals and Margins of Error**

Prevalence rates are based on samples rather than the entire population. One important source of uncertainty in generalizing from a sample to the population—sampling error—is generally presented as a measure of the uncertainty around the identified value. Calculations of the size of this variation—sometimes called the confidence interval and sometimes referred to as the margin of error—are based on the percentage of the sample with a particular characteristic and the size of the sample.

To illustrate, the margin of error for the total sample of Florida seniors (N=1,260) is  $\pm 2.8\%$ . The margin of error for an entire sample is generally calculated for a situation in which half of the respondents answer a question “Yes” and the other half answer “No.” The confidence interval allows us to assume with reasonable certainty—95 times out of 100—that the “true” value is somewhere between 47.2% (50% minus 2.8%) and 52.8% (50% plus 2.8%).

The confidence interval narrows as the value approaches either 0% or 100%. For example, a value of 5% among the Florida senior sample has a margin of error of  $\pm 1.2\%$ . This means that we can be reasonably certain that the “true” value falls between 3.8% and 6.2%. As values near these extremes, the confidence interval can approach or exceed the value itself. The closer the confidence interval comes to the value, the less reliable the value itself is considered to be. In several of the tables that follow, confidence intervals that equal or exceed 50% of the value of the prevalence estimate are flagged with an asterisk and readers are advised to treat these estimates with caution.

### **Population Estimates**

According to the most recent census (U.S. Census Bureau, 2001), the population of Florida aged 55 and over in 2000 was 4,366,610. Based on these figures, we estimate that as few as 14,000 (0.3%) and as many as 56,000 (1.3%) Florida seniors can be classified as lifetime pathological gamblers. In addition, we estimate that as few as 20,000 (0.45%) and as many as 68,000 (1.55%) Florida residents aged 55 and over can be classified as lifetime problem gamblers. Finally, we estimate that as few as 284,000 (6.5%) and as many as 415,000 (9.5%) Florida seniors can be classified as lifetime at-risk gamblers.

Based on current prevalence figures, we estimate that as few as 4,000 (0.1%) and as many as 31,000 (0.7%) Florida seniors can be classified as past-year pathological gamblers. In addition, we estimate that as few as 9,000 (0.2%) and as many as 52,000 (1.2%) Florida residents aged 55 and over can be classified as past-year problem gamblers. We also estimate that as few as 118,000 (2.7%) and as many as 205,000 (4.7%) Florida seniors can be classified as past-year at-risk gamblers.

### **Prevalence Rates Within Demographic Groups**

Problem gambling prevalence rates are significantly different among sub-groups in the senior population in Florida. Because the confidence intervals around prevalence estimates for many of these sub-groups are large, most of the comparisons between these groups must be interpreted with caution. In presenting these data, we have suppressed all estimates where the confidence interval equals or exceeds the

prevalence estimate. Table 14 presents information about the size of each group in the sample as well as the confidence interval for the combined problem and pathological gambling prevalence rate.

**Table 14: Prevalence by Demographic Group**

		Group Size	Lifetime Prevalence (NODS=3+) %	Conf.
Gender				
	Male	571	2.8	±1.3
	Female	688	1.2*	±0.8
Ethnicity				
	White	817	0.9*	±0.6
	Black	172	4.7*	±3.2
	Hispanic	188	3.2*	±3.0
Marital Status				
	Married	698	1.7*	±0.9
	Widowed	346	1.4*	±1.2
	Divorced/Separated	150	4.0*	±3.1
Employment				
	Working Part Time	121	4.1*	±3.5
	Retired	757	1.6	±0.9

\*Confidence interval equals or exceeds 50% of the prevalence estimate.

Table 14 shows that the prevalence of problem and pathological gambling is two times higher among senior men compared with senior women. It is also likely that the prevalence of problem and pathological gambling is higher among Black and Hispanic seniors compared with White seniors, and among seniors who are working part-time compared with those who are retired. Finally, the prevalence of problem and pathological gambling seems to be higher among divorced or separated seniors than among those who are married or widowed.

**Prevalence by Type of Gambling**

Another approach to understanding the relationship between wagering and gambling-related problems is to examine the prevalence of problem gambling among individuals who participate in specific types of gambling. Table 15 on the following page shows the prevalence of problem and pathological gambling for seniors who have gambled in the past year as well as for those who gamble weekly. Table 15 also shows the prevalence of problem and pathological gambling among seniors who have participated in specific types of gambling in the past year. As with the previous table, all estimates where the confidence interval equals or exceeds the prevalence estimate have been suppressed and results where the confidence interval exceeds 50% of the prevalence estimate have been flagged with an asterisk.

**Table 15: Prevalence by Type of Gambling**

	Group Size	Lifetime Prevalence (NODS=3+) %	Conf.
Total Sample	1260	1.8	±0.7
Past-Year Gamblers	823	2.9	±1.1
Monthly Gamblers	489	4.5	±1.8
Weekly Gamblers	318	6.0	±2.6
AMONG PAST-YEAR PLAYERS			
Pari-mutuel	144	7.6*	±4.3
Casino	285	6.3	±2.8
Private	125	5.6*	±4.0
Non-Casino Bingo	112	4.5*	±3.8
Other	104	3.8*	±3.7
Sports	124	3.2*	±3.1
Lottery	703	3.1	±1.3

\*Confidence interval equals or exceeds 50% of the prevalence estimate.

As with the previous table, the confidence intervals around the prevalence estimates for many of these sub-groups are large and the results must be interpreted with caution. It is clear that the prevalence of problem and pathological gambling increases among seniors with the regularity of their gambling, climbing from 1.8% for the entire sample to 6.0% for those respondents who gamble once a week or more often. Among past-year gamblers, the prevalence of problem and pathological gambling is highest among past-year pari-mutuel bettors although the small size of this group means that the confidence interval around this estimate is large. The prevalence of problem and pathological gambling also appears high among past-year casino players and seniors engaged in private wagering.

## COMPARING NON-PROBLEM AND PROBLEM SENIOR GAMBLERS

In considering how best to develop and refine policies and programs for problem gamblers of all ages, it is important to direct these efforts in an effective and efficient way. The most effective efforts in the areas of prevention, outreach and treatment are targeted at individuals who are at greatest risk of experiencing gambling-related difficulties. Since the purpose of this section is to examine individuals at risk, our focus here is on differences between seniors who gamble, with and without problems, rather than on the entire sample of seniors in Florida.

In looking at differences between Florida seniors who gamble with and without problems, our analysis is based on the lifetime NODS. Developmental work and recent research support the view that the lifetime DSM-IV criteria are more accurate than past-year measures in identifying at-risk individuals in clinical samples as well as the general population (Gerstein et al, 1999; Lesieur & Rosenthal, 1998; Stinchfield, 2003). Given the small number of respondents in the Florida Senior Survey who scored as problem and pathological gamblers on the basis of the lifetime NODS, the two groups have been combined into a single group and will be referred to as problem gamblers in this section. The small size of this group means that readers should interpret the results of this analysis with caution.

### **Demographics**

Table 16 shows that senior problem gamblers in Florida are demographically distinct from non-problem gamblers. Senior problem gamblers in Florida are significantly more likely than non-problem gamblers to be men from minority groups. Table 16 also shows that senior problem gamblers in Florida are significantly more likely than non-problem gamblers to be divorced or separated and to be working part-time or keeping house. There are no significant differences between senior problem and non-problem gamblers in age, region of the state, religion, educational status, military service and any of three measures of income.

**Table 16: Demographics of Non-Problem and Problem Senior Gamblers**

		Non-Problem Gamblers (903) %	At Risk Gamblers (101) %	Problem & Pathological Gamblers (24) %	Sig.
Gender	Male	46.3	56.4	66.7	.026
	Female	53.7	43.6	33.3	
Age	55 – 64	35.2	38.0	26.1	.878
	65 – 74	34.4	35.0	47.8	
	75 – 84	25.1	22.0	21.7	
	85 +	5.3	5.0	4.3	
Ethnicity	White	72.1	60.4	30.4	.000
	Black	10.2	21.8	34.8	
	Hispanic	12.1	12.9	26.1	
	Other	5.6	5.0	8.7	

**Table 16: Demographics of Non-Problem and Problem Senior Gamblers (cont'd)**

		Non-Problem Gamblers (903) %	At Risk Gamblers (101) %	Problem & Pathological Gamblers (24) %	Sig.
Region	North Central	19.9	19.0	26.1	.906
	North East	7.5	6.0	4.3	
	North West	7.0	7.0	4.3	
	South Central	27.1	34.0	30.4	
	South	38.5	34.0	34.8	
Marital Status	Married	58.7	49.0	50.0	.003
	Widowed	26.6	20.6	20.8	
	Divorced/Separated	11.1	22.5	25.0	
	Never Married	3.7	7.8	4.2	
Education	Elementary / Some HS	9.8	17.2	18.2	.367
	HS Grad	31.1	28.3	31.8	
	Some College	32.6	31.3	36.4	
	BA Degree	15.6	11.1	9.1	
	Graduate Study	10.8	12.1	4.5	
Employment	Working Full Time	18.8	20.8	8.7	.027
	Working Part Time	9.6	13.9	21.7	
	Keeping House	5.8	5.9	13.0	
	Retired / Disabled	64.6	55.4	52.2	
	Unemployed	1.2	4.0	4.3	
Armed Forces Service		32.7	39.6	37.5	.347

It is interesting that at-risk senior gamblers are midway between non-problem and problem gamblers in terms of gender and ethnicity but are closer to problem gamblers in marital status, employment status and military experience.

### ***Gambling Participation***

While information about the demographic characteristics of problem gamblers is useful in designing prevention and treatment services, it is also helpful to understand differences in the gambling behavior of non-problem and problem gamblers. Information about the behavioral correlates of problem gambling can help treatment professionals effectively identify at-risk individuals, design appropriate treatment measures and establish accessible services.

Lifetime. Senior problem gamblers in Florida are significantly more likely than non-problem gamblers to have ever tried most of the different types of gambling included in the survey. The exceptions are lottery play, non-casino bingo, speculative investments and “Other” types of gambling (largely raffles and sweepstakes). Lifetime participation rates for at-risk senior gamblers fall between non-problem and problem gamblers with a few exceptions. These include non-casino gaming machines, private wagering, speculative investments and bingo.

Past-Year. Table 17 on the following page shows differences in past-year involvement in different types of gambling by non-problem, at-risk and problem senior gamblers in Florida. Only those types of gambling for which past-year participation among problem gamblers is 10% or higher are shown. Table 17 shows that senior problem gamblers in



Florida are significantly more likely than non-problem gamblers to have gambled in the past year on the lottery, at a casino and on horse or dog races as well as privately and on sports. Senior problem gamblers are also significantly more likely than non-problem gamblers to have played bingo in the past year.

**Table 17: Past-Year Gambling of Non-Problem and Problem Senior Gamblers**

	Non-Problem Gamblers (903) %	At Risk Gamblers (101) %	Problem & Pathological Gamblers (24) %	Sig.
Lottery	67.0	75.2	91.7	.011
Casino	25.0	40.6	75.0	.000
Pari-mutuel	11.1	32.7	47.8	.000
Private	10.8	19.8	30.4	.001
Sports	10.7	22.8	17.4	.001
Non-casino Bingo	10.0	16.8	20.8	.032
Other	9.5	13.9	17.4	.198
Speculative Investments	9.1	15.8	12.5	.087

Table 17 also shows that past-year participation rates for at-risk senior gamblers fall between non-problem and problem gamblers with a few exceptions. These include sports wagering and speculative investments.

When they gamble at a casino, senior problem gamblers in Florida are significantly more likely than non-problem and at-risk gamblers to report that they usually play slot machines or video games (e.g. video poker). Over half (52%) of senior problem gamblers who had gambled at a casino in the past year said that they usually play slot machines or video games compared with 19% of non-problem gamblers and 24% of at-risk gamblers. Senior problem gamblers are also significantly more likely than non-problem and at-risk gamblers to prefer daily or instant lottery games over Lotto and Powerball. Again, over half (54%) of senior problem gamblers who had played the lottery in the past year indicated that they usually purchase daily or instant tickets when they play the lottery compared with 10% of non-problem gamblers and 13% of at-risk gamblers.

Monthly. Table 18 shows differences in monthly involvement in different types of gambling by non-problem, at-risk and problem senior gamblers. Again, only those types of gambling for which monthly participation among problem gamblers is 10% or higher are shown. Table 18 shows that senior problem gamblers in Florida are significantly more likely than non-problem gamblers to gamble monthly or more often on the lottery, privately, on non-casino bingo, at a casino and on horse or dog races. In fact, the rate of monthly pari-mutuel and casino wagering is higher among senior problem gamblers in Florida than monthly gambling on bingo and private games. Monthly participation rates for at-risk senior gamblers fall between non-problem and problem gamblers.

**Table 18: Monthly Gambling of Non-Problem and Problem Senior Gamblers**

	Non-Problem Gamblers (903) %	At Risk Gamblers (101) %	Problem & Pathological Gamblers (24) %	Sig.
Lottery	37.5	57.4	75.0	.000
Private	5.1	10.9	12.5	.023
Non-casino Bingo	3.8	10.9	12.5	.001
Casino	2.7	9.9	26.1	.000
Pari-mutuel	1.2	5.0	20.8	.000

Weekly. Senior problem gamblers in Florida are significantly more likely than non-problem gamblers to gamble weekly or more often on the lottery, on pari-mutuel events, at a casino and privately, as well as on non-casino bingo. However, with the exception of lottery play, weekly participation rates are extremely low.

### Motivations for Gambling

Table 19 presents information about the reasons that non-problem, at-risk and problem senior gamblers endorse as “somewhat important” or “very important.” Table 19 shows that all of the senior gamblers are most likely to say that winning money and entertainment are important reasons for gambling. However, nine in ten senior problem gamblers feel that these are important reasons for gambling compared with only six or seven in ten non-problem gamblers. Senior problem gamblers are much more likely than non-problem and at-risk gamblers to believe that excitement or challenge, distraction and escaping from feelings are important reasons for gambling.

**Table 19: Reasons for Gambling Among Non-Problem and Problem Senior Gamblers**

Reasons for Gambling	Non-Problem Gamblers (755) %	At Risk Gamblers (95) %	Problem & Pathological Gamblers (24) %	Sig.
To win money	63.2	80.0	91.7	.000
Entertainment or fun	68.3	80.0	91.7	.004
Excitement or challenge	40.2	65.3	87.5	.000
As a distraction	15.2	43.2	79.2	.000
Convenience	36.2	34.7	69.6	.004
To be with people	24.9	31.6	41.7	.080
Escape feelings	6.1	11.6	33.3	.000

Table 20 on the following page presents information about the types of gambling preferred by non-problem, at-risk and problem senior gamblers in Florida. Table 20 shows that casino gambling and playing the lottery are the top two favorite activities among senior gamblers. Nearly half of the senior gamblers who expressed a preference indicated that gambling at a casino was their favorite activity followed by about one-quarter who preferred playing the lottery. Other gambling activities were preferred by much smaller numbers of senior gamblers.

**Table 20: Favorite Gambling Activities**

Favorite Type of Gambling	Non-Problem Gamblers (755) %	At Risk Gamblers (95) %	Problem & Pathological Gamblers (24) %	Sig.
				.048
Casino	48.1	51.2	47.8	
Lottery	25.4	21.4	21.7	
Pari-mutuel	7.2	9.5	8.7	
Bingo	5.1	7.1	4.3	
Private	10.4	7.1	8.7	

**Other Significant Differences**

Table 21 presents information about other important differences between non-problem, at-risk and problem senior gamblers in Florida. Table 21 shows that there are few differences among senior gamblers with regard to whether they gamble alone, the distance they travel and their mode of transportation. In contrast to adults under 55, who often gamble with a spouse or other family member, seniors may be more likely to gamble alone because of their smaller social networks. Similarly, transportation to and from gambling venues is often provided free to senior gamblers. Free transportation would tend to weaken the relationship between enthusiasm for gambling and willingness to travel.

**Table 21: Other Significant Differences**

	Non-Problem Gamblers (755) %	At Risk Gamblers (95) %	Problem & Pathological Gamblers (24) %	Sig.
Company				.479
Alone	39.9	41.9	52.2	
Accompanied	60.1	58.1	47.8	
Distance				.064
Don't travel	17.1	9.7	4.3	
5 miles	32.1	30.1	30.4	
6 – 60 miles	18.1	28.0	34.8	
More than 60 miles	32.7	32.3	30.4	
Transportation				.540
Own car	65.9	63.4	73.9	
Family or friend	11.5	17.2	21.7	
Airplane	11.9	12.9	---	
Don't leave home	3.4	1.1	---	
Frequency compared w/5 yrs ago				.000
More	5.6	12.6	34.8	
About the same	52.1	40.0	26.1	
Less	42.3	47.4	39.1	

**Table 21: Other Significant Differences (cont'd)**

	Non-Problem Gamblers (755) %	At Risk Gamblers (95) %	Problem & Pathological Gamblers (24) %	Sig.
Average monthly spend				.000
\$10 or less	64.4	34.5	5.0	
\$11 - \$99	27.2	39.3	30.0	
\$100 or more	8.4	26.2	65.0	
Largest single day loss				.000
Less than \$10	37.9	16.1	---	
\$10 - \$99	38.2	19.5	13.0	
\$100 or more	23.8	64.4	87.0	

These variables were examined by age to determine if seniors aged 55 to 64 were more or less likely than seniors aged 65 and over to gamble alone, travel substantial distances to gamble and their mode of transportation. There were no substantial or significant differences in these variables identified beyond those shown in Table 21.

In contrast to the lack of differences noted with regard to companionship and transportation, there are significant differences between non-problem, at-risk and problem senior gamblers in terms of their gambling involvement compared with five years ago and their spending on gambling. Senior problem gamblers are significantly more likely than non-problem and at-risk gamblers to say that they are gambling more now than they did five years ago. Senior problem gamblers are also significantly more likely than non-problem or at-risk gamblers to report that they spend \$100 or more on gambling in an average month and to acknowledge they have lost \$100 or more in a single day of gambling.

Table 22 presents information about tobacco, alcohol and drug use among non-problem, at-risk and problem senior gamblers in Florida. Table 22 shows that there are no significant differences between senior gamblers with regard to daily tobacco use, past-year marijuana use and monthly use of prescription drugs. However, senior problem gamblers are significantly more likely than non-problem or at-risk senior gamblers to consume alcohol once a week or more often and to use non-prescription drugs once a month or more often.

**Table 22: Tobacco, Alcohol and Drug Use**

	Non-Problem Gamblers (903) %	At Risk Gamblers (101) %	Problem & Pathological Gamblers (24) %	Sig.
Weekly Alcohol	21.8	30.0	45.8	.009
Daily Tobacco	14.2	18.0	25.0	.233
Monthly Non-Prescription Drugs	4.3	4.0	16.7	.035
Monthly Prescription Drugs	11.1	14.0	12.5	.727
Past-year Marijuana	0.9	3.0	4.2	.068

Table 23 presents self-ratings of physical and mental health among non-problem, at-risk and problem senior gamblers. Table 23 shows that senior problem gamblers are significantly more likely than non-problem gamblers to rate their physical health as poor or fair, to have experienced the death of someone close in the past year and to indicate that they have been clinically depressed at some time in their lives. The possibility of links between loss of family, depression and gambling problems among seniors strongly indicates the need for further research in this area.

**Table 23: Physical and Mental Health**

	Non-Problem Gamblers (903) %	At Risk Gamblers (101) %	Problem & Pathological Gamblers (24) %	Sig.
Physical Health (fair or poor)	21.7	32.7	39.1	.038
Home Help	16.6	24.8	12.5	.101
Illness/disability / someone close	23.5	29.7	25.0	.380
Death of someone close	28.4	39.6	39.1	.040
Gambling by someone close	2.0	4.0	4.2	.361
Depression	10.5	21.8	33.3	.000
Dysthymia	3.5	5.1	6.7	.632

In considering these data, Dr. McNeilly suggests that greater monthly non-prescription drug use among senior problem gamblers may be related to their poorer physical health and higher rates of depression and personal loss. Seniors commonly use non-prescription drugs to help them sleep at night or for other minor physical ailments. Senior problem gamblers, and at-risk gamblers to a lesser degree, appear to be coping with a range of personal losses which leave them more depressed than non-problem gamblers and may lead them to self-medicate, not only with non-prescription drugs and alcohol, but also with gambling.

**Comparing the Survey and Helpline Data**

The FCCG operates a toll-free, confidential, 24-hour Helpline for problem gamblers, family members and other interested persons. Information on callers aged 55 and over (approximately 20% of all of the calls received for help or information) is available from the Council (Florida Council on Compulsive Gambling, 2001b, 2001c). Table 24 compares the demographics of senior problem gamblers identified in the telephone survey with the characteristics of senior problem gamblers calling the FCCG Helpline.

**Table 24: Comparing Survey and Helpline Data**

	Survey Seniors %	Helpline Seniors %
Male	67	47
White	30	70
55 to 64	26	62
Protestant	32	57
Divorced / Separated	25	27

Table 24 shows that the senior problem gamblers contacting the HelpLine are substantially more likely to be female, White and younger than the senior problem gamblers identified in the general population. Senior problem gamblers contacting the HelpLine are most likely to identify casinos and cards as the types of gambling causing the greatest problems. This is an interesting contrast to senior problem gamblers in the population where lottery play and pari-mutuel wagering, as well as casino gambling and private wagering, are implicated.

Based on information provided by the FCCG, senior problem gamblers are most likely to report that they gamble in order to be with people, as a distraction and to escape feelings. Like the HelpLine senior callers, senior problem gamblers in the population are significantly more likely than non-problem or at-risk gamblers to say that distraction and escaping feelings are important reasons to gamble (see Table 19). However, they are not significantly more likely than less troubled gamblers to report that they gamble in order to be with people.

Only three seniors in the telephone survey sample acknowledged seeking help for a gambling problem. One had sought help from a family member, another from a friend and the third from a member of the clergy.

## COMPARING FLORIDA SENIORS AND YOUNGER ADULTS

We noted above (see *Problem Gambling in Florida* on Page 9) that a statewide survey of gambling and problem gambling was carried out in Florida in 2001 (Shapira et al, 2002). Data from the statewide survey were provided to Gemini Research by FCCG. Given similarities in many of the items included in the statewide survey and the senior survey, it is possible to directly compare their results.

### ***Demographics***

The sample for the adult survey of gambling and problem gambling in Florida included 1,504 residents aged 18 and over.<sup>6</sup> One-third of the respondents in the weighted sample from the Florida adult population were aged 55 and over. Table 25 presents selected demographic characteristics of the adult and senior samples from the two surveys. The most striking difference is that the Florida Senior sample is substantially more likely to be Hispanic or Black than the older adults from the general population sample.

**Table 25: Demographics of Adult and Senior Samples**

		Adults 18-54 (943) %	Adults 55+ (516) %	Seniors (1260) %
Gender	Male	49.9	44.7	45.3
	Female	50.1	55.3	54.7
Ethnicity	White	68.2	85.4	65.5
	Black	13.6	5.7	13.9
	Hispanic	12.2	4.5	15.1
	Other	6.0	4.5	5.5
Marital Status	Married	49.0	57.0	55.9
	Widowed	1.4	24.0	27.7
	Divorced/Separated	16.3	14.9	12.1
	Never Married	33.2	4.1	4.3
Education	HS or Less	31.1	41.2	44.5
	Some College	42.6	35.6	30.4
	College Degree	17.0	13.0	15.2
	Graduate College	9.4	10.3	9.8
Employment	Working Fulltime	67.5	20.5	18.1
	Working Part-time	10.9	6.6	9.9
	Student/Disabled/Unemp	13.6	10.5	4.8
	Keeping House	7.2	10.9	6.1
	Retired	0.7	51.6	61.2

In contrast to the difference in ethnicity, Table 25 shows that both samples of older Florida adults are somewhat more likely to be female and far more likely to be widowed

<sup>6</sup> Forty-five individuals (3%) refused to provide information about their age and have been excluded from analyses in this section.

and retired. Table 25 also shows that both samples of older Florida adults are less likely than adults aged 18 to 54 to have graduated from high school.

**Gambling Participation**

Table 26 presents information about lifetime, past-year and weekly gambling among adults aged 18 to 54 in the general population, adults aged 55 and over in the general population and seniors (all of whom were aged 55 and over). In considering differences between these groups, it is important to note that the general population survey assessed involvement in 22 different gambling activities while the senior survey assessed only 11 activities.

**Table 26: Gambling Participation Among Adult and Senior Samples**

	Group Size	Lifetime	Past-year	Weekly
Adults 18-54	943	88.1	72.0	21.8
Adults 55-74	356	89.9	72.8	29.2
Adults 75+	161	79.5	48.8	20.0
Seniors 55-74	840	83.6	69.8	28.8
Seniors 75+	387	77.8	56.1	18.3

To identify patterns in gambling participation among older adults, these two samples have been split between respondents aged 55 to 74 and those aged 75 and over. Table 26 demonstrates that adults in Florida aged 55 to 74 are actually more likely than either adults aged 18 to 54 or adults aged 75 and over to gamble on a weekly basis. The same pattern is apparent among the senior sample, with those aged 55 to 74 much more likely than individuals aged 75 and over to gamble weekly or more often.

**Table 27: Past-Year Gambling By Adults and Seniors**

	Adults 18-54 (943) %	Adults 55+ (516) %	Seniors (1260) %
Lottery	59.0	54.0	55.9
Casino	15.1	16.2	22.6
Pari-mutuel	8.9	8.5	11.5
Private	28.2	13.8	10.0
Sports	10.7	5.2	9.9
Bingo	5.3	8.7	8.9
Speculative	22.0	16.1	8.0
Non-Casino Machines	7.0	4.9	5.5

Table 27 presents information on past-year participation in several types of gambling for adults aged 18 to 54, adults aged 55 and over and seniors in Florida. Table 27 shows that past-year lottery play as well as gambling on pari-mutuel events, non-casino gaming machines and sports are quite similar across all of these groups. Adults aged 18 to 54 are far more likely to have wagered privately in the past year and to have engaged in speculative investments than seniors. However, past-year casino gambling is considerably higher among respondents in the Florida Senior Survey than among respondents in the adult survey. It is likely that differences in gambling participation



among older adults in the general population and the senior sample are due to the ethnic (and related socioeconomic) differences between these two samples.

Table 28 presents information about the demographics of past-year gamblers in the general population and senior samples. Table 28 shows that, as with the full samples, past-year gamblers in the Florida Senior sample are significantly more likely to be Hispanic or Black than older past-year gamblers in the general population sample. As with the full samples, the two groups of older past-year adults are somewhat more likely to be female, far more likely to be widowed and retired and less likely than adults aged 18 to 54 to have graduated from high school.

**Table 28: Demographics of Adult and Senior Past-Year Gamblers in Florida**

		Adults 18-54 (679) %	Adults 55+ (337) %	Seniors (822) %
Gender	Male	53.6	50.1	50.1
	Female	46.4	49.9	49.9
Ethnicity	White	72.6	86.9	69.9
	Black	11.0	3.9	11.2
	Hispanic	11.3	5.4	13.1
	Other	5.2	3.9	5.9
Marital Status	Married	50.0	60.7	58.2
	Widowed	1.2	19.0	24.6
	Divorced/Separated	17.0	16.1	13.0
	Never Married	31.9	4.2	4.3
Education	HS or Less	31.9	39.5	41.2
	Some College	41.7	37.1	33.6
	College Degree	17.3	13.9	15.8
	Graduate College	9.1	9.5	9.4
Employment	Working Fulltime	72.0	22.8	19.4
	Working Part-time	10.4	8.9	11.2
	Student/Disabled/Unemp	11.3	10.9	4.4
	Keeping House	5.5	9.5	6.1
	Retired	0.9	47.9	58.9
	Armed Forces Service	12.8	39.9	34.8

### Motivations for Gambling

In addition to different patterns of gambling involvement, older and younger adults have somewhat different motivations to gamble. Table 29 on the following page presents information on the proportion of adult and senior gamblers who endorsed different reasons for gambling as “somewhat” or “very important.” Table 29 shows that there are very few differences in the reasons for gambling endorsed by adults of different ages. One possible exception is that adults aged 18 to 54 are significantly more likely than adults aged 55 and over to say that excitement or challenge is a somewhat or very important reason to gamble. It is interesting that gamblers in the Florida Senior sample are even more likely than adults aged 18 to 54 in the general population sample to

endorse this reason for gambling. It is also interesting that gamblers in the Florida Senior sample are far less likely than gamblers in the adult sample to endorse “escaping feelings” as an important reason for gambling.

**Table 29: Reasons for Gambling Among Adult and Senior Gamblers**

Reasons for Gambling	Adult Gamblers 18-54 (410) %	Adult Gamblers 55+ (206) %	Senior Gamblers (873) %
Entertainment or fun	69.5	66.3	70.2
To win money	64.6	62.4	65.9
To support worthy causes	66.3	63.7	51.1
Excitement or challenge	36.3	22.1*	44.3
To be with people	33.7	31.2	26.1
As a distraction	20.3	18.1	20.0
Escape feelings	15.9	17.6	7.5

\* Significant difference between two groups of adult gamblers (p=.000).

### **Problem Gambling Prevalence<sup>7</sup>**

It is also informative to compare problem gambling prevalence rates for Florida seniors and the general population. Table 30 shows prevalence rates based on the lifetime NODS among seniors in Florida compared with older adults as well as younger adults aged 18 to 54 from the general population sample.

**Table 30: Comparing Problem Gambling Prevalence Rates**

	Adults 18-54 (943) %	Adults 55+ (516) %	Seniors (1260) %
Non-Gambling	8.8	9.7	18.4
Non-Problem Gambling	79.8	84.1	71.8
At Risk	9.1	5.6	8.0
Problem	0.8	0.2	1.0
Pathological	1.4	0.4	0.8

It is clear from Table 30 that respondents in the Florida Senior sample are much less likely to have ever gambled than respondents in the general population sample. However, Table 30 also shows that at-risk, problem and pathological gambling prevalence rates in the Florida Senior sample are much closer to prevalence rates among adults aged 18 to 54 in Florida than to those among adults aged 55 and over in the general population. As with past-year gambling participation rates, this may be due to differences in the demographics of the two samples of seniors in Florida.

Finally, Table 31 on the following page compares motivations for gambling among problem gamblers aged 18 to 54 and those aged 55 and over. Data on the group of 18 to 54 year old problem gamblers is from the general population sample while the group of senior problem gamblers is from the Florida Senior Survey.

<sup>7</sup> As a reminder, the original NODS prevalence rates have been used in this section to alleviate reader confusion.

**Table 31: Reasons for Gambling Among Problem Gamblers**

Reasons for Gambling	Adult Problem Gamblers (21) %	Senior Problem Gamblers (24) %
To win money	80.0	91.7
Entertainment or fun	72.7	91.7
Excitement or challenge	71.4	87.5
As a distraction	71.4	79.2
To be with people	66.7	41.7
Escape feelings	76.2	33.3

Table 31 shows that senior problem gamblers are more likely than younger problem gamblers to believe that entertainment or fun, excitement or challenge and distraction are somewhat or very important reasons to gamble. In contrast, problem gamblers aged 18 to 54 are substantially more likely than senior problem gamblers to say that being with people and escaping unpleasant feelings are somewhat or very important reasons to gamble. In contrast, according to the FCCG, senior problem gamblers are most likely to report that they gamble in order to be with people, as a distraction and to escape feelings.

## EXAMINING THE PERFORMANCE OF THE NODS AND THE FSPGS

In the Florida Senior Survey, the NODS was employed as the primary measure of gambling problems for two reasons. The first reason was because analysis indicated that the NODS performed better than the SOGS in identifying seniors with gambling problems (see *Measuring Gambling Problems Among Seniors* on Page 6). The second reason for using the NODS in the Florida Senior Survey was to provide a basis for comparing the results of this survey with the earlier prevalence survey in Florida (Shapira et al, 2002). This technical section of the report is intended for readers interested in the performance of the NODS and the new problem gambling items among the seniors interviewed in this survey.

### ***The NORC DSM-IV Screen (NODS) for Gambling Problems***

The NODS is based on the most recent diagnostic criteria for pathological gambling (American Psychiatric Association, 1994). The NODS is composed of 17 lifetime and 17 past-year items, compared to the 20 lifetime and 20 past-year items that comprise the South Oaks Gambling Screen. The maximum score on the NODS is 10 compared to 20 for the SOGS. As indicated above (see *Measuring Gambling Problems Among Seniors* on Page 6), the NODS is more restrictive in assessing problematic behaviors than the SOGS or other screens based on the DSM-IV criteria.

For example, several of the DSM-IV criteria are difficult to establish with a single question. In assessing these criteria (Preoccupation, Escape, Risking a Significant Relationship), two or three questions were used with respondents receiving a single point if they give a positive response to any of the questions assessing that criterion. Another complication in constructing the NODS is that two of the DSM-IV criteria (Withdrawal, Loss of Control) assume that the questioner already knows that the individual has tried to “stop, cut down, or control” her or his gambling. These criteria were assessed with the NODS by first determining whether the respondent had tried to control her or his gambling before assessing whether the respondent had felt restless or irritable during these times (Withdrawal) and, then, assessing whether the respondent had been able to do so (Loss of Control).

Another decision in developing the NODS was to place definite limits on several of the criteria, in keeping with the approach taken in alcohol and drug abuse research. For example, in assessing Preoccupation, the NODS asks if the periods when respondents spent a lot of time thinking about gambling or about getting money to gamble have lasted 2 weeks or longer. Similarly, the NODS asks if respondents have tried, but not succeeded, in controlling their gambling three or more times (Loss of Control). Respondents are also asked if they have lied to others about their gambling three or more times (Lying). Only positive responses to these latter items are included in the final score for the NODS.

## ***Statistical Properties of the NODS<sup>8</sup>***

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

### **Reliability**

The most widely accepted test of reliability is a measure of the internal consistency of an instrument. The reliability of the lifetime NODS in the sample of Florida seniors is good with Cronbach's alpha of .81. This alpha is substantially higher than the .70 that is generally accepted as representing good reliability. The reliability of the more limited set of items that are scored for the NODS (N=10) is lower than the full scale, with Cronbach's alpha of .73.

In addition to testing the internal consistency of the NODS, the screen was analyzed to assess how the individual items of the lifetime NODS cluster together. This analysis indicates that the NODS is a homogeneous scale since all of the items load on a single factor which accounts for 60% of the total variance in the score. Table 33 presents information on the relationship of the lifetime NODS items to this single factor.

***Table 32: Lifetime NODS Principal Component Analysis***

NODS Scored Items	Component Loading
Preoccupation	.509
Tolerance	.708
Withdrawal	.590
Loss of Control	.429
Escape	.668
Chasing	.480
Lying	.641
Illegal Acts	.549
Risked Significant Relationship	.507
Bailout	.636

### **Item Analysis**

Endorsement of the lifetime NODS items among respondents to whom the screen was administered ranged from a high of 7.7% (Chasing) to a low of 0.2% (Illegal Acts). It is instructive to compare positive responses to specific items by problem gamblers and non-problem gamblers to see how well the different items discriminate between these

<sup>8</sup> Only the performance of the lifetime NODS is examined here. There were too few respondents in the survey who scored in the problem to pathological range on the past-year NODS (N=14) to yield reliable information. It is also important to note that the unweighted data were used for this analysis since the purpose was to assess performance rather than generalize to the population.

groups, as presented in Table 34. For this analysis, at-risk gamblers (those scoring 1 or 2 on the lifetime NODS) have been consolidated with non-problem gamblers while problem and pathological gamblers (those scoring 3 or more on the lifetime NODS) have grouped together.

**Table 33: Endorsement of NODS Items**

NODS Scored Items	Non-Problem Gamblers (1001) %	Problem Gamblers (23) %	Sig.
Preoccupation	1.5	60.9	.000
Tolerance	1.0	73.9	.000
Withdrawal	0.3	39.1	.000
Loss of Control	0.2	17.4	.000
Escape	1.3	56.5	.000
Chasing	6.0	82.6	.000
Lying	0.6	56.5	.000
Illegal Acts	---	8.7	.000
Risked Significant Relationship	0.4	17.4	.000
Bailout	0.2	21.7	.000
Mean NODS Score	0.1	4.3	.000

Table 34 shows that all of the NODS items discriminate effectively between problem and non-problem senior gamblers in Florida. The most effective discriminator is Chasing with 83% of the problem and pathological gamblers scoring a positive response in contrast to only 6% of the non-problem gamblers. The next best discriminator is Tolerance, with 74% of the problem and pathological gamblers scoring a positive response compared to 1% of the non-problem gamblers. Table 34 also shows that the average score on the lifetime NODS is significantly higher for senior problem gamblers compared with non-problem gamblers.

**Validity**

There are several different types of validity that can be measured to assess performance. These include content, criterion, congruent and construct validity. Content validity is a subjective measure of how appropriate the items seem to a set of reviewers who have some knowledge of the subject matter. Since the NODS is closely based on the DSM-IV criteria, and since these criteria have been shown to have good content validity, it is likely that the NODS also has good content validity (Lesieur & Rosenthal, 1998).

Criterion validity judges the performance of a new screen against some other method that is acknowledged as a standard for assessing the same phenomenon. Since the NODS was the only problem gambling screen used in the Florida Senior Survey, it is impossible to assess criterion validity in this sample. However, research on the performance of the NODS in relation to the more widely-used SOGS in other problem gambling surveys suggests that the two screens are highly correlated (Volberg, 2001a, 2001b, 2002, 2003a).

The most difficult and yet valuable test of validity is construct validity—a measure of how meaningful the scale is in practical use. Construct validity is not usually calculated as a

quantifiable statistic. Rather, construct validity emerges over time as the performance of an instrument in different settings and with different populations is assessed. One way to begin to assess construct validity is examine the convergence of the instrument with associated measures to see if these vary in a predictable way. Another approach is to examine the divergence of the measure from traits or behaviors with which it is not supposed to be associated.

Highly significant differences in mean score between weekly and less frequent senior gamblers in Florida ( $F=53.30$ ,  $p=.000$ ) provide some evidence of construct validity for the lifetime NODS. Additional analyses showing highly significant differences between senior problem and non-problem gamblers in behaviors associated with problem gambling provide additional evidence of construct validity. Table 35 shows that senior problem gamblers are significantly more likely than non-problem gamblers to gamble weekly, to spend large amounts of money on gambling, and to rate gambling as very important compared with other leisure and entertainment options.

**Table 34: Evidence in Support of NODS Construct Validity**

	Non-Problem Gamblers (1001) %	Problem Gamblers (23) %	Sig.
Weekly Gambling	29.3	78.3	.000
Average Monthly Spending \$100+	10.1	63.2	.000
Largest Single Day Loss \$100+	27.7	86.4	.000
Gambling very important compared with other leisure/entertainment options	11.9	69.6	.000

### **The Florida Senior Problem Gambling Screen (FSPGS)**

A primary purpose of the Florida Senior Gambling Survey was to assess the performance and validity of existing problem gambling screens among seniors and to identify an alternative set of questions that might perform better in identifying gambling problems among seniors. We noted above (see *Measuring Gambling Problems Among Seniors*) that smaller differences in endorsement rates for the NODS across age groups support the view that this screen does a better job than the SOGS at identifying gambling problems across the lifespan. Examination of the performance of the NODS in the Florida Senior Survey demonstrates that the lifetime version of this screen has good internal consistency and construct validity, is very homogeneous, and effectively discriminates between problem and non-problem senior gamblers.

In spite of this acceptable performance, concerns about the applicability of existing measures of problem gambling to seniors led to the addition of seven items to the problem gambling section of the questionnaire for the Florida Senior Survey to assess problematic aspects of gambling specific to seniors.<sup>9</sup> Only 39 of the 1,024 seniors who had ever gambled endorsed one or more of these new items. All but two of these 39 respondents (95%) endorsed either borrowing using credit cards to gamble or

<sup>9</sup> Only the lifetime items are examined here because too few respondents endorsed the past-year items ( $N=19$ ) to yield reliable information. As with the NODS, the unweighted data were used to analyze the performance of these items.

experiencing feelings of shame related to their gambling or both. Senior men were significantly more likely than senior women to say that they had borrowed using credit cards to gamble ( $p=.024$ ). There were no significant differences in the age of seniors who endorsed either of these items.

The Cronbach's alpha for the full set of seven items was an unsatisfactory .62. Based on principal components analysis, only the item assessing borrowing using credit cards clustered significantly with the lifetime NODS. Endorsement of these items among senior gamblers ranged from a high of 2.0% (Credit Cards) to a low of 0.1% (Sold Personal Property). Between three and eight senior problem gamblers endorsed three of the items (Sold Stocks, Credit Cards, Shame). All of the other items were endorsed by only one or two senior problem gamblers.

Table 36 presents information on the relationship between the lifetime NODS and the new items. It is noteworthy that 14 of the 39 senior gamblers who scored on these items did not score on the NODS. All but three of these 14 respondents (79%) endorsed either borrowing using credit cards to gamble or experiencing shame related to their gambling. The majority of these respondents were White men aged 55 to 74. These two items appear to "capture" a group of senior problem gamblers that is not caught on the basis of the psychiatric criteria for pathological gambling.

**Table 35: New Items by NODS Score**

NODS	New Items		Total
	0	1+	
0	888	14	902
1	73	10	83
2	12	4	16
3	7	4	11
4	2		2
5	2	3	5
6		2	2
7	1	1	2
8		1	1
Total	985	34	1024

In an effort to identify an alternative approach to identifying seniors with gambling problems, we explored how well a sub-set of questions culled from the NODS and the new items captured respondents who scored on one or both of these two scales. Seven NODS items and two new items captured all but five of the 123 Florida seniors who scored 1 or more on the NODS (96%) and all but three of the 39 Florida seniors who scored on 1 or more on the new items (92%). This set of items has been named the Florida Senior Problem Gambling Screen (FSPGS).

The individual items that make up the FSPGS are presented in Table 37 on the following page. Future research is needed to improve our understanding of the FSPGS and its relationship to gambling problems among seniors.



**Table 36: The Florida Senior Problem Gambling Screen (FSPGS)**

NODS1	Preoccupation	Have there ever been periods lasting 2 weeks or longer when you spent a lot of time thinking about your gambling experiences or planning out future gambling ventures or bets?
NODS3	Tolerance	Have there ever been periods when you needed to gamble with increasing amounts of money or with larger bets than before in order to get the same feeling of excitement?
NODS4	Loss of Control Screen	Have you ever tried to stop, cut down, or control your gambling?
NODS8	Escape	Have you ever gambled as a way to escape from personal problems?
NODS10	Chasing	Have you often gambled to win back money you lost on a previous day?
NODS11	Lying Screen	Have you ever lied to family members, friends, or others about how much you gamble or how much money you lost on gambling?
NODS14	Risked Relationship	Has your gambling ever caused serious or repeated problems in your relationships with any of your family members or friends?
FCCG4	Borrowed / Credit Cards	Have you ever borrowed money using your credit cards to get money to gamble or pay gambling debts?
FCCG6	Shame	Have you ever experienced feelings of shame related to your gambling?

## SUMMARY AND CONCLUSION

Growth in the senior population and the availability of gambling has raised concerns about the impacts of this massive new recreational influence on senior Americans. The main goals of this study were to improve methods to identify gambling problems among seniors, assess the prevalence of problem gambling among seniors in Florida, and assist FCCG in targeting services for senior problem gamblers in Florida. The results of this study will be useful in documenting the impacts of gambling on seniors in Florida and in refining the services available to seniors in Florida with gambling-related difficulties.

### ***Summary***

The present survey found that gambling participation rates among seniors in Florida are similar to the general population, with 25% gambling weekly and 40% having gambled in the past year. However, nearly twice as many seniors have never gambled (18%) compared with the general population. In terms of lifetime participation, Florida seniors are most likely to have played lottery games, gambled at a casino, bet on horse or dog races or Jai Alai, bet privately and played bingo. Florida seniors are most likely to play lottery games, wager privately, play bingo and gamble at a casino on a monthly or weekly basis.

There are significant differences among Florida seniors between non- and infrequent gamblers, on the one hand, and monthly and weekly gamblers, on the other. Non- and infrequent gamblers are most likely to be female, Hispanic or Black, and widowed. Monthly and weekly gamblers are most likely to be male, White and married and to have served in the armed forces. Moral and financial concerns are important reasons for not gambling among Florida seniors while entertainment, excitement and challenge are important reasons for doing so among those who gamble.

The combined lifetime prevalence of problem and pathological gambling among seniors in Florida is 1.8% and the combined past-year prevalence is 1.1%. Prevalence rates are highest among men, Blacks and Hispanics, divorced and separated individuals, and among those working part-time or keeping house. Prevalence rates are also high among individuals who gamble weekly or more often and among past-year horse, dog and Jai Alai bettors, casino gamblers, those wagering privately and bingo players.

Senior problem gamblers in need of services are most likely to be male, aged 65 to 74 and Hispanic or Black. These senior problem gamblers are most likely to live in South Central or South Florida counties and to be retired or disabled. Senior problem gamblers in Florida are significantly more likely than non-problem gamblers to say that excitement or challenge, distraction, and escape from feelings are important reasons to gamble. Finally, senior problem gamblers in Florida are more likely than non-problem gamblers to consume alcohol once a week or more often, rate their physical health only fair or poor, to have experienced the death of someone close in the past year and to be depressed.

### ***Directions for the Future***

The impacts of problem gambling can be high, for families and communities as well as for individuals. Pathological gamblers experience physical and psychological stress and

exhibit substantial rates of depression, alcohol and drug dependence and suicidal ideation. The families of problem and pathological gamblers experience physical and psychological abuse as well as harassment and threats from bill collectors and creditors. Other significant impacts include costs to employers, creditors, insurance companies, social service agencies and the civil and criminal justice systems. A particular concern with senior problem gamblers is that their financial losses are more devastating than for younger people because they have little if any time to recoup their losses.

### Recommendations

Given the rates of at-risk, problem and pathological gambling among seniors in Florida, it will be important to target services for this sub-group in the population. While treatment services are important, it would also be sensible to focus resources on less-severely affected senior gamblers, whose behavior may be more amenable to change. In developing and refining services for senior problem gamblers in Florida, decision-makers may wish to give consideration to the following:

- refinement of **public education and prevention activities** targeted toward senior at-risk, problem and pathological gamblers, as well as toward specific venues where seniors are most likely to gamble. Target populations include senior Black and Hispanic men as well as seniors aged 65 to 74 and retirees. Venues include racetracks, Jai Alai frontons, bingo halls, casinos and lottery outlets;
- identification and development of a range of age-appropriate **alternative activities** for seniors in Florida that provide entertainment, excitement and a place to socialize at an affordable cost;
- expanding **training opportunities** to educate human services, health care and criminal justice professionals working with seniors in how to assess for gambling problems in this population and where to refer individuals for appropriate treatment (including but not limited to senior centers, faith and community-based organizations, retirement communities, nursing homes and agencies that serve minorities and the indigent);
- establishment of a **vendor training program** to ensure awareness of senior problem gambling among gaming operators and employees;
- development of specific **government initiatives** to address problem gambling among seniors in Florida;
- establishment of **treatment services** for senior problem gamblers;
- **evaluation** of existing services as well as those established in the future; and
- future **monitoring** among seniors in Florida to identify changes in the prevalence of gambling and problem gambling and to refine ongoing efforts.

## REFERENCES

- Abbott, M. W. & R. A. Volberg. 1996. "The New Zealand National Survey of Problem and Pathological Gambling," Journal of Gambling Studies, 12 (2): 143-160.
- Abbott, M. W. & R. A. Volberg. 1999. Gambling and Problem Gambling in the Community: An International Overview and Critique. Report Number One of the New Zealand Gaming Survey. Wellington: Department of Internal Affairs.
- Abbott, M. W. & R. A. Volberg. 2000. Taking the Pulse on Gambling and Problem Gambling in New Zealand: Phase One of the 1999 National Prevalence Survey. Report Number Three of the New Zealand Gaming Survey. Wellington: Department of Internal Affairs.
- American Psychiatric Association. 1980. Diagnostic and Statistical Manual of Mental Disorders, Third Edition. Washington, DC: Author.
- American Psychiatric Association. 1994. Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition. Washington, DC: Author.
- Bazargan, M., Bazargan, S. H., & Akanda, M. 2000. "Gambling Habits Among Aged African Americans," Clinical Gerontologist 22 (3-4): 51-62.
- Bergh, C., T. Eklund, P. Sodersten, & C. Nordin. 1997. "Altered Dopamine Function in Pathological Gambling," Psychological Medicine 27: 473-475.
- Bernhard, B., P. Shapiro & F. Preston. 2000. Elderly Gambling Patterns in Las Vegas. Paper presented at the 14<sup>th</sup> National Conference on Problem Gambling, Philadelphia, PA. October 6, 2000.
- Bondolfi, G., C. Osiek & F. Ferrero. 2000. "Prevalence estimates of pathological gambling in Switzerland," Acta Psychiatrica Scandinavica 101 (6): 473-475.
- Chapple, C., & S. Nofziger. 2000. "Bingo!: Hints of Deviance in the Accounts of Sociability and Profit of Bingo Players," Deviant Behavior 21: 489-517.
- Cousins, S. O., C. Witcher & J. Moodie. 2002. High Quality Aging or Gambling With Health? The Lifestyles of Elders Who Play Bingo. Edmonton: Alberta Gaming Research Institute.
- Cox, S., H. R. Lesieur, R. J. Rosenthal & R. A. Volberg. 1997. Problem and Pathological Gambling in America: The National Picture. Columbia, MD: National Council on Problem Gambling.
- Cunningham-Williams, R. M., L. B. Cottler, W. M. Compton, E. L. Spitznagel & A. Ben-Abdallah. 2000. "Problem Gambling and Comorbid Psychiatric and Substance Use Disorders Among Drug Users Recruited from Drug Treatment and Community Settings," Journal of Gambling Studies 16 (4): 347-376.

- Dixey, R. 1996. "Bingo in Britain: An Analysis of Gender and Class." In McMillen, J. (ed), Gambling Cultures: Studies in History and Interpretation. London: Routledge. (Pp. 136-151).
- Drake, S. C. & H. Cayton. 1945. Black Metropolis. New York, NY: Harcourt Brace & Co.
- Ferris, J. & H. Wynne. 2001. The Canadian Problem Gambling Index: Final Report. Ottawa: Canadian Centre on Substance Abuse.
- Fisher, S. 2000. "Measuring the Prevalence of Sector-Specific Problem Gambling: A Study of Casino Patrons," Journal of Gambling Studies 16 (1):25-51.
- Florida Council on Compulsive Gambling. 2001a. Seniors At Risk: A Proceedings Report of the "National Think Tank on Older Adults and Gambling." Maitland, FL: Author.
- Florida Council on Compulsive Gambling. 2001b. 2000-2001 Caller Profile. Maitland, FL: Author.
- Florida Council on Compulsive Gambling. 2001c. Senior Gambler Helpline Statistics, 2000-2001. Maitland, FL: Author.
- Florida Council on Compulsive Gambling. 2002. Evaluation of the Referral HelpLine, Fourth Quarter and Annual Summary (July 1, 2001-June 30, 2002). Maitland, FL: Author.
- Foti, D. J. & J. L. Cummings. 1997. "Neurobehavioral Aspects of Movements Disorders." In R. L. Watts & W. C. Koller (eds.), Movement Disorders, Neurologic Principles and Practice. New York: McGraw Hill. (Pp. 15-30).
- Fowler, P. (1997). Addiction crisis stage comes quick for slot players. Quote from Executive Director, Florida Council on Compulsive Gambling. The Mississippi Sun Herald, November 25, 1997.
- Gafner, G. & F. Uetz. 1990. "Compulsive Gambling and the Aging Marital System," Clinical Gerontologist 10 (1): 45-47.
- Gallup Organization, 1999. "Gambling in America: Topline and Trends". Princeton, N.J. (<http://www.gallup.com/poll/socialaudits/gambling2.asp>, accessed February 23,2000).
- Gerstein, D. R., R. A. Volberg, M. T. Toce, H. Harwood et al. 1999. Gambling Impact and Behavior Study. Final Report to the National Gambling Impact Study Commission. Chicago, IL: National Opinion Research Center at the University of Chicago.
- Gosker, E. 2000. "Marketing of Gambling to the Elderly," Elder Law Journal 7 (1): 185-216.
- Henslin, J. 1967. "Craps and Magic," American Journal of Sociology, 73: 316-330.

- Higgins, J. 2001. "A Comprehensive Policy Analysis of and Recommendations for Senior Center Gambling Trips," Journal of Aging & Social Policy 12 (2): 73-91.
- Hope, J., & L. Havir. 2002. "You Bet They're Having Fun! Older Americans and Casino Gambling," Journal of Aging Studies 16 (2): 177-197.
- Hoppes, S., Hally, C. & L. Sewell. 2000. "An Interest Inventory of Games for Older Adults," Physical & Occupational Therapy in Geriatrics 18 (2): 71-83.
- Howardresearch. 2000. Seniors and Gambling: Exploring the Issues. Edmonton: Alberta Alcohol & Drug Abuse Commission.
- Hraba, J. & G. Lee. 1996. "Gender, Gambling and Problem Gambling," Journal of Gambling Studies 12 (1): 83-101.
- Kallick, M., Suits, D. Dielman, T. & J. Hybels. 1976. Survey of American Gambling Attitudes and Behavior. Final Report to the Commission on the Review of the National Policy Toward Gambling. Research Report Series, Survey Research Center, Institute for Social Research. Ann Arbor: University of Michigan Press.
- Korn, D. A. & H. J. Shaffer. 1999. "Gambling and the Health of the Public: Adopting a Public Health Perspective," Journal of Gambling Studies 15 (4): 289-365.
- Korn, D. A. 2001. "Examining Gambling Issues From a Public Health Perspective," Electronic Journal of Gambling Issues: eGambling, Issue 4. (<http://www.camh.net/egambling/issue4/feature/index.html>, accessed December 20, 2001)
- Lesieur, H. R. 1994. "Epidemiological Surveys of Pathological Gambling: Critique and Suggestions for Modification," Journal of Gambling Studies 10 (4): 385-398.
- Lesieur, H. R. 1998. "Costs and Treatment of Pathological Gambling," Annals of the American Academy of Political and Social Science 556: 153-171.
- Lesieur, H. R. & S. B. Blume. 1987. "The South Oaks Gambling Screen (SOGS): A New Instrument for the Identification of Pathological Gamblers," American Journal of Psychiatry 144: 1184-1188.
- Lesieur, H. R. & R. J. Rosenthal. 1998. "Analysis of Pathological Gambling." In T.A. Widiger, A.J. Francis, H.A. Pincus, R. Ross, M.B. First, W. Davis & M. Kline (eds), DSM-IV Sourcebook, Volume 4. Washington, D.C. :American Psychiatric Association. (Pp. 393-401).
- Li, W. L. & M. H. Smith. 1976. "The Propensity to Gamble: Some Structural Determinants." In W. R. Eadington (ed), Gambling and Society: Interdisciplinary Studies on the Subject of Gambling. Springfield, IL: Charles C. Thomas.
- Light, I. 1977. "Numbers Gambling Among Blacks: A Financial Institution," American Sociological Review 42: 892-904.

- Litwin, M. S. 1995. How to Measure Survey Reliability and Validity. Thousand Oaks: Sage Publications.
- McNeilly, D. P. & W. J. Burke. 2000. "Late Life Gambling: The Attitudes and Behaviors of Older Adults," Journal of Gambling Studies 16 (4): 393-415.
- McNeilly, D. P. & W. J. Burke. 2001. "Casino Gambling as a Social Activity of Older Adults," International Journal of Aging & Human Development 52 (1): 19-28.
- McNeilly, D. P. & W. J. Burke. 2002. "Disposable Time and Disposable Income: Problem Gambling Behaviors in Older Adults," Journal of Clinical Geropsychology 8 (2): 75-86.
- Mok, W. P. & J. Hraba. 1991. "Age and Gambling Behavior: A Declining and Shifting Pattern of Participation," Journal of Gambling Studies 7 (4): 313-336.
- Molina, J. A., M. J. Sainz-Artiga, A. Fraile, F. J. Jimenez-Jimenez, C. Villanueva, M. Orti-Pareja, & F. P. Bermejo. 2000. "Pathologic Gambling in Parkinson's Disease: A Behavioral Manifestation of Pharmacologic Treatment?" Movement Disorders 15 (5): 869-872.
- Moore, T. L. 2001. Older Adult Gambling in Oregon: An Epidemiological Survey. Salem, OR: Oregon Gambling Addiction Treatment Foundation.
- National Gambling Impact Study Commission. 1999. Final Report. Washington, DC: Government Printing Office.
- National Research Council. 1999. Pathological Gambling: A Critical Review. Washington, DC: National Academy Press.
- North American Association of State & Provincial Lotteries. 2003. Directory of Member Lotteries. (<http://www.naspl.org/directory.html>, accessed March 5, 2003).
- Office of Planning and Budgeting, Executive Office of the Governor of Florida. 1997. Casinos in Florida: An Analysis of the Economic and Social Impacts.
- Petry, N. M. 2002. "A Comparison of Young, Middle-aged, and Older Adult Treatment-Seeking Pathological Gamblers," The Gerontologist 42 (1): 92-99.
- Productivity Commission. 1999. Australia's Gambling Industries, Report No. 10. Canberra: AusInfo.
- Shaffer, H. J., M. N. Hall & J. Vander Bilt. 1999. "Estimating the Prevalence of Disordered Gambling Behavior in the United States and Canada: A Research Synthesis," American Journal of Public Health 89 (9): 1369-1376.
- Shaffer, H. J., R. LaBrie, K. M. Scanlan & T. N. Cummings. 1994. "Pathological Gambling Among Adolescents: Massachusetts Gambling Screen (MAGS)," Journal of Gambling Studies 10 (4): 339-362.

- Shapira, N. A., M. A. Ferguson, K. Frost-Pineda & M. S. Gold. 2002. Gambling and Problem Gambling Prevalence Among Adults in Florida. Report to the Florida Council on Compulsive Gambling. Gainesville, FL: University of Florida.
- Smart, R.G. & J. Ferris. 1996. "Alcohol, Drugs and Gambling in the Ontario Adult Population, 1994," Canadian Journal of Psychiatry 41: 36-45.
- Sobel, B. P. 2001. "Bingo vs. Physical Intervention in Stimulating Short-term Cognition in Alzheimer's Disease Patients," American Journal of Alzheimer's Disease & Other Dementias 16(2): 115-20.
- Sproston, K., B. Erens & J. Orford. 2000. Gambling Behaviour in Britain: Results from the British Gambling Prevalence Survey. London: National Centre for Social Research.
- Stegbauer, C. C. 1998. "Pathologic Gambling," The Nurse Practitioner 23 (9): 74-82.
- Stinchfield, R. 2003. "Reliability, Validity and Classification Accuracy of a Measure of DSM-IV Diagnostic Criteria for Pathological Gambling," American Journal of Psychiatry 160: 180-182.
- United States Census Bureau. 2001. United States Census 2000. (<http://www.census.gov/main/www/cen2000.html>, accessed February 10, 2003).
- Volberg, R. A. 2001a. Gambling and Problem Gambling in North Dakota: A Replication Study, 1992 to 2000. Report to the North Dakota Office of the Governor. Bismarck, ND: Office of the Governor.
- Volberg, R. A. 2001b. Changes in Gambling and Problem Gambling in Oregon, 1997 to 2000. Report to the Oregon Gambling Addiction Treatment Foundation. Salem, OR: Oregon Gambling Addiction Treatment Foundation.
- Volberg, R. A. 2001c. When the Chips Are Down: Problem Gambling in America. New York, NY: The Century Foundation.
- Volberg, R. A. 2002. Gambling and Problem Gambling in Nevada. Report to the Nevada Department of Human Resources. Carson City, NV: Department of Human Resources.
- Volberg, R. A. 2003a. Gambling and Problem Gambling in Arizona. Report to the Arizona Lottery. Phoenix, AZ: Arizona Lottery. (*forthcoming*).
- Volberg, R. A. 2003. "Has There Been a 'Feminization' of Gambling and Problem Gambling in America?" Electronic Journal of Gambling Issues: eGambling Issue 8: Feature Article. (<http://www.camh.net/egambling>, *forthcoming*).
- Volberg, R. A. & H. J. Steadman. 1988. "Refining Prevalence Estimates of Pathological Gambling," American Journal of Psychiatry 145: 502-505.
- Volberg, R. A., M. T. Toce & D. R. Gerstein. 1999. "From Back Room to Living Room: Changing Attitudes Toward Gambling," Public Perspective 10 (5): 8-13.



- Volberg, R. A., M. W. Abbott, S. Rönnerberg & I. M. Munck. 2001. "Prevalence and Risks of Pathological Gambling in Sweden," Acta Psychiatrica Scandinavica 104 (4): 250-256.
- Welte, J. W., G. M. Barnes, W. F. Wieczorek, M. Tidwell & J. Parker. 2002. "Gambling Participation in the U.S.—Results from a National Survey," Journal of Gambling Studies 18 (4): 313-337.
- Wiebe, J. 2002. Gambling Behaviour and Factors Associated with Problem Gambling among Older Adults. Ph.D. Dissertation, Department of Community Health Sciences, Faculty of Medicine, University of Manitoba.
- Windsor Problem Gambling Research Group. 2003. Understanding and Preventing Problem Gambling in Seniors. ([http://zeus.uwindsor.ca/pgrq/ideas\\_files/frame.htm](http://zeus.uwindsor.ca/pgrq/ideas_files/frame.htm), accessed March 5, 2003).
- Zola, I. K. 1964. "Observations on Gambling in a Lower-Class Setting." In H. S. Becker (ed), The Other Side: Perspectives on Deviance. New York, NY: Free Press. (Pp. 247-260).

# APPENDIX A

## *Questionnaire*

INTRODUCTION

Hello, my name is \_\_\_\_\_ and I am calling from Kerr & Downs Research. I want to assure you that we're not selling anything; we are conducting a survey for the State of Florida about people's attitudes toward gambling.

Your number was randomly selected by a computer. All of your answers will be kept strictly confidential and will only be used for reporting purposes. You may refuse to answer any question that makes you uncomfortable.

In order to interview the right person, I need to speak with the member of your household who is aged 55 or over and has had the most recent birthday. Would that be you?

IF NO, ASK TO SPEAK TO THAT PERSON.  
IF NOT AVAILABLE, ARRANGE CALL-BACK.

IF R IS RELUCTANT TO PARTICIPATE OR INDICATES THAT IT IS NOT A CONVENIENT TIME:  
*I realize I am intruding on your time but the results of this survey are for a very important study and by participating the results will be more accurate. Can you please spare just a few minutes to participate?*

SECTION A: GAMBLING INVOLVEMENT

**SKIP RULES:** ASK ALL RESPONDENTS Lifetime Participation (A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11).  
IF RESPONDENT DOES NOT ACKNOWLEDGE ANY GAMBLING, SKIP TO CHECKPOINT A.

IF RESPONDENT ACKNOWLEDGES ANY Lifetime Participation, ASK Past Year Participation (A1A, A2A, A3A, A4A, A5A, A6A, A7A, A8A, A9A, A10A, A11A) AND FOLLOW-UP QUESTIONS FOR EACH TYPE OF GAMBLING ACKNOWLEDGED.

Now, I would like to ask about your experience with various kinds of gambling. By gambling, I mean placing a bet on the outcome of a race or a game of skill or chance, buying a lottery ticket, betting on a sporting event or at a casino, playing the stock market or playing a game – including for charity – in which you might win or lose money.

First, I would like to ask you about some popular activities.

A1. Have you ever gambled at a **casino**? (*READ IF NECESSARY:* A casino is a large gambling hall with many different kinds of games, for example, in a resort hotel or in a gambling hall on a riverboat or cruise ship.)

- 1 Yes GO TO A1A
- 2 No GO TO A2
- 8 DON'T KNOW GO TO A2
- 9 REFUSED GO TO A2

A1A. About how often did you gamble at a **casino** in the past 12 months?

- 1 Daily (30+ times per month)
- 2 Several times a week (6 – 29 times per month)
- 3 Several times a month (3 – 5 times per month)
- 4 Once a month or less (6 – 12 times per year)
- 5 Only a few days all year (1 – 5 times per year)
- 6 Not at all in the past 12 months (0 times)
- 8 DON'T KNOW
- 9 REFUSED

A1B. When you gamble at a **casino**, what game do you usually play? (*DO NOT READ LIST*)

- 1 Card games such as blackjack or poker
- 2 Other table games, such as roulette or craps
- 3 Slot machines
- 4 Other video games, such as video poker
- 5 Keno-type games
- 6 Sports
- 7 Horse or dog race betting
- 8 Bingo
- 9 Pull-tabs
- 10 Baccarat
- 11 Other [SPECIFY]
- 88 DON'T KNOW
- 99 REFUSED

A1C. When you visit a **casino**, what city or geographic location do you visit most often? (*DO NOT READ LIST*)

- 1 Las Vegas or Reno, Nevada
- 2 Atlantic City, New Jersey
- 3 Gulf Coast, Mississippi
- 4 Bahamas, Freeport
- 5 Cancun, Mexico
- 6 Somewhere in Florida ASK A1D
- 7 Other [SPECIFY]
- 8 DON'T KNOW
- 9 REFUSED

A1D. *IF Somewhere in Florida, ASK:* Is that a land-based casino or a floating day cruise casino?

- 1 Land-based casino
- 2 Floating day cruise casino
- 8 DON'T KNOW
- 9 REFUSE

A2. Have you ever gambled on a **gaming machine outside of a casino**, such as a slot or cherry master machine, or video poker or keno at a bar, convenience store, race track or other location? *[INCLUDE VIDEO LOTTERY TERMINALS, OTHER GAMES WHERE ONE PLAYS AGAINST THE MACHINE. DON'T INCLUDE INTERNET GAMBLING, PULLTABS OR GAMES WHERE R ONLY MADE SIDE BETS ON OUTCOME OF GAME WITH AN ACQUAINTANCE]*

- 1 Yes GO TO A2A
- 2 No GO TO A3
- 8 DON'T KNOW GO TO A3
- 9 REFUSED GO TO A3

A2A. About how often did you gamble on a **gaming machine outside of a casino** in the past 12 months?

- 1 Daily (30+ times per month)
- 2 Several times a week (6 – 29 times per month)
- 3 Several times a month (3 – 5 times per month)
- 4 Once a month or less (6 – 12 times per year)
- 5 Only a few days all year (1 – 5 times per year)
- 6 Not at all in the past 12 months (0 times)
- 8 DON'T KNOW
- 9 REFUSED

A2B. When you gamble on a **gaming machine outside of a casino**, where do you usually play? *(DO NOT READ LIST)*

- 1 Bar or tavern
- 2 Race track
- 3 Convenience store
- 4 Restaurant or lounge
- 5 Grocery store or laundromat
- 6 Private club
- 7 Social/fraternal organization
- 8 Truck stop
- 9 Bingo hall
- 10 Pool hall or billiard parlor
- 11 Or somewhere else [SPECIFY]
- 88 DON'T KNOW
- 99 REFUSED

A3. Have you ever spent money on **lottery games like Lotto, daily games like Cash-3 or Play-4 or instant and scratch off tickets?**

- 1 Yes GO TO A3A
- 2 No GO TO A4
- 8 DON'T KNOW GO TO A4
- 9 REFUSED GO TO A4

A3A. About how often did you buy a **lottery ticket** in the past 12 months?

- 1 Daily (30+ times per month)
- 2 Several times a week (6 – 29 times per month)
- 3 Several times a month (3 – 5 times per month)
- 4 Once a month or less (6 – 12 times per year)
- 5 Only a few days all year (1 – 5 times per year)
- 6 Not at all in the past 12 months (0 times)
- 8 DON'T KNOW

9 REFUSED

A3B. When you play the lottery, what kind of lottery tickets do you usually buy? (*DO NOT READ LIST. ACCEPT UP TO 3 ANSWERS*)

- 1 Lotto
- 2 Powerball
- 3 Daily games, like Cash 3, Play 4, Fantasy 5, Mega Money
- 4 Instant or scratch-off tickets
- 5 Other [SPECIFY]
- 8 DON'T KNOW
- 9 REFUSED

A4. Have you ever spent money on **Bolita, policy or an illegal numbers game**?

- 1 Yes GO TO A4A
- 2 No GO TO A5
- 8 DON'T KNOW GO TO A5
- 9 REFUSED GO TO A5

A4A. About how often did you play **Bolita, policy or an illegal numbers game** in the past 12 months?

- 1 Daily (30+ times per month)
- 2 Several times a week (6 – 29 times per month)
- 3 Several times a month (3 – 5 times per month)
- 4 Once a month or less (6 – 12 times per year)
- 5 Only a few days all year (1 – 5 times per year)
- 6 Not at all in the past 12 months (0 times)
- 8 DON'T KNOW
- 9 REFUSED

A5. Have you ever placed a bet on a **horse race or dog race or jai alai**? (*INCLUDE BETTING WITH A BOOKIE*)

- 1 Yes GO TO A5A
- 2 No GO TO A6
- 8 DON'T KNOW GO TO A6
- 9 REFUSED GO TO A6

A5A. About how often did you bet on a **horse or dog race or jai alai** in the past 12 months?

- 1 Daily (30+ times per month)
- 2 Several times a week (6 – 29 times per month)
- 3 Several times a month (3 – 5 times per month)
- 4 Once a month or less (6 – 12 times per year)
- 5 Only a few days all year (1 – 5 times per year)
- 6 Not at all in the past 12 months (0 times)
- 8 DON'T KNOW
- 9 REFUSED

A5B. *IF A5A = 1, 2,3,4 ASK*, Do you prefer to bet on:

- 1 Horse races
- 2 Dog races
- 3 Jai alai
- 4 No preference
- 8 DON'T KNOW
- 9 REFUSED

A6. Have you ever played **bingo for money outside of a casino**?

- 1 Yes GO TO A6A
- 2 No GO TO A7
- 8 DON'T KNOW GO TO A7
- 9 REFUSED GO TO A7

A6A. About how often have you played **bingo for money outside of a casino** in the past 12 months?

- 1 Daily (30+ times per month)
- 2 Several times a week (6 – 29 times per month)
- 3 Several times a month (3 – 5 times per month)
- 4 Once a month or less (6 – 12 times per year)
- 5 Only a few days all year (1 – 5 times per year)
- 6 Not at all in the past 12 months (0 times)
- 8 DON'T KNOW

9 REFUSED

A7. Have you ever gambled on a **private game** such as cards, dice or dominoes in someone's home or at a club or organization, or on a game of skill such as golf, pool or bowling? (*DO NOT INCLUDE PRIVATE GAMES ON THE INTERNET IF A THIRD PARTY IS TAKING A CUT OR PLAYERS ARE PLAYING AGAINST "THE HOUSE."*)

- 1 Yes GO TO A7A
- 2 No GO TO A8
- 8 DON'T KNOW GO TO A8
- 9 REFUSED GO TO A8

A7A. About how often have you gambled on a **private game** in the past 12 months?

- 1 Daily (30+ times per month)
- 2 Several times a week (6 – 29 times per month)
- 3 Several times a month (3 – 5 times per month)
- 4 Once a month or less (6 – 12 times per year)
- 5 Only a few days all year (1 – 5 times per year)
- 6 Not at all in the past 12 months (0 times)
- 8 DON'T KNOW
- 9 REFUSED

A8. Have you ever bet on the **outcome of sports or other events with friends, co-workers, a bookie or some other person?**

- 1 Yes GO TO A8A
- 2 No GO TO A9
- 8 DON'T KNOW GO TO A9
- 9 REFUSED GO TO A9

A8A. About how often have you gambled on **sports** in the past 12 months?

- 1 Daily (30+ times per month)
- 2 Several times a week (6 – 29 times per month)
- 3 Several times a month (3 – 5 times per month)
- 4 Once a month or less (6 – 12 times per year)
- 5 Only a few days all year (1 – 5 times per year)
- 6 Not at all in the past 12 months (0 times)
- 8 DON'T KNOW
- 9 REFUSED

A9. Have you ever gambled on the **Internet or World Wide Web?** (*INCLUDE LOTTERY TICKETS BOUGHT OVER THE INTERNET. DO NOT INCLUDE GAMES PLAYED AMONG PEOPLE UNLESS A BUSINESS HOSTING THE GAME TAKES A CUT.*)

- 1 Yes GO TO A9A
- 2 No GO TO A10
- 8 DON'T KNOW GO TO A10
- 9 REFUSED GO TO A10

A9A. About how often have you gambled on the **Internet** in the past 12 months?

- 1 Daily (30+ times per month)
- 2 Several times a week (6 – 29 times per month)
- 3 Several times a month (3 – 5 times per month)
- 4 Once a month or less (6 – 12 times per year)
- 5 Only a few days all year (1 – 5 times per year)
- 6 Not at all in the past 12 months (0 times)
- 8 DON'T KNOW
- 9 REFUSED

A10. Have you ever called a broker or gone online to **trade stocks, bonds or mutual funds?** This includes trading in commodities and futures as well as placing puts and calls.

- 1 Yes GO TO A10A
- 2 No GO TO A11
- 8 DON'T KNOW GO TO A11
- 9 REFUSED GO TO A11

A10A. About how often have you called a broker or gone online to trade stocks, bonds or mutual funds in the past 12 months?

- 1 Daily (30+ times per month)
- 2 Several times a week (6 – 29 times per month)

- 3 Several times a month (3 – 5 times per month)
- 4 Once a month or less (6 – 12 times per year)
- 5 Only a few days all year (1 – 5 times per year)
- 6 Not at all in the past 12 months (0 times)
- 8 DON'T KNOW
- 9 REFUSED

A11. Have you ever gambled on **any other kind of game** I haven't mentioned? Examples might include raffles, sweepstakes, baby pools, pull-tabs or betting on a dogfight or cockfight.

- 1 Yes GO TO A11A
- 2 No GO TO CHECKPOINT A
- 8 DON'T KNOW GO TO CHECKPOINT A
- 9 REFUSED GO TO CHECKPOINT A

A11A. About how often have you gambled on **any other kind of game** I haven't mentioned in the past 12 months?

- 1 Daily (30+ times per month)
- 2 Several times a week (6 – 29 times per month)
- 3 Several times a month (3 – 5 times per month)
- 4 Once a month or less (6 – 12 times per year)
- 5 Only a few days all year (1 – 5 times per year)
- 6 Not at all in the past 12 months (0 times)
- 8 DON'T KNOW
- 9 REFUSED

**CHECKPOINT A**

**SKIP RULE:** ASK FOLLOWING QUESTION **ONLY** IF R HAS EVER GAMBLED (ONE OR MORE OF A1–A11 IS "YES") BUT HAS NOT GAMBLED IN THE PAST YEAR ON ANY GAME (A1A–A11A NOT IN (1 2 3 4 5)). ELSE GO TO CHECKPOINT B.

*PROGRAMMING NOTE: IF A1A–A11A IN (1 2 3 4 5), AUTOMATICALLY CODE RESPONSE TO A12 AS 5.*

A12. Have you gambled in **the past 5 years**?

- 1 Yes GO TO CHECKPOINT C
- 2 No GO TO CHECKPOINT B
- 3 DON'T KNOW GO TO CHECKPOINT B
- 4 REFUSED GO TO CHECKPOINT B
- 5 LOGICAL IMPUTE Yes GO TO CHECKPOINT C

**SECTION J: QUESTIONS FOR NON-GAMBLERS**

**CHECKPOINT B**

**SKIP RULE:** ASK J1 TO J3 ONLY IF R HAS REPORTED NO GAMBLING EVER (A1–A11 ARE ALL "NO") OR R IS **NOT** A RECENT GAMBLER (A12 = 2 3 OR 4). ELSE GO TO CHECKPOINT C.

You have indicated that you have never gambled or have not gambled recently. Please tell me whether each of the following reasons is very important, somewhat important, or not at all important to you as a reason for **not** gambling.

- J1. Inconvenient or you live too far away
- J2. Moral or ethical concerns
- J3. The possibility of losing money
- J4. Other [SPECIFY]

**SECTION B: SENIOR GAMBLING QUESTIONS**

**CHECKPOINT C**

**SKIP RULE:** ASK FOLLOWING QUESTIONS **ONLY** IF R IS A RECENT GAMBLER (A12 = 1 OR 5); ELSE GO TO CHECKPOINT D.

B1. IF R HAS DONE MORE THAN ONE TYPE OF GAMBLING, ASK: Thinking about the

sorts of activities we have discussed, can you tell me which is your favorite gambling activity? *[DO NOT READ LIST]*

- 1 Card games at a casino
- 2 Table games at a casino
- 3 Slot machines at a casino
- 4 Gaming machines outside a casino
- 5 Lottery game
- 6 Illegal numbers game
- 7 Horse race, dog race or jai alai
- 8 Bingo
- 9 Private game
- 10 Sports
- 11 Sports on the Internet
- 12 Card games (not at a casino or on the Internet)
- 13 Card games on the Internet
- 14 Slot machines on the Internet
- 15 Some other type of gambling on the Internet
- 16 Stock trading
- 17 Some other activity [SPECIFY]
- 88 DON'T KNOW
- 99 REFUSED

B3. When participating in your favorite type of gambling, does anyone accompany you or do you go alone?

- 1 Alone
- 2 Accompanied
- 3 DON'T KNOW
- 4 REFUSED

B4. When participating in your favorite type of gambling, can you tell me what distance you usually travel, if any? *(PAUSE, READ IF NECESSARY)*

- 1 Don't travel
- 2 5 miles or less
- 3 6 to 15 miles
- 4 16 to 30 miles
- 5 31 to 45 miles
- 6 46 to 60 miles
- 7 More than 60 miles
- 8 DON'T KNOW
- 9 REFUSED

Next, I would like to ask you about reasons you may have for gambling. Please tell me whether each of the following reasons is very important, somewhat important, or not at all important to you as a reason for gambling.

B6. To be around or with other people

B8. Because it's convenient or easy to do

B9. To win money

B10. For entertainment or fun

B11. To support good causes

B12. Because it's exciting and challenging

B13. Because it is inexpensive entertainment

B15. To distract yourself from everyday problems, loneliness or boredom

B16. To escape feelings due to the death of a loved one or loss of relationship, such as a divorce

B18. Compared to 5 years ago, would you say that today you gamble more, less or about the same amount as before?

- 1 More
- 2 About the same
- 3 Less
- 8 DON'T KNOW
- 9 REFUSED

B20. When you go some place other than your home to gamble, who usually provides the



transportation? (*DO NOT READ LIST*)

- 1 I do/My own car
- 2 Spouse/family member gives me a ride
- 3 A friend gives me a ride
- 4 Taxi
- 5 Gaming establishment provides it
- 6 Senior center takes us
- 7 My condo/retirement center
- 8 A membership club provides
- 9 Provided by travel agency
- 10 Other organization
- 11 Public bus
- 12 Airplane
- 13 Other [SPECIFY]
- 14 DON'T KNOW
- 15 REFUSED
- 16 I don't travel outside the home to gamble

B22. About how much do you spend on gambling in an average month? (*IF HESITANT, SAY "I'm just looking for an approximate amount." IF STILL HESITANT, READ LIST*)

- 1 Less than \$1
- 2 \$1 to \$10
- 3 \$11 to \$49
- 4 \$50 to \$99
- 5 \$100 to \$199
- 6 \$200 to \$299
- 7 \$300 to \$499
- 8 \$500 to \$999
- 9 More than \$1000
- 88 DON'T KNOW
- 99 REFUSED

B23. What is the largest amount of money you have ever lost in one day? (*PAUSE, PROMPT WITH HIGHEST NUMBER IN EACH RANGE IF NECESSARY*)

- 1 Less than \$1
- 2 \$1 - \$9
- 3 \$10 - \$99
- 4 \$100 - \$999
- 5 \$1,000 - \$9,999
- 6 \$10,000 or more
- DON'T KNOW
- REFUSED

### SECTION C: NORC DSM-IV SCREEN FOR GAMBLING PROBLEMS

#### CHECKPOINT D

**SKIP RULE:** ASK FOLLOWING QUESTIONS ONLY IF R IS A GAMBLER (ONE OR MORE OF A1–A11 IS YES). ELSE GO TO CHECKPOINT E.

Next, I would like to ask you some questions about how you feel about your gambling. There are no right or wrong answers. We want to know what your experiences have been **in your lifetime**. Remember that all the information you share is confidential.

IF INTERVIEWER ENCOUNTERS DIFFICULTIES WITH RESPONDENTS IN COMPLETING THIS SECTION,  
SAY:

*We realize that these questions may not apply to everyone, but your answers are very important and will only take a few more minutes.*

B17. How old were you, the first time you gambled?

- \_\_\_\_\_ years  
888 DON'T KNOW  
999 REFUSED

B19. Compared to other recreational or social activities, how important is gambling to you? Would you say it is ...  
(*READ LIST*)

- 1 Very important
- 2 Somewhat important
- 3 Not at all important

8 DON'T KNOW  
9 REFUSED

C1. Have you often gambled to win back money you lost on a previous day?  
1 Yes  
2 No  
8 DON'T KNOW  
9 REFUSED

C1A. *IF C1 YES* Has this happened in the past year?  
1 Yes  
2 No  
8 DON'T KNOW  
9 REFUSED

C2. Have you ever gambled as a way to escape from personal problems?  
1 Yes  
2 No  
8 DON'T KNOW  
9 REFUSED

C2A. *IF C2 YES* Has this happened in the past year?  
1 Yes  
2 No  
8 DON'T KNOW  
9 REFUSED

C3. Have you ever gambled to relieve uncomfortable feelings?  
1 Yes  
2 No  
8 DON'T KNOW  
9 REFUSED

C3A. *IF C3 YES* Has this happened in the past year?  
1 Yes  
2 No  
8 DON'T KNOW  
9 REFUSED

C4. Have there ever been periods lasting 2 weeks or longer when you spent a lot of time thinking about your gambling experiences or planning out future gambling ventures or bets?  
1 Yes  
2 No  
8 DON'T KNOW  
9 REFUSED

C4A. *IF C4 YES* Has this happened in the past year?  
1 Yes  
2 No  
8 DON'T KNOW  
9 REFUSED

C5. Have there ever been periods lasting 2 weeks or longer when you spent a lot of time thinking about ways of getting money to gamble with?  
1 Yes  
2 No  
8 DON'T KNOW  
9 REFUSED

C5A. *IF C5 YES* Has this happened in the past year?  
1 Yes  
2 No  
8 DON'T KNOW  
9 REFUSED

C6. Have there ever been periods when you needed to gamble with increasing amounts, or make larger bets than before, in order to get the same feeling of excitement?  
1 Yes  
2 No  
8 DON'T KNOW  
9 REFUSED

C6A. *IF C6 YES* Has this happened in the past year?

1 Yes  
2 No  
8 DON'T KNOW  
9 REFUSED

C7. Have you ever tried to stop, cut down, or control your gambling?

1 Yes GO TO C8  
2 No GO TO C11  
8 DON'T KNOW GO TO C11  
9 REFUSED GO TO C11

C8. On one or more of the times when you tried to stop, cut down, or control your gambling, were you restless or irritable?

1 Yes  
2 No  
8 DON'T KNOW  
9 REFUSED

C8A. *IF C8 YES* Has this happened in the past year?

1 Yes  
2 No  
8 DON'T KNOW  
9 REFUSED

C9. Have you ever tried *but not succeeded* in stopping, cutting down, or controlling your gambling?

1 Yes GO TO C10  
2 No GO TO C11  
8 DON'T KNOW GO TO C11  
9 REFUSED GO TO C11

C10. Has this happened three or more times?

1 Yes  
2 No  
8 DON'T KNOW  
9 REFUSED

C10A. *IF C10 YES* Has this happened in the past year?

1 Yes  
2 No  
8 DON'T KNOW  
9 REFUSED

C11. Have you ever lied to family members, friends, or others about how much you gamble or how much you lost on gambling?

1 Yes GO TO C12  
2 No GO TO C13  
8 DON'T KNOW GO TO C13  
9 REFUSED GO TO C13

C12. *IF YES:* Has this happened three or more times?

1 Yes  
2 No  
8 DON'T KNOW  
9 REFUSED

C12A. *IF C12 YES* Has this happened in the past year?

1 Yes  
2 No  
8 DON'T KNOW

9 REFUSED

C13. Have you ever written a bad check or taken money that didn't belong to you, from family members or anyone else, in order to pay for your gambling?

- 1 Yes
- 2 No
- 8 DON'T KNOW
- 9 REFUSED

C13A. *IF C13 YES* Has this happened in the past year?

- 1 Yes
- 2 No
- 8 DON'T KNOW
- 9 REFUSED

C14. Have you ever done **anything else** that could have gotten you in trouble with the law, in order to pay for your gambling?

- 1 Yes
- 2 No
- 8 DON'T KNOW
- 9 REFUSED

C14A. *IF C14 YES* Has this happened in the past year?

- 1 Yes
- 2 No
- 8 DON'T KNOW
- 9 REFUSED

C15. Has your gambling ever caused serious or repeated problems in your relationships with any of your family members or friends?

- 1 Yes
- 2 No
- 8 DON'T KNOW
- 9 REFUSED

C15A. *IF C15 YES* Has this happened in the past year?

- 1 Yes
- 2 No
- 8 DON'T KNOW
- 9 REFUSED

C16. Has your gambling ever caused you any problems with your job, to lose a job, or miss out on an important job or career opportunity?

- 1 Yes
- 2 No
- 8 DON'T KNOW
- 9 REFUSED

C16A. *IF C16 YES* Has this happened in the past year?

- 1 Yes
- 2 No
- 8 DON'T KNOW
- 9 REFUSED

C17. Have you ever needed to ask family members or anyone else to loan you money, or otherwise bail you out of a desperate situation that was largely caused by your gambling?

- 1 Yes
- 2 No
- 8 DON'T KNOW
- 9 REFUSED

C17A. *IF C17 YES* Has this happened in the past year?

- 1 Yes
- 2 No

8 DON'T KNOW  
9 REFUSED

C18. Have you ever neglected personal needs or your physical health in order to gamble or pay off gambling debts? Examples include not filling prescriptions, missing doctors' appointments, skipping meals or not paying bills on time.

- 1 Yes GO TO C18A
- 2 No GO TO C19
- 3 DON'T KNOW GO TO C19
- 4 REFUSED GO TO C19

C18A. *IF C18 YES* Has this happened in the past year?

- 1 Yes
- 2 No
- 8 DON'T KNOW
- 9 REFUSED

C19. Have you ever lost interest in your family, your friends, work or recreational pursuits as a result of your gambling?

- 1 Yes GO TO C19A
- 2 No GO TO C20
- 3 DON'T KNOW GO TO C20
- 4 REFUSED GO TO C20

C19A. *IF C19 YES* Has this happened in the past year?

- 1 Yes
- 2 No
- 8 DON'T KNOW
- 9 REFUSED

C20. Have you ever sold stocks, used retirement funds or cashed in an insurance policy to get money to gamble or to pay gambling debts?

- 1 Yes GO TO C20A
- 2 No GO TO C21
- 3 DON'T KNOW GO TO C21
- 4 REFUSED GO TO C21

C20A. *IF C20 YES* Has this happened in the past year?

- 1 Yes
- 2 No
- 8 DON'T KNOW
- 9 REFUSED

C21. Have you ever borrowed money using your credit cards to get money to gamble or pay gambling debts?

- 1 Yes GO TO C21A
- 2 No GO TO C22
- 3 DON'T KNOW GO TO C22
- 4 REFUSED GO TO C22

C21A. *IF C21 YES* Has this happened in the past year?

- 1 Yes
- 2 No
- 8 DON'T KNOW
- 9 REFUSED

C22. Have you ever sold or pawned personal property to get money to gamble or pay gambling debts?

- 1 Yes GO TO C22A
- 2 No GO TO C23
- 3 DON'T KNOW GO TO C23
- 4 REFUSED GO TO C23

C22A. *IF C22 YES* Has this happened in the past year?

- 1 Yes
- 2 No

8 DON'T KNOW  
9 REFUSED

C24. Have you ever experienced feelings of shame related to your gambling?

- 1 Yes GO TO C24A
- 2 No GO TO C25
- 3 DON'T KNOW GO TO C25
- 4 REFUSED GO TO C25

C24A. IF C24 YES Has this happened in the past year?

1 Yes  
2 No  
8 DON'T KNOW  
9 REFUSED

C25. Have you ever used alcohol or drugs to solve problems created by gambling?

- 1 Yes GO TO C25A
- 2 No GO TO C26
- 3 DON'T KNOW GO TO C26
- 4 REFUSED GO TO C26

C25A. IF C25 YES Has this happened in the past year?

1 Yes  
2 No  
8 DON'T KNOW  
9 REFUSED

C27. Have you ever sought help to stop gambling?

- 1 Yes GO TO C27A
- 2 No GO TO CHECKPOINT E
- 8 DON'T KNOW GO TO CHECKPOINT E
- 9 REFUSED GO TO CHECKPOINT E

C27A. IF YES: Who did you contact? (*DO NOT READ*)

Family member  
Friend  
Family doctor  
Gamblers Anonymous  
Gambling treatment program in Florida  
Gambling treatment program outside Florida  
Veterans Administration  
Employee assistance program (EAP)  
Psychologist or psychiatrist  
Other counselor  
Clergy (e.g. minister/priest/rabbi)  
Alcohol or drug abuse treatment program  
Mental health treatment center  
Hospital in Florida  
Hospital outside Florida  
Other [SPECIFY]  
Refused

SECTION E: ALCOHOL AND DRUGS

**CHECKPOINT E**

**SKIP RULES:** ASK ALL RESPONDENTS Alcohol and Drug Questions.

Now I have some questions about things that some people do. Remember all your answers are totally confidential.

E1. In the last 12 months, how often have you used **cigarettes, chewing tobacco or snuff**?

- 1 Daily (more than 30 times per month)
- 2 Several times a week (6 – 29 times per month)
- 3 Several times a month (3 – 5 times per month)
- 4 Once a month or less (6 – 12 times per year)
- 5 Only a few days all year (1 – 5 times per year)
- 6 Not at all in the past 12 months (0 times)

- 8 DON'T KNOW
- 9 REFUSED

- E2. In the last 12 months, how often have you had **an alcoholic beverage**?
- 1 Daily (more than 30 times per month)
  - 2 Several times a week (6 – 29 times per month)
  - 3 Several times a month (3 – 5 times per month)
  - 4 Once a month or less (6 – 12 times per year)
  - 5 Only a few days all year (1 – 5 times per year)
  - 6 Not at all in the past 12 months (0 times) **GO TO E5**
  - 8 DON'T KNOW
  - 9 REFUSED

IF RESPONDENT ASKS, A DRINK IS DEFINED AS: *a can or bottle of beer or malt liquor, a 4-oz glass of wine, a mixed drink or a one and one-half oz shot*

- E3. On a typical day when you drink, how many drinks do you have?

\_\_\_\_\_ [RECORD NUMBER]  
888 DON'T KNOW  
999 REFUSED

**SKIP RULES: ASK E4 ONLY IF R HAS REPORTED DRINKING ALCOHOL MORE THAN ONCE A MONTH (E2 = 1, 2, 3). ELSE GO TO E5.**

- E4. In the last 12 months, how many times have you gotten into difficulties of any kind because of your drinking?
- 1 None
  - 2 1
  - 3 2-3
  - 4 4-9
  - 5 10 times or more
  - 6 DON'T KNOW
  - 7 REFUSED

- E5. In the last 12 months, how often have you used **marijuana or hashish**?
- 1 Daily (more than 30 times per month)
  - 2 Several times a week (6 – 29 times per month)
  - 3 Several times a month (3 – 5 times per month)
  - 4 Once a month or less (6 – 12 times per year)
  - 5 Only a few days all year (1 – 5 times per year)
  - 6 Not at all in the past 12 months (0 times)
  - 8 DON'T KNOW
  - 9 REFUSED

- E7. In the last 12 months, how often have you used **something prescribed by your doctor to sleep or feel less depressed or anxious**?
- 1 Daily (more than 30 times per month)
  - 2 Several times a week (6 – 29 times per month)
  - 3 Several times a month (3 – 5 times per month)
  - 4 Once a month or less (6 – 12 times per year)
  - 5 Only a few days all year (1 – 5 times per year)
  - 6 Not at all in the past 12 months (0 times)
  - 8 DON'T KNOW
  - 9 REFUSED

- E8. In the last 12 months, how often have you used **something not prescribed by your doctor to sleep or feel less depressed or anxious**?
- 1 Daily (more than 30 times per month)
  - 2 Several times a week (6 – 29 times per month)
  - 3 Several times a month (3 – 5 times per month)
  - 4 Once a month or less (6 – 12 times per year)
  - 5 Only a few days all year (1 – 5 times per year)
  - 6 Not at all in the past 12 months (0 times)
  - 8 DON'T KNOW
  - 9 REFUSED

SECTION F: MENTAL HEALTH  
**SKIP RULES: ASK ALL RESPONDENTS Mental Health Questions.**

Now I would like to ask you some questions about your physical and mental health.

- F1. How would you describe your general health over the past 12 months? Would you say it was excellent, good, fair or poor?
- 1 Excellent
  - 2 Good
  - 3 Fair
  - 4 Poor
- F2. Does someone help you out with things like shopping, home maintenance, transportation, financial management, checking on you by phone or making arrangements for care?  
*(IF R ASKS, SAY: That includes your spouse, partner or significant other as well as family members or friends who do not live with you.)*
- 1 Yes
  - 2 No
  - 8 DON'T KNOW
  - 9 REFUSED
- F3. In the past 12 months, has someone close to you become seriously ill or disabled?
- 1 Yes
  - 2 No
  - 8 DON'T KNOW
  - 9 REFUSED
- F4. In the past 12 months, has someone close to you died?
- 1 Yes
  - 2 No
  - 8 DON'T KNOW
  - 9 REFUSED
- F5. In the past 12 months, has someone close to you gambled so much it troubled you?
- 1 Yes GO TO F5A
  - 2 No GO TO F6
  - 8 DON'T KNOW GO TO F6
  - 9 REFUSED GO TO F6
- F5A. What is their relationship to you? If you are thinking about more than one person, please say each one. *(CODE ALL THAT APPLY)*
- 1 Spouse/partner/significant other
  - 2 Parent
  - 3 Brother or sister
  - 4 Child (own, adopted, foster)
  - 5 Other relative
  - 6 Other non-related person
  - 8 DON'T KNOW
  - 9 REFUSED

Now I would like you to think about how you have been feeling in the last few weeks.

- F6. Have you been consistently depressed or down most of the day, nearly every day, for the past two weeks?
- 1 Yes
  - 2 No
  - 8 DON'T KNOW
  - 9 REFUSED
- F7. In the past two weeks, have you been less interested in most things or less able to enjoy the things you used to enjoy most of the time?
- 1 Yes
  - 2 No
  - 8 DON'T KNOW
  - 9 REFUSED
- IF EITHER F6 OR F7 = YES, GO TO K1*  
*IF F6 AND F7 = NO, GO TO F8.*
- F8. Have you felt sad, low or depressed most of the time for the last two years?
- 1 Yes
  - 2 No
  - 8 DON'T KNOW



9 REFUSED

SECTION K: DEMOGRAPHICS

**SKIP RULES:** ASK ALL RESPONDENTS Demographic Questions.

The following questions are for statistical purposes only and your answers will be kept confidential.

- K1. Are you currently married, widowed, divorced, separated, or have you never been married?
- |                                    |           |
|------------------------------------|-----------|
| Married, common-law, co-habitation | GO TO K2  |
| Widowed                            | GO TO K1A |
| Divorced                           | GO TO K1A |
| Separated                          | GO TO K1A |
| Never married                      | GO TO K1A |
| Refused                            | GO TO K2  |
- K1A. Do you live alone or with someone else?
- |                   |  |
|-------------------|--|
| Alone             |  |
| With someone else |  |
| DON'T KNOW        |  |
| REFUSED           |  |
- K2. What is the highest level of education you have completed? (READ IF NECESSARY)
- |  |           |
|--|-----------|
| 1 Elementary school  |           |
| 2 Some high school   |           |
| 3 High school degree or GED  |           |
| 4 Some college   |           |
| 5 Associate degree or other degree (vocational, technical or trade school) |           |
| 6 Bachelors degree   |           |
| 7 Masters degree   |           |
| 8 Other  | [SPECIFY] |
| 88 DON'T KNOW  |           |
| 99 REFUSED   |           |
- K3. Last week, were you working full-time, part-time or not working?
- |                         |           |
|-------------------------|-----------|
| 1 Working full-time     | GO TO K4  |
| 2 Working part-time     | GO TO K3A |
| 3 Not working last week | GO TO K3B |
- K3A. IF WORKING PART-TIME, ASK: Have you previously retired from any fulltime jobs?
- |              |  |
|--------------|--|
| 1 Yes        |  |
| 2 No         |  |
| 3 DON'T KNOW |  |
| 4 REFUSED    |  |
- K3B. IF NOT WORKING, ASK: Are you a student, homemaker/ househusband, completely retired, disabled, unemployed or something else?
- |                          |  |
|--------------------------|--|
| 1 Student                |  |
| 2 Homemaker/househusband |  |
| 3 Completely retired     |  |
| 4 Disabled               |  |
| 5 Unemployed             |  |
| 6 Something else         |  |
| REFUSED                  |  |
| DON'T KNOW               |  |
- K4. In what year were you born?
- K5. How many living children over the age of 18 do you have?  
\_\_\_\_\_ RECORD NUMBER
- IF NUMBER OF CHILDREN GREATER THAN ZERO, ASK K5A.  
ELSE SKIP TO K6.
- K5A. Do any of your children live nearby?
- |            |  |
|------------|--|
| Yes        |  |
| No         |  |
| DON'T KNOW |  |
| REFUSED    |  |

- K6. How many months of the year do you live in Florida?  
 \_\_\_\_\_ *RECORD NUMBER (1 - 12)*
- K7. Are you one of the following: Hispanic, Latino, or of Spanish Origin?  
 1 Yes  
 2 No  
 8 DON'T KNOW  
 9 REFUSED
- K8. Which of the following best describes your racial or ethnic group? Are you ...  
 Native American  
 Asian or Pacific Islander  
 Black or African American  
 White or Caucasian  
 Or something else (SPECIFY)  
 DON'T KNOW  
 REFUSED
- K10. Have you ever been in the Armed Services?  
 1 Yes  
 2 No  
 8 DON'T KNOW  
 9 REFUSED
- K11. Can you describe your current religious preference? (*DO NOT READ LIST*). (*PROTESTANT INCLUDES BAPTIST, LUTHERAN, METHODIST*).
- |                          |   |    |
|--------------------------|---|----|
| Protestant               |   | 1  |
| Catholic                 | 2 |    |
| Jewish                   |   | 3  |
| Muslim                   |   | 4  |
| Christian Fundamentalist | 5 |    |
| Mormon, LDS              |   | 6  |
| Other                    |   | 7  |
| None                     |   | 8  |
| DON'T KNOW               |   | 88 |
| REFUSED                  |   | 99 |

The following questions concern income, and are for classification purposes only.

- K13. Which of the following statements best describes your ability to get along on your income?  
 1 Can't make ends meet  
 2 Have just enough, no more  
 3 Have enough, with a little extra sometimes  
 4 Always have money left over  
 8 DON'T KNOW  
 9 REFUSED
- K14. Can you tell me approximately what your total household income was last year?  
*IF DON'T KNOW OR REFUSE, SAY: Is that ... AND READ 1-8.*
- |                          |  |  |
|--------------------------|--|--|
| 1 Up to \$15,000         |  |  |
| 2 \$15,001 to \$25,000   |  |  |
| 3 \$25,001 to \$35,000   |  |  |
| 4 \$35,001 to \$50,000   |  |  |
| 5 \$50,001 to \$75,000   |  |  |
| 6 \$75,001 to \$100,000  |  |  |
| 7 \$100,001 to \$125,000 |  |  |
| 8 Over \$125,000         |  |  |
| 88 DON'T KNOW            |  |  |
| 99 REFUSED               |  |  |
- K15. How important are your savings, investments or pension plan in meeting your monthly expenses? Would you say very important, somewhat important or not at all important?  
 1 Very important  
 2 Somewhat important  
 3 Not at all important  
 8 DON'T KNOW  
 9 REFUSED
- K16. In what county do you live?

K17. RECORD RESPONDENT GENDER. DON'T GUESS. (*IF CANNOT TELL, SAY "I am required to ask, are you male or female?"*)

- 1 Male
- 2 Female

That was the last question. Thank you very much for your time and cooperation.