# PATHOLOGICAL GAMBLING PREVALENCE IN NEW JERSEY 1990 FINAL REPORT

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# EXECUTIVE SUMMARY

Research on pathological gambling for the New Jersey Department of Higher Education grant for 1989-1990 is in three phases: 1) incidence and prevalence of pathological gambling among citizens of New Jersey, 2) incidence and prevalence of pathological gambling among clients in mental health settings, and 3) needs assessment of the effects of gambling on spouse and children for enhanced family treatment. Previously, in conjunction with this grant, a "Pathological Gambling Research: Progress Report" was submitted to the Department of Higher Education on October 2, 1989. Also, in February, 1990 a "Carry Forward & Extension Grant Proposal For Research on Pathological Gambling: Epidemiological, Needs Assessment, and Psychosocial Factors" was submitted.

In this Phase I final report pathological gambling is first defined, then a discussion of its etiology is presented. The review of gambling literature continues with the personality and cognitive correlates of pathological gambling and the effects of pathological gambling on family members. An incidence and prevalence literature review is presented followed by the results of the 1990 New Jersey Prevalence Study.

The survey used to detect pathological gambling among NJ citizens was based on the nine criteria of the proposed DSM-IV. They are: preoccupation, tolerance, withdrawal, escape, chasing, denial, illegality, loss and bailout. Affirmative responses to four or more criteria provided a strict classification of probable pathological

gambling disorder. A score of two or three was deemed as potential pathclogical and an affirmative response to one criteria was defined as problem gambling. Other items on the survey included frequency and type of gambling, as well as items relating gambling behavior to alcohol, heredity and co-dependency issues. In total 2,896 stratified (county & sex) random telephone numbers were called to obtain 858 completed surveys. Of that number 50 (5.8%) were classified as problem gamblers, 16 (1.9%) were classified as potential pathological and 10 (1.2%) scored four or more affirmative responses and were classified as probable pathological.

These findings, although generally comparable to other surveys (see Table 2) seem to indicate a lower incidence and prevalence of pathological gambling in New Jersey in 1990. Although the sample selected was randomly drawn, the other comparisons with previous surveys are limited because of the first time use of the nine DSM-IV criteria as indicators of pathological gambling; and the very strict numerical designation of the criteria helped minimize false positives, but may have exacerbated the problems with false negative responses.

In the item by item criteria hierarchical breakdown: preoccupation was the most prevalent behavior of gamblers, followed by chasing (returning to gamble the next day to get even after losing), the need to gamble more and more, restless when trying to stop gambling, using gambling as an escape mechanism, concealing gambling from significant others, borrowing money to pay gambling debts, jeopardizing an important life aspect to continue gambling, and committing illegal acts to fund gambling activities.

A breakdown and comparison of gamblers with non-gamblers for a

number of demographic variables including: county of residence, gender, age, race, marital status, income, education, and occupation appears in Appendix A. Type and frequency of gambling between gamblers and non-gamblers is presented in Table 1. The preferred methods of gambling for the excessive gamblers include: lottery play, followed by casino betting and playing the slots, horse betting and playing cards. In every type of gambling, gamblers far exceeded non-gamblers in frequency of participation.

Responses to related items were as follows:

* 8% of the general population and 25% of gamblers use alcohol or other drugs while gambling
* 5% of the general population and 13% of gamblers are related to gamblers
* .04% of the general population and 3% of gamblers live with a spouse or roommate with a gambling problem
* 1% of the general population and 8% of gamblers are acquainted with a pathological gambler.

The Phase I Prevalence Report concludes with a discussion of prevention intervention with problem gamblers before the disorder evolves to pathological proportions. Finally, a review of literature of the treatment (behavioral, self-help, outpatient abstinence, inpatient) of pathological gambling is presented. Forthcoming reports includes: Phase II - Incidence and Prevalence of Pathological Gambling Among Clients in Mental Health Settings, and Phase III - Needs Assessment.

## GAMBLING ADDICTION: DEFINITION, ETIOLOGY AND EFFECTS

Pathological gambling addiction is defined in the proposed DSM-IV - Diagnostic and Statistical Manual of Mental Disorders (Lesieur, 1990a), as a disorder of impulse control characterized by a cluster of cognitive, behavioral, and perhaps physiological symptoms that dispose the affected person to lose control of his or her gambling to the extent that personal, family, vocational pursuits are disrupted and damaged. The term pathological gambling is considered more accurate than compulsive gambling because the behavior is not dysthymic or unwanted, but rather ego-syntonic; most pathological gamblers, at least until later stages of the disorder, love to gamble; so the term pathological gambling will be used throughout this report.

### Etiology

Gambling is thousands of years old. Research in archeology, anthropology, history, sociology and psychology attest to risk-taking behavior in every culture. Gambling probably originated in religious rituals as one attempt by ancient people to control or compel the direction of their fate. Gambling was usually surpressed by authorities in earlier times, but today risk-taking, gambling strategies are an integral part of many respectable business practices, e.g., insurance industry, professional sports, stock options and commodities, certain banking practices, as well as legal casinos and of course, state lotteries.

The dynamics and etiology of pathological gambling are quite diverse, depending upon psychological or psychiatric theoretical orientations. Freud (1928) viewed gambling as a substitute for

unresolved sexual conflicts. He presented the pathological gambler as an anally fixated neurotic. Learning theorists view pathological gambling behavior as relieving anxiety and tension, thus it is strongly reinforced; and the behavior brings excitement to otherwise boring and mundane life situations (Adler, 1966). Bolen (1974) accepts the basic human need for stimulation and excitement which gambling fulfills, and adds a second need to gain the illusion of certainty in life by appealing to luck. Moran (1970) was one of the first researchers to attempt a systematic study of 50 pathological gamblers in London. Using primitive factor analytic techniques, he found five types of pathological gambling: 1) subcultural - gambling as an important part of individual's social setting; 2) neurotic - gambling related to some stressful situation or emotional problem, and the activity provided some relief or escape from the underlying tension; 3) impulsive - gambling asociated with loss of control because the activity was both desired and dreaded; 4) psychopathic - gambling as the overriding preoccupation; and 5) symptomatic - gambling as one of many symptoms of another mental disorder.

Another pioneer in the research and treatment of pathological gambling was Robert L. Custer. Dr. Custer, who died this September 4th, led the effort in the American Psychiatric Association for the classification of pathological gambling as a psychological disorder, achieving that goal with the publication of the 1980 DSM-III. Custer (1984) postulated that all pathological gamblers develop along a three phase hierarchy. The early phase may be characterized by frequent winning or the "big win," but always includes excessive excitement, a preoccupation with gambling, and more

frequent gaming and wagering higher stakes (akin to developing a tolerance as in substance abuse). The second or losing phase is characterized by "chasing." In this classical addictive phenomenon, the gambler irrationally bets more and more money in order to recoup his or her inevitable losses. This behavior is in sharp contrast to the professional gambler who will rationally accept losses as part of the profession. In this second phase the pathological gambler becomes restless and irritable when attempting to cut down or stop gambling. He or she begins excessive borrowing to pay gambling debts, and begins to conceal involvement with gambling from family and non-gambling friends. In the final or desparation phase the gambler has often been "bailed out" several times from a desparate financial situation, has jeopordized or actually lost his or her marriage, job, educational opportunity, etc. The pathological gambler may resort to committing illegal acts such as forgery, fraud, theft or embezzlement to finance gambling. One-fourth of pathological gamblers are arrested for above crimes; and depression, suicidal thoughts and suicide attempts are common at this time (Custer, 1980).

Another dynamic or etiological view of pathological gambling is provided by Lesieur (1979). He postulates that all gamblers proceed through three moral stages in their gambling career spiral. In order to cognitively justify excessive gambling, the pathological gambler will begin in the first stage by using totally moral ideological or situational justifications. They borrow money from a number of sources and succeed for a time in repaying with winnings or paycheck. After these justifiable actions, pathological gamblers revert to partially justified behaviors with excuses in the second stage. Thus, knowingly

overdrawing from one's checking account is justified in that money is being "borrowed" temporarily from the bank. The realization that the behavior is wrong is acknowledged, but because the action can be partially justified, it is excused. In the third moral, or more appropriately, immoral stage, the gambler uses up his or her morally justifiable options. Any activity to acquire money to pay off gambling debts is excused because of the threats from bookmakers, loan sharks or credit companies.

Personality and Cognitive Correlates of Pathological Gambling

Research on the personality charateristics of pathological gamblers is well under way. Graham and Lowenfeld (1986) found evidence of significant psychopathology among 100 male pathological gamblers using the MMPI, including heightened subscales of depression and anxiety; and significantly higher scores on the MacAndrew Alcoholism Scale for substance abuse. Also suggested in the MMPI profiles were disregard for authority, impulsivity, feelings of masculine inadequacy, and histories of overly close relationships with mothers and faulty identification with fathers. Nora and Guida (1990) found significantly elevated MMPI subscale scores for psychastenia (obsessions, compulsions, phobias), and depression for a sample of 38 male inpatient pathological gamblers at a veterans administration hospital. In addition, they found significantly lower scores for their sample on the Hooper Visual Organization Test designed to diagnose and differentiate brain damage from other types of pathology. Lower scores are indicative of either mild, moderate or severe impairment.

In another line of cognitive personality research, Zuckerman

(1979) suspects that gambling is a form of sensation seeking, and individuals differ in their optimal levels of stimulation for arousal. Pathological gamblers may have higher levels of stimulation in sensation seeking behaviors than non-gamblers. The risk of losing money for gamblers may serve as a positive reinforcement in a high arousal state during that period of uncertainty after placing bets, as well as the positive arousal by actually winning. Kuley and Jacobs (1988) found that the total sensation seeking scores on Zuckerman's Sensation Seeking Scale of problem gamblers were significantly greater than those of social gamblers. Problem gamblers also scored significantly higher than social gamblers on the subscales of disinhibition, boredom susceptibility, and experience seeking. In related research, Jacobs (1987) hypothesized that problem gamblers undergo a dissociative-like state while gambling, wherein the gambler enters a trance-like state (blurring of reality testing), assumes another identity (shift in persona), watches himself or herself gambling (out of body experience), and may suffer from amnesia or memory blackout while gambling, which may help to blunt the losing experiences. Kuley and Jacobs found that problem gamblers reported a significantly greater number of dissociative-like experiences than social gamblers.

## Effects of Pathological Gambling on Family Members

The effects or impact of pathological gambling on the spouse and children are significant and staggering. Lorenz and Shuttlesworth (1983) surveyed 144 spouses of pathological gamblers (98% were women, and 94% were married to the gambler at time of survey). They found

that 84% of those responding considered themselves emotionally ill as a result of their experiences while married to gambler. Seventy eight percent indicated that they had threatened separation, and 12% indicated that they had attempted suicide. Seventy three percent of respondents had provided financial "bail outs" of one kind or another (personal savings, borrowed money from family or friends). Respondents also characterized the gambler as a liar (93%), dishonest (89%), irresponsible (89%), uncommunicative (88%), insincere (82%) and impulsive (80%). All respondents (100%) described the gambler as unable to exert control over own actions and as emotionally ill. Franklin and Thoms (1989) report the effects of pathological gambling on the children of gamblers as devastating. These children display signs of anxiety, anger, depression, inconsistent academic performance, verbal and physical abuse from the gambler and significant behavioral or adjustment problems, such as running away from home, and engaging in drug, alcohol or gambling related activities.

## INCIDENCE AND PREVALENCE REVIEW

The pathological gambling prevalence literature provides numerical estimates of pathological gambling in several states and countries. The first epidemiological study of pathological gambling was undertaken in 1975 by the Institute for Social Research (ISR) of the University of Michigan. The researchers' primary concern was to survey attitudes and behaviors with regard to legal and illegal gambling in the USA and Nevada. The data were gathered using structured interviews with 1,736 respondents in a national probability sample which provided information based on respondents' gambling behavior

during the preceding year. The ISR researchers, Kallick, Suits, Dielman, and Hybels (1979) found a prevalence rate of (.77%) of all adults over 18 years old in the nation as probable pathological gamblers. These rates were observed as higher in Nevada, with (2.62%) probable pathological and (2.35%) potential pathological. The survey was empirically constructed using eight relevant psychological tests which resulted in 119 variables (items) given to 120 known pathological gamblers (cases) and 120 church members (controls). A discriminate function analysis resulted in 18 variables or items which classified controls correctly 95% of the time and cases correctly 90% of the time. Thus, the test or survey exhibited somewhat greater specificity (proportion of true negative test results) than sensitivity (proportion of true positive results). The ISR researchers set the probability of inclusion level of their test at (.96) which sacrificed sensitivity and accepted a relatively high risk of false negative classifications. Both Nadler (1985) and Culleton (1989) criticized the inclusion level as too high. Even so, 16% of the USA sample or 278 cases tested positive and were "at risk" of gambling pathology. Weighting procedures and rigorous compensation for prediction errors drastically reduced the "at risk" group to the reported (.77%) pathological gamblers in the total population (see Table 2).

In 1980 the American Psychiatric Association recognized pathological gambling as a mental disorder with its inclusion in the DSM Third Edition. Based on the DSM-III seven diagnostic signs of pathological gambling, the Inventory of Gambling Behaviors was developed and tested by Zimmerman, Meeland, and Krug (1985). They intercorrelated responses to 122 items from a group of 83 admitted

compulsive gamblers from Gamblers Anonymous (GA) and 61 non-gamblers. Eight significant factors emerged which distinguished significantly the pathological gambler from the non-gambler controlled by sex, age, education, and religious preference. The Inventory of Gambling Behavior was used by Culleton (1989) in two prevalence studies of pathological gambling in Deleware Valley and Ohio. In the Deleware Valley survey a prevalence rate of (3.25%) probable pathological and (3.4%) potential pathological was found for a stratified random sample of 534 individuals interviewed by telephone. In Ohio the stratified random sample telephoned numbered 801, with (2.41%) testing probable pathological and (3.4%) potential pathological.

Other large scale prevalence studies of pathological gambling were conducted by Volberg and Steadman in New York State (1988) and New Jersey and Maryland (1989a). The South Oaks Gambling Screen (SOGS), a 20-item scale derived from DSM-III criteria, was adapted for use in the telephone surveys. Lesieur and Blume (1987) report a 98% sensitivity ratio for the SOGS administered to 213 GA members, and a 95% specificity ratio with 384 college students. Volberg and Steadman found prevalence rates of (1.4%) probable pathological and (2.8%) potential pathological for their stratified sample of 1000 New Yorkers. In New Jersey a stratified sample of 1000 respondents produced prevalence rates of (2.8%) probable pathological and (1.4%) as potential pathological. In Maryland the prevalence rates were (2.4%) probable pathological and (1.5%) potential pathological for a stratified telephone sample of 750 individuals.

The prevalence studies cited above sampled only adults over 18 years old, Lesieur and Klein (1987) surveyed 892 11th and 12th graders

from four randomly selected New Jersey high schools by region. They found that 91% of the students had gambled at least once in their lifetime, 89% gambled in the previous year, and 32% gambled at least once per week. Using a pathological gambling index based on the DSM-III, the researchers found a probable pathological prevalence rate of (5.7%). High scores on the pathological gambling index were correlated with parents who have gambling problems, low grade point average, being male, and gambling at least once per week. Non-correlates with pathological gambling included: socioeconomic status, single versus two parent household, particular school attended and religion.

Another study of gambling behaviors among high school students was conducted by Ladouceur and Mireault (1988). They randomly sampled 1,612 10th - 12th graders from nine high schools in Quebec City. The survey used was a French version of the DSM-III criteria. The researchers found that 76% of the respondents had gambled at least once in their life, 65% had gambled in the past year, and 24% placed a wager at least once per week. They report a probable pathological prevalence rate of (3.6%). Data on gambling trends in the family were also reported. A large proportion of the parents (90%) knew their children gambled, and 84% did not object. Sixty one percent of the students wagered on games with their parents, and 57% wagered with other members of the family. Almost 8% stated that their mother or father gambled too much.

## RESULTS OF THE 1990 NEW JERSEY PREVALENCE STUDY

As previously discussed, the diagnosis of pathological gambling in a large scale representative sample of individuals in a state population has generally used the seven diagnostic signs or criteria developed for the DSM-III. Lesieur (1990b) indicates that psychometric factor analyses of the criteria with over 200 confirmed pathological gamblers have refined and isolated the nine key factors which are indicators of pathological gambling. They are: preoccupation, tolerance, withdrawal, escape, chasing, denial, illegality, loss, and bailout. These nine criteria will serve as the indicators for the pathological gambling disorder of impulse control proposed for the new DSM-IV. The American Psychiatric Association (APA) insists that a positive response to four or more of the criteria is an indication of probable pathological gambling disorder. Lesieur claims no significant difference in discriminating power between three or four positive criteria, but APA policy is to try to minimize false positives. Consequently, a score of four or more positive responses was used as the cutoff for a "probable pathological" classification in the 1990 New Jersey Prevalence Household Survey. A score of two or three was deemed as "potential pathological;" and because of the serious, maladaptive behavior indicative of each of the nine criteria, a score of one positive response was deemed to diagnose a "problem" gambler. The designation of "problem gambling" has become more widespread in recent years. The National Council on Compulsive Gambling this past year changed their name to the National Council on Problem Gambling to reflect this more encompassing view of gambling behavior. The Council (1990) defines problem gambling as a "pattern of gambling

behavior which may compromise, disrupt and damage family, personal or vocational pursuits. Problem gambling includes, but is not limited to, compulsive or pathological gambling." This broader definition on non-desirable gambling is important for prevention and prevention research purposes. Identifying at risk or problem gamblers who are not as yet pathological (if excessive gambling can be placed on a hirarchical continuum of severity) aids in the prevention of pathological gambling, for special programs can be designed and implemented for that purpose. Confining excessive gambling to a pathological disorder prioritizes treatment strategies, but limits prevention strategies.

The Household Survey which appears in Appendix B was based on the nine pathological sign items in the proposed DSM-IV. In addition, types and frequency of gambling questions were asked as well as items relating gambling behavior to alcohol, heredity and co-dependency issues. Standard demographic questions were also included. The actual sample of 5600 was stratified by county and sex based on 1987 census estimates by the NJ Department of Health (1989) of the New Jersey population. Ten replicates of 560 randomly selected computer generated telephone numbers were provided by Survey Sampling, Inc. of Fairfield, CT. Centrac, Inc. of Clifton, NJ telephoned 2896 numbers to obtain the 858 completed surveys.

The gross results of the Household Survey indicated that of the 858 individuals who responded, 50 (5.8%) answered in the affirmative to one of the nine diagnostic signs or criteria and are classified as problem gamblers. The number of respondents to the survey who scored two or three affirmative responses on the pathological gambling scale was 16 (1.9%). These persons can be classified as potential

pathological gamblers. Ten individuals (1.2%) scored four or more on the scale and may be classified or diagnosed as probable pathological.

In the item by item breakdown of the pathological gambling scale:

- 32 individuals were preoccupied with gambling
- 21 persons needed to gamble more and more money to get the same excitement (tolerance)
- 14 used gambling as a way of escaping from problems
- 31 returned to gambling the next day to get even after losing (chasing)
- 12 concealed their gambling from significant others
- Only 2 admitted to committing illegal acts to finance gambling
- Five persons jeopardized an important aspect of their life to gamble
- Seven persons borrowed money to relieve a desparate financial situation caused by gambling.

Because of the relatively low numbers of pathological gamblers, a demographic profile of gamblers will include the 50 problem gamblers. Of the 76 probable pathological, potential pathological, and problem gamblers as described in the Appendix A Demographic Tables, 56% were male and 44% female. Volberg & Steadman (1989b) found that 64% of their NJ sample of pathological gamblers were male. Proportionately, excessive gambling seems more of a problem with younger and older persons. This study was unique among general population surveys for pathological gambling because it attempted to capture responses from 15-18 year olds; 41 individuals (5% of the total sample) in this age bracket were identified. Of this subsample, six individuals admitted to gambling excessively on the pathological scale, and this number represented 8% of the total excessive gamblers captured by the scale.

Another interesting and significant demographic finding was that 32% of the excessive gamblers earned less than $15,000/year. Low income may serve as one incentive for excessive gambling.

Other items on the Household Survey attempted to gauge the types and frequency of gambling among the general populaton of New Jersey. From Table 1 it is apparent that the most preferred method of gambling among the New Jersey general population is lottery play, followed by casino play; and apparently while in the casino playing slot machines is a popular method of gambling. Among the problem and pathological gamblers a similar pattern is detected of lottery play, attending casinos and playing the slots. The most dramatic finding from Table 1 is the obvious, that gamblers do in fact gamble more often, and engage in more types of gambling than the general population.

The Household Survey also asked N.J. residents about gambling and related issues, such as alcohol and drug use while gambling, heredity and gambling and co-dependency. To the questions:

- Do you ever use alcohol or other drugs while gambling?

Eight percent of the general population and 25% of gamblers answered in the affirmative.

- Do or did one or both of your parents or other close family members have a gambling problem?

Five percent of general population and 13% of gamblers answered in the affirmative.

- Does your son or daughter have a problem with gambling?

Only 3 of the 780 non-gamblers who responded to the question answered in the affirmative, while 3% of gamblers admitted to such a problem.

- Does your spouse/partner or roommate have a problem with gambling?

Only 1% of the general population and 8% of the gamblers answered "Yes" to this item.

- Does anyone else living with you have a gambling problem?

Not one individual in the general population responded in the affirmative to this item, while 5% of gamblers live with another person who also gambles.

Table 2 presents a comparison of all large-scale epidemiology studies on pathological gambling conducted in North America. The findings of the 1990 N.J. Household Survey are comparable to other surveys. The DSM-IV criteria appear somewhat strict, thus minimizing the chances of false positives. Because a key symptom of any addiction is patient denial of said symptoms, the issue of false negative respondents should be addressed. Although a weighting procedure could have been employed to statistically compensate for false negatives, such procedures inevitably lead to increases in errors of measurement and debate about weight size. It was decided to create the category of problem gamblers to capture individuals who may gamble excessively, deny any morbidity, but may exist on the continuum toward pathological gambling.

In the next phase of identification and possible prevention of pathological gambling, those individuals classified as problem gamblers by the survey, and those individuals who are at risk of becoming problem gamblers (who may have admitted alcohol or drug use while gambling, or who may live with a problem gambler, or who are related to problem gamblers) would be targeted for special prevention research studies along scientific guidelines. Various education strategies on the evils of excessive gambling through workshops or media prevention campaigns could be compared with special focus groups targeted toward excessive gambling prevention. Video taping of such groups and their mass distribution to high schools, senior citizen centers, mental

health centers, etc., could serve as an authentic New Jersey experience for the prevention of pathological gambling. Planning effective prevention strategies could serve as a first step in anticipating the treatment options available for pathological gamblers described in the next section.

## TREATMENT OF PATHOLOGICAL GAMBLING

A number of diverse techniques for treating pathological gamblers have been used in the psychotherapeutic community, mostly on an outpatient basis (Lester, 1980). Boyd and Bolen (1970) claimed effective results with gamblers using psychoanalytic psychotherapy. However, Bergler (1957) complained that a number of his patients desired only a symptom cure and had no interest in attempting to reconstruct their personalities. This type of therapy has stressed the importance of the gambler as a human being and that gambling and material possessions are not necessary for a sense of self-esteem.

Another quite different form of therapy is behavioral and requires that gambling behaviors be paired with electric shock. In this type of aversion therapy, electric shock (usually applied to the extremities) is used to extinguish undesired gambling behavior, such as: using slot machines; reading betting pages of newspapers; watching slides or films of betting shops, poker hands, roulette wheels, etc; and making bets at casinos. Electric shock is a preferred punishment to chemical aversion therapy (which causes vomiting) since it is cheaper, safer and less humiliating to the patient. It can also be done on an outpatient basis and makes timing of stimuli and punishment easier (Barker and Miller, 1968). Aversion therapy has been successful

in curtailing gambling behavior in a shorter period of time than other treatments. But to prevent symptom substitution, the patient must also be taught how to satisfy his or her needs in other, adaptive ways.

Researchers have found that marital and family therapy are often necessities in outpatient treatment of addictions and disorders of impulse control (Stanton & Todd, 1982; Kaufman & Pattison, 1981; Wegscheider, 1981). Wives of male gamblers are often enablers to their spouse's gambling and must be instructed to cease playing the "martyr" role. Often, crisis intervention is necessary to deal with the severe depressions in the spouses and children of gamblers and the severe marital and financial stresses that develop as treatment progresses.

Gamblers Anonymous (Scodel, 1964) is a self-help group therapy technique modeled after the 12-step approach of Alcoholic Annonymous that uses only ex-gamblers as helpers. This volunteer model is perceived as more effective than other treatment programs in alleviating pathological gambling symptoms. It involves confession of misdeeds, acknowledgment of guilt and penance, and acceptance of personal responsibility. GA provides the gambler with a sponsor whose main task is to perform an audit of the gambler's finances, take control of the gambler's income (transferring finances to the spouse or "significant other" of the gambler has been found untenable as this only encourages the enabling to continue), and provide for graduated payments to bookmaker and other creditors.

Outpatient treatment for pathological gamblers in addiction treatment centers has generally mirrored the drug counseling abstinence disease model. This treatment focuses on identifying specific needs

and delivering concrete services. Its major focus is on providing external services rather than dealing with intrapsychic processes. The counselor recommends immediate membership for the client to GA. Counselors monitor progress by reviewing GA sponsor reports and vocational situations. They provide liaison services with physicians, courts and social agencies, or they help implement GA program rules and policies. The counselor handles the gambler's denial and relapses as inevitable, stressing that gambling is a lifelong illness and total abstinence is the goal of treatment. Positive activites outside of gambling are encouraged, and clients are expected to spend less time on gambling behaviors and more time on work or school related activities and acceptable liesure or family time endeavors as treatment progresses. The counselor may recommend that the client participate in other group therapy sessions with addicted individuals to buttress the work of GA. The counselor may also schedule family and marital therapy sessions. If the client is in an acute desparation phase and admits to suicidal thoughts, the counselor will recommend inpatient treatment and locate the appropriate agency.

Many pathological gamblers can and do recover using only outpatient care. However, there are indications for considering the inpatient treatment approach if:

- significant disturbed behavior or ideations relating to suicide and violence exist;
- severe target symptoms of anxiety, panic and psychological decompensation exist;
- existing comorbidities, such as medical or psychiatric complications exist;
- need to perform specialized diagnostic tests;

- patient totally overwhelmed by pressures and requires a well-structured, secure and safe environment; and/or

- patient has tried oupatient care but was unsuccessful.

Nora (1989) describes one inpatient program specifically geared for pathological gamblers in New Jersey. The acronym THERAPIES describes the treatment process:

T - Team approach provided by a well-trained and qualified multidisciplinary staff;

H - "Here and now" focus pertaining to patient's problems;

E - Educational programs on pathological gambling and other addictions;

R - Restitution of all gambling-related debts;

A - Abstinence from gambling activities;

P - Physical problems attended to;

I - Individual, group, marital and family therapies are considered important;

E - Evaluation and management of characterological defects and maladaptive cognitive coping skills;

S - Self-support groups such as GA are recognized as integral parts of the treatment program.

Table 1

Type and Frequency of Gambling Between The General Population of New Jersey and Problem/Pathological Gamblers

| | Not At All | | Less Than Once Per Week | | Once Per Week or More | |
|---|---|---|---|---|---|---|
| | General % | Gamblers % | General % | Gamblers % | General % | Gamblers % |
| Play Cards | 79 | 45 | 19 | 47 | 2 | 8 |
| Bet on Horses | 77 | 50 | 22 | 45 | 1 | 5 |
| Bet on Sports | 89 | 70 | 10 | 23 | 1 | 7 |
| Play Dice | 91 | 78 | 8 | 18 | 1 | 3 |
| Go to Casino | 44 | 20 | 55 | 75 | 2 | 5 |
| Lotteries | 45 | 23 | 34 | 33 | 22 | 43 |
| Bingo | 85 | 80 | 13 | 17 | 2 | 3 |
| Stock Market | 85 | 70 | 13 | 23 | 2 | 7 |
| Slots | 55 | 40 | 43 | 57 | 2 | 3 |
| Games of Skill | 88 | 75 | 10 | 13 | 3 | 12 |

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thological Gambling Prevalence Models
mmary Review of Literature

| REGION | STUDY | DATE | MEASURE | N | PATHOLOGICAL TENDENCY PROBABLE % | PATHOLOGICAL TENDENCY POTENTIAL % |
|---|---|---|---|---|---|---|
| ited States | ISR/Michigan | 1975 | Special Survey | 1736 | .77 | 2.33 |
| vada | ISR/Michigan | 1975 | Special Survey | 296 | 2.62 | 2.35 |
| laware | Culleton | 1984 | Inventory of Gambling Behavior | 534 | 3.25 | 3:40 |
| io | Culleton | 1985 | Inventory of Gambling Behavior | 801 | 2.41 | 3.40 |
| w York | Volberg/Steadman | 1986 | SOGS | 1000 | 1.40 | 2.80 |
| w Jersey | Volberg/Steadman | 1989 | SOGS | 1000 | 2.80 | 1.40 |
| ryland | Volberg/Steadman | 1989 | SOGS | 750 | 2.40 | 1.50 |
| w Jersey | Reilly/Guida | 1990 | DSM-IV | 858 | 1.20 | 1.90 |
| | | | <18 Years Old | | | |
| w Jersey | Lesieur/Klein | 1987 | DSM-III | 892 | 5.70 | |
| ebec | Ladouceur/Mireault | 1988 | DSM-III | 1612 | 3.60 | |

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# APPENDIX A

## Respondent Distribution by County

| County | Sample # | Sample % | 1987 Census Estimate % | Gambling # | Gambling % |
|---|---|---|---|---|---|
| Atlantic | 23 | 2.7 | 3.0 | 3 | 4 |
| Bergen | 91 | 10.6 | 11.0 | 8 | 11 |
| Burlington | 45 | 5.2 | 5.0 | 3 | 4 |
| Camden | 51 | 5.9 | 6.0 | 3 | 4 |
| Cape May | 10 | 1.2 | 1.0 | 1 | 1 |
| Cumberland | 18 | 2.1 | 2.0 | 1 | 1 |
| Essex | 86 | 10.0 | 11.0 | 10 | 13 |
| Gloucester | 26 | 3.0 | 3.0 | 2 | 3 |
| Hudson | 61 | 7.1 | 7.0 | 4 | 5 |
| Hunterdon | 9 | 1.0 | 1.0 | 1 | 1 |
| Mercer | 34 | 4.0 | 4.0 | 2 | 3 |
| Middlesex | 70 | 8.2 | 8.0 | 6 | 8 |
| Monmouth | 59 | 6.9 | 7.0 | 2 | 3 |
| Morris | 49 | 5.7 | 5.0 | 2 | 3 |
| Ocean | 45 | 5.2 | 5.0 | 4 | 5 |
| Passaic | 53 | 6.2 | 6.0 | 2 | 3 |
| Salem | 12 | 1.4 | 1.0 | 2 | 3 |
| Somerset | 26 | 3.0 | 3.0 | 2 | 3 |
| Sussex | 19 | 2.2 | 2.0 | 2 | 3 |
| Union | 57 | 6.6 | 7.0 | 4 | 5 |
| Warren | 14 | 1.6 | 1.0 | 2 | 3 |
| Total | 858 | | | 76 | |

## Respondent Distribution by Other Demographic Variables

| | Sample # | Sample % | Gambling # | Gambling % |
|---|---|---|---|---|
| SEX | | | | |
| Male | 398 | 46 | 43 | 56 |
| Female | 460 | 54 | 33 | 44 |
| | | | | |
| AGE | | | | |
| 15-18 | 41 | 5 | 6 | 8 |
| 19-29 | 190 | 22 | 21 | 28 |
| 30-39 | 215 | 25 | 14 | 18 |
| 40-49 | 134 | 16 | 16 | 21 |
| >50 | 278 | 32 | 19 | 25 |

| | Sample # | Sample % | Gambling # | Gambling % |
|---|---|---|---|---|
| RACE | | | | |
| Asian | 23 | 3 | 6 | 8 |
| Black | 68 | 8 | 11 | 14 |
| Hispanic | 36 | 4 | 4 | 5 |
| White | 713 | 83 | 49 | 64 |
| Other | 18 | 2 | 6 | 8 |
| | | | | |
| MARITAL STATUS | | | | |
| Single, never been married | 229 | 27 | 27 | 36 |
| Currently married | 476 | 56 | 31 | 41 |
| Divorced or separated | 76 | 9 | 11 | 15 |
| Widowed | 68 | 8 | 6 | 8 |
| Living with roomate | 9 | 1 | 1 | 1 |
| | | | | |
| INCOME | | | | |
| Less than $15,000 | 220 | 26 | 24 | 32 |
| $15,000 - $25,000 | 135 | 16 | 10 | 13 |
| $25,000 - $35,000 | 142 | 17 | 10 | 13 |
| $35,000 - $50,000 | 123 | 14 | 11 | 14 |
| More than $50,000 | 158 | 18 | 12 | 16 |
| Refused | 80 | 9 | | |
| | | | | |
| EDUCATION | | | | |
| Some High School | 72 | 8 | 12 | 16 |
| High School Graduate/GED | 286 | 33 | 26 | 34 |
| Some College | 187 | 22 | 19 | 25 |
| College Graduate | 181 | 21 | 8 | 10 |
| Post Graduate | 92 | 11 | 6 | 8 |
| Vocational/Business School | 34 | 4 | 4 | 5 |
| Refused | 6 | 1 | | |
| | | | | |
| OCCUPATION | | | | |
| Employed - Full-time | 429 | 50 | 45 | 59 |
| Employed - Part-time | 108 | 13 | 10 | 13 |
| Working at home | 28 | 3 | 2 | 2 |
| Student | 48 | 6 | 4 | 5 |
| Retired | 120 | 14 | 8 | 11 |
| Childrearing | 47 | 6 | 1 | 1 |
| Unemployed | 39 | 5 | 1 | 1 |
| Other | 39 | 5 | 5 | 7 |

University of Medicine and Dentistry of New Jersey
Community Mental Health Center at Piscataway

# Pathological Gambling Research
# Household Survey

## SCREENER

Hello, my name is _____ from Centrac, Inc., a marketing research firm in New Jersey. We represent the University of Medicine and Dentistry of New Jersey and we are conducting a study of recreational behavior among citizens of New Jersey. Your telephone number was drawn at random and all your responses will be kept confidential and anonymous. This will only take a few moments of your time and your participation will help the fields of science and medicine. The most important thing is for you to answer each question as honestly as possible.

1. What is your approximate age? Is it..... (READ LIST)

_____ under 15 (Ask to speak to another household member who is 15 years or older. Record call back time if necessary. If unable to speak, TERMINATE)

_____ 15-18 (continue)

_____ 19-29 (continue)

_____ 30-39 (continue)

_____ 40-49 (continue)

_____ 50 or over (continue)

2. Please indicate which of the following types of gambling you have done in your lifetime. For each type you will have three alternatives. You can respond with "Not At All", "Less Than Once a Week" or "Once per Week or More."

| HOW OFTEN DO YOU..... | Not At All | Less Than Once Per Week | Once Per Wee Or More |
|---|---|---|---|
| a. play cards for money | _____ | _____ | _____ |
| b. bet on horses, dogs or other animals | _____ | _____ | _____ |
| c. bet on sports (parlay cards, with bookie or at Jai Alai) | _____ | _____ | _____ |
| d. play dice games (including craps, over and under or other dice games) | _____ | _____ | _____ |
| e. go to a casino (legal or illegal) | _____ | _____ | _____ |
| f. play the numbers or bet on lotteries | _____ | _____ | _____ |
| g. play bingo | _____ | _____ | _____ |
| h. play the stock and/or commodities market and/or stock options | _____ | _____ | _____ |
| i. play slot machines, poker machines or other gambling machines | _____ | _____ | _____ |
| j. bowl, shoot pool, play golf or some other game of skill for money | _____ | _____ | _____ |

The next series of questions require a "Yes" or "No" response.

| | YES | NO |
|---|---|---|
| 3. Do you think about gambling a lot, or become preoccupied with gambling the more you bet? | _____ | _____ |
| 4. Have you found that you needed to gamble with more and more money in order to get the excitement you desired? | _____ | _____ |
| 5. Have you ever felt restless or irritable when you cut down or stopped gambling? | _____ | _____ |
| 6. Have you ever gambled as a way of escaping from problems? | _____ | _____ |

| | YES | NO |
|---|---|---|
| 7. After losing money while gambling, do you return another day in order to get even? | ____ | ____ |
| 8. Have you ever lied to your family, employer, or therapist to protect and conceal the extent of your involvement with gambling? | ____ | ____ |
| 9. Have you ever committed illegal acts such as forgery, fraud, theft or embezzlement in order to finance gambling? | ____ | ____ |
| 10. Have you ever jeopardized (or lost) a significant relationship or marriage, or your job or education because of gambling? | ____ | ____ |
| 11. Have you ever borrowed money to relieve a desperate financial situation caused by your gambling? | ____ | ____ |
| 12. Do you ever use alcohol or other drugs while gambling? | ____ | ____ |

| | YES | NO | DON'T KNOW |
|---|---|---|---|
| 13. Do or did one or both of your parents or other close family members have a gambling problem? | ___ | ___ | ___ / |

(Ask Q14 and Q15 for respondents who are 19 years or older in Q1.)

| | | | |
|---|---|---|---|
| 14. Does your spouse/partner or roommate have a problem with gambling? | ___ | ___ | ___ |
| 15. Does your son or daughter have a problem with gambling? | ___ | ___ | ___ |
| 16. Does anyone else living with you have a gambling problem? | ___ | ___ | ___ |

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/sam