

**MINNESOTA'S PROGRAMS**

**FOR**

**TROUBLED GAMBLERS**

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**October 17, 1994**

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## INTRODUCTION

This report uses the term "troubled gambler" as a general description of persons who have had trouble with their gambling. The term is intended to be inclusive, ranging from persons who have mild losses that are personally irritating to persons who lose their money, their family, their homes, jobs and even lives.

The literature on gambling is confusing, with some terms such as "pathological gambling" defined through measurement scales; others such as "problem gambling" intended to be general terms; and some terms, such as "compulsive gambling," that are used widely, but are rejected by professionals. There is a conceptual crisis in this field and national literature is barely beginning to describe what is going on with troubled gamblers.

Minnesota has created a fledgling, but growing program to help troubled gamblers. The program is among the most advanced and best funded in the United States, but is still just beginning to find its focus and to learn how to serve persons with gambling troubles. The Minnesota approach has been to learn about troubled gamblers at the same time that the state tries to help them.

This report is an overview and evaluation of Minnesota's compulsive gambling program. The program has been in existence at the Department of Human Services since 1990, and has been treating clients, conducting research, and creating public awareness programs for almost five years. The compulsive gambling program is an innovative but fledgling attempt to help people; one that needs to gain knowledge about this relatively new problem in light of the conceptual confusions that exist in national literature.

This report was prepared while the author was on a mobility assignment at the Minnesota State Lottery. The lottery was very helpful in providing resources for the completion of this report. The Department of Human Services was very cooperative during the preparation of this report, as were the researchers, treatment staff, and gambling professionals interviewed for this report.

## **PART I: MINNESOTA'S COMPULSIVE GAMBLING PROGRAMS**

Minnesota established its range of programs for troubled gamblers in 1990. Testimony at the time cited the growing incidence of problems associated with Minnesota's expansion of gambling. The debate over the creation of the Minnesota State Lottery included concerns over problem gambling. The Legislature decided to begin fledgling programs to help troubled gamblers with limited funds. The state began this response with two major themes in mind:

- 1) The growth of gambling in Minnesota was leading to increased troubles for gamblers who needed help;
- 2) Comments made by legislators in legislative hearings suggested that there was the intent to start these programs small, learn what works, and slowly expand in an intelligent and effective fashion.

In 1990, the Department of Human Services (DHS) was given responsibility for all aspects of the new "Compulsive Gambling Program." Both funding and administration of this program have proceeded since 1990 in an ad hoc fashion, with each year seeing new initiatives, increased funding, and somewhat uncoordinated decisions as to the best focus for the new program.

This section of the report provides a critical overview of the activities grouped under the umbrella of "compulsive gambling" as administered by DHS. This year, 1994, is the fifth year that the program has been operating, and some program trends are becoming clear.

### **TREATMENT PROGRAMS**

Treatment is the cornerstone of the Compulsive Gambling Program. Critics have stated that DHS has a treatment bias; it is at least clear that DHS has a treatment preference. Treatment programs receive just under half of the funds appropriated by the Legislature. In 1994-1995, \$989,000 was appropriated for treatment, which was over half of the total of \$1,847,000 to be allocated. Of an extra million for FY 1995 appropriated by the 1994 Legislature, an additional \$300,000 was spent on treatment, of which \$140,000 went to treatment centers and \$160,000 was divided among efforts to expand treatment into underserved geographic areas, to serve cultural and ethnic minorities, and to pay for increased assessments. This gives treatment-related programs 45 percent of the total 1994-1995 budget, by far the most of any of DHS's program components. Education programs were expanded from a tiny \$88,000 in original budget allocations for the biennium to a total of \$443,000 for FY 1994 and 1995. As a result, education receives 15.5 percent of the 1994-1995 budget. Few of these education funds go for a broad-based education effort.



..... **A. Numbers Treated, Cost Per Client**

Six treatment centers are funded with grants administered by DHS. These outpatient treatment centers began operations in the spring of 1992, after bidding on grants through a request for proposal process. These centers treat gamblers who are referred from hotline calls, correctional officers, yellow pages advertisements, word-of-mouth, Gambler's Anonymous (GA) meetings, friends, neighbors, and through self-referrals.

Treatments range from 12-step chemical dependency models to intensive mental health oriented counseling, with various combinations. All of the treatment centers operate on an outpatient basis, although one center also provides housing during treatment. Group therapies are the cornerstone of most program approaches.

The six centers have treated at least 500 persons since they began operations; outcomes research published by DHS has already studied 377 persons, and many clients do not cooperate with this research (Stinchfield). Some programs counsel family members of troubled gamblers; this counseling is a necessary part of their treatment model, but creates problems when trying to decide how many persons actually received treatment. The following table lists the numbers reported by each of the programs, as of August 1994, in order to give a rough estimate of total persons who interact with the six programs.

**TOTAL PERSONS INTERACTING WITH SIX PROGRAMS**

<u>Program</u>	<u>Cost of Course</u>	<u>Persons Assessed</u>	<u>State Grant</u>	<u>of Treatment</u>
Fairview .....		150		
.....		126		
.....		126		
.....	\$3,200			
St. Cloud .....		104		
.....		52		
.....		52		
.....				
.....	3,800-4,000			

Duluth .....	169
.....	291
.....	291
.....	
.....	3,200
Gambler's Choice .....	250
.....	152
.....	90
.....	3,137
Bemidji .....	50
.....	45
.....	45
.....	
.....	2,694
<u>Granite Falls</u> .....	<u>201</u>
.....	<u>179</u>
.....	<u>169</u>
.....	
.....	3,000-3,200
 TOTALS .....	 924
.....	845
.....	773



The above table, based solely on self-reporting by the six treatment programs, indicates that overall treatment programs have interacted with at least 1,000 persons since funding began in the spring of 1992. These are estimates made by each program and not audited figures. Interaction is very broadly defined; for example the Duluth figures include aftercare-only clients, treated clients, and family members of clients. This gets confusing, as an overall number of problem gamblers treated becomes impossible to compute.

It is probably enough for purposes of this report to say that between 500 and 600 persons received substantive treatment, and over 1,000 troubled gamblers, family members, and associated persons have received some sort of service from these programs. The services include individual counseling and group therapy. A fair number of those counted in this figure of 1,000 persons did drop out of their program before completing the full course of treatment.

It would be helpful if each program reported a yearly intake census, a yearly count of persons assessed, treated, completing treatment, seeking crisis intervention, family members counseled, and exact costs per person. Program standards are not in place to require this sort of reporting. Standards are being developed on a Request for Proposal (RFP) basis in coming months. Some programs can supply this information easily, but different programs use different treatments, definitions and accounting procedures.

The average cost per client is about \$3,500 (Stinchfield), with some programs more and some less expensive. A number of clients quit before finishing treatment (28%). A few clients are admitted to inpatient treatment, usually due to suicidal tendencies, and they can cost as much as \$30,000 per person. Some programs have limited outside sources of income from grants and donations, and others do not. The state no longer requires matching funds.

The generous estimate of almost 1,000 persons who have interacted with a treatment center in Minnesota provides a rough cost-benefit guide. Total spending on treatment is about 45 percent of funds spent since 1992, or about \$1,604,000, which is about \$1,600 per person. Some of these persons are family members, and a good portion of these persons received very little in the way of services. If half received significant services, the average cost of about \$3,200-\$3,500 per person is supported. However, studies show that some persons have received as many as 74 sessions of treatment (Stinchfield). This means that there are significant outliers, persons who received very expensive treatments.

When the outcomes from these treatments are examined later in this report, we will see that the number of successful outcomes proven by these programs is relatively modest. **This program badly needs to compile accurate cost-benefit figures for treatment, figures which both fully disclose the true cost of treatment and that provide accurate success measures.** Despite an ongoing outcomes research effort, there is not accurate or sufficient data on outcomes, costs, benefits, and effectiveness of various treatments. In addition, although programs submit a certified audit, none of these six programs have been financially audited by the state. The exact accomplishments of each program are therefore unclear.

## **B. Program Description**

The original design of the six treatment programs called for each of the centers to test some different aspect of treatment, in order to provide a basis for comparing treatment approaches and learning what works. Generalizations about these programs are therefore dangerous, in that each has unique features. Appendix Three provides a detailed description of each program.

The programs are located in different areas of the state. An effort was made in establishing these programs to test different models, and part of that effort was placing the centers in areas of Minnesota that provide different cultural and gambling environments.

These programs are outpatient treatment programs. The programs use variations on a basic theme of group therapy, family therapy, and education about gambling problems. Troubled gamblers are assessed, educated, counseled, given financial guidance, and hopefully cured of their gambling troubles. Aftercare programs vary in quality and intensity, but all programs make some effort to help the gambler after treatment.

There is a strong effort to try different approaches. There are mental health programs in Minnesota, which are trying to use forms of cognitive and behavioral counseling to help troubled gamblers. There are addiction models, which use 12-step programs to help persons overcome their gambling. There is one program (Granite Falls) that provides housing for clients.

Treatments range from short-term, five-week models to programs with 39 weeks of counseling and group therapy. The tools used by each of the programs differ in certain respects, and there is ample evidence that DHS has designed treatment models that test some of the available alternatives in treatment.

### **C. Comments On Treatment Programs**

Visits to each of the six treatment centers were made during research for this report. Each center was staffed with enthusiastic and helpful treatment professionals. There is an adequate range of models, from 12-step addiction programs to mental health programs, based on cognitive therapies. A number of observations are possible after visiting these programs:

Some programs bring years of experience with other addictions to the treatment of gamblers. Others are attempting to define a mental health approach. It is wrong to say, as some media reports have, that all programs are based on a 12-step model.

The Fairview program is notable for the high level of family involvement that this mental health treatment requires. The approach is to integrate the gambler and the gambler's family in treatment that acts as an intervention. However, other programs have little or no family involvement.

When asked about a success rate, the Duluth program staff cited the DHS outcomes research and claimed a 55-70 percent success rate. Staff at each of the programs, when asked, cited the Stinchfield treatment outcomes study and the 55 percent success rate. Follow-up of clients completing treatment by each of the programs, separate from the Stinchfield follow-ups, were somewhat sketchy.

Most program staff accepted client abstinence as a measure of program success, but most also expressed some confusion over whether abstinence is really necessary for the troubled gambler. Is gambling an addiction so absolute that one lottery ticket inexorably leads to binges? Can controlled gambling habits be a legitimate goal of treatment programs? How can anyone talk about success until

these questions are answered? The treatment programs themselves would like an answer to these questions.

Program staff at each of the treatment centers note that public education is part of their job description. Several lamented the time and effort taken by these speeches and would prefer to spend the time treating problem gamblers. This public education is often a matter of attempting to extend referral networks for problem gamblers; it is not a substitute for a broad-based education effort.

Program staff also noted that there is a shortage of Gambler's Anonymous (GA) groups, despite the explosive growth in this private voluntary program. The number of GA groups has grown from under ten to over 50 in the past few years, but these groups (often used by treatment programs as aftercare providers) are still scarce, especially in outstate Minnesota.

It is interesting to note that staff at programs with a chemical dependency model of treatment pointed out that gamblers often have chemical dependency problems. Staff at programs with a mental health perspective pointed out the mental problems of gamblers. In part, this is because each program uses different assessment scales. Mental health programs tend to use depression inventories and chemical dependency programs tend to test for chemical dependencies. There are also client differences between programs, including both socioeconomic and background differences. These differences and the variety of scales used to assess gamblers will form the basis of a cutting edge research project, currently being proposed by DHS.

The high number of gamblers treated for concurrent problems, or scoring high on scales designed to measure concurrent problems, raises real concerns about the nature of this program. If 40 percent have concurrent mental health problems, a third are addicted to some chemical substance and a large percentage have family problems, it may be that gambling is only a symptom (Specker). Gambling may be a way to act out, to manifest deeper troubles. If that is the case, treatment programs must continue to acknowledge the contributory nature of gambling to other, long-standing needs and troubles.

**One critical fact:** each program has adapted, shifted strategies and approaches in order to do a better job. These changes show that program staff are learning about gamblers and what it takes to help them. There is an attempt just underway to learn about the treatment models, funded by DHS. It is important that the state learn from these changes as well, because such knowledge is the backbone of efforts to form a Minnesota approach to treatment of troubled gamblers.

#### **D. Program Outcomes**

The Department of Human Services contracts with outside researchers to evaluate outcomes from each of the six treatment programs. The Hazelden Foundation, under a contract from the state, collects outcome data from clients who volunteer to participate. A form is filled out by each volunteer client at the time of assessment and administered again when the program is completed. Follow-up forms are administered at the six and 12 month points following completion of treatment.

The goal of outcomes research is to provide detailed proof of what works and why each different type of treatment process fails or helps people. If the original intent of the Legislature was to start small and learn about this problem, outcomes research becomes the cornerstone of the effort, almost as important as the treatment itself.

The annual outcomes reports provide some interesting information. Clients in treatment were 61 percent male, age 39 on average and predominantly white. Almost half had sought help for gambling problems in the past. Over a third have used chemical dependency services and 45 percent have used mental health services. A total of 40 percent had a co-existing psychiatric disorder. These figures may not represent an "average" gambler. Instead, the figures may show what portion of the community these programs tend to serve.

The outcomes report paints a picture of troubled gamblers who have gambled for long periods of their lives. These people are white, middle-class, troubled, have concurrent mental and chemical problems and are heavy gamblers. Gambling problems affect work, are at times associated with criminality and are accompanied by emotional and family problems. People who seek treatment have real and intense problems, in addition to their gambling. The report supports existing national research that found similar patterns. This is the most useful portion of existing outcomes research.

When it comes to actually measuring treatment outcomes, existing research is inadequate. For example, the research has noted a 55 percent success rate for these programs. This figure is controversial, and is probably not accurate (see Appendix One). The 55 percent figure represents only 41 actual persons who responded to the questionnaire who have stopped gambling at the 12-month point following completion of treatment, and so it is hardly definitive. The research is also marred by extremely low response rates, under 50 percent.

The outcomes research does note a high dropout rate (104 out of 377) without explaining why over a quarter of persons studied chose to drop out. When asked, most programs cited high dropout rates in other sorts of treatment programs, and argue that dropouts are frequent because of the daunting financial and emotional nature of treatment to the average person. These numbers are troubling and treatment programs need to find an answer to the high dropout rate, in order to: (1) respond to questions that are sure to be raised; and (2) provide a complete treatment regimen to persons with a gambling addiction.

It is not absolutely clear from existing research how many persons and family members have received services and what type of services were received. Most programs offer some form of group therapy and some use a 12-step model, but existing research does not adequately break down treatment modalities and their effectiveness. Existing research does not track the many adjustments that current programs have made in their therapeutic approaches, although such research may soon be under way.

There are three main questions that must be answered by outcomes research and the current research design answers none of these questions.

- **First**, what happens in treatment and does it work?

- **Second**, what is the most cost-effective and client-effective treatment for each level of severity, and should the state switch to this kind of treatment and delivery model instead of others now receiving funding?
- **Third**, who are the treatment programs not reaching?

The outcomes research reports published by DHS do not provide detailed program-by-program analysis, although each program is the subject of a separate unpublished report. Clients are lumped together into one large population, which ignores the many differences between programs. This evaluation design also is insufficient in regard to the true purpose of this research, which is to evaluate the pilot projects funded by the state. As a result, the ability to choose between competing treatment designs is minimized. A further attempt to evaluate programs was started by DHS on July 1, 1994.

There are a number of questions that are not asked in current reports. How many people seeking treatment have been through treatment before? There is anecdotal evidence that a number of gamblers seek treatment repeatedly. How do troubled gamblers fare when left alone, without treatment?

The reports do not provide cost-benefit analysis, although such analysis is scheduled to begin soon. As a result, the reports do not measure the benefits of treatment or provide a basis of comparison between different treatment approaches, some of which use five weeks of treatment, while others use nine months. There is also no current attempt made to compare the "bang" the state gets for its treatment dollar with the "bang" the state might get through preventive educational efforts; DHS would like to see this sort of research in coming years.

One reason outcomes research is less than helpful may be the lack of program standards for treatment programs. DHS is planning to develop such standards, using a forthcoming RFP and state grant to fund the development of program standards. The eventual adoption of these standards may provide more comparable information about programs. DHS is already moving to correct some of these data shortages through adoption of these standards.

Research on a national basis finds a lack of consensus as to the best treatment approaches to be taken. S. Legg England, in a key article notes that, "As yet there is no standard treatment approach for problem gamblers." John B. Murray says, "No one personality profile definitive of pathological gamblers has been identified." England laments that there have been few trials with blind panels, control groups or long term follow up. Murray comments that, "A lack of control groups has limited conclusions..." If treatment of gamblers is to be given credence by the medical community, research on that treatment must meet the standards of the medical community.

The national literature finds research on troubled gamblers and their treatments to be lacking in conclusive findings that would validate any one approach. Problem gambling has been compared to the field of chemical dependency research thirty years ago, when even the basic questions remained

unanswered. Given the lack of clarity in national research on this issue, Minnesota needs solid and definitive research to provide guidance in coming years.

### **E. Pilot Projects? Why the Treatment Center Approach?**

The original funding of six treatment centers was understandable, given the need to create this new program from scratch. The existing centers draw on the treatment strengths available in Minnesota, using both chemical dependency and mental health models. DHS did a good job of quickly getting so many programs underway, with the relatively light funding available.

Interviews with treatment providers show that DHS has chosen intelligent and hard working providers to operate current programs. These providers are fine tuning their programs and are working to provide better therapies and achieve better results. However, there are some weaknesses with the treatment center approach.

The six centers do not adequately serve all of Minnesota. The lack of centers in suburbs of the Metro area, Southeast Minnesota, Northwest Minnesota and in many counties supposedly covered by current centers yield a geographic gap in coverage. This gap may be inevitable with any approach based on centers, which require single locations and traveling for many clients.

The "centers" approach does test treatment through an intensive approach, whether for nine months, as in St. Cloud, or for five weeks of residential treatment, as in Granite Falls. These centers are testing the treatments that require lengthy commitments from clients.

The state needs to be creative in funding future expansions of this program. The goal should not be to increase the size, scope and permanence of the current six treatment centers. At this point, the state's primary responsibility is still to find out what works. With this in mind, the debate over possible expansions of the treatment program can proceed.

Currently, DHS is considering two expansion options: creation of a seventh treatment center and creation of a scattered site program that funds treatment by many professionals. There are currently six centers, but these six centers cover only a portion of Minnesota. Expansion into a seventh site must be considered in light of the pilot nature of the treatment projects currently under way. The goal is to test different psychiatric and chemical dependency treatment models as they are applied to gambling problems. However, the objective is also to test various delivery models in order to provide both cost and effectiveness data to the state.

The scattered sites approach needs to be tested as part of one of the next treatment expansions approved by DHS. The key need is to preserve the experimental approach. All treatment projects are pilot efforts. Funding a scattered site approach, in which many therapists provide treatment out of their offices, would allow a comparative evaluation of the centers model and the scattered sites model. This would allow some testing of alternatives to funding treatment centers, which may be very expensive ways to deliver treatment.

A scattered sites approach would probably involve individual therapies and could include less intensive treatment modalities than currently provided at treatment centers. There is some interest among current providers in an approach that would begin treatment at a treatment center, and continue treatment and aftercare at scattered sites. **Given the current lack of knowledge as to what level of treatment is appropriate for each level of problem gambling, the state needs to preserve its options by testing different delivery systems.**

## **F. Insurance Reimbursement**

In 1986, the first compulsive gambling report ever submitted to the Legislature by DHS contained a section recommending reimbursement by the health insurance industry for treatment of problem gamblers. The report concluded that, "continuing efforts should be made to educate third party payers regarding the reasons for reimbursing treatment costs."

A telephone survey of existing health plan companies in Minnesota reveals that no major insurer routinely reimburses for compulsive gambling treatment. Most say that such reimbursement is unlikely due to both the state of the art at current treatment centers and the increasing need for treatment for more established mental and chemical problems. One person speculated that many problem gamblers may be uninsured.

There are therapists in Minnesota who treat problem gamblers without state funds. When contacted for this report, most did not want to make a comment on the record. However, it should be noted that at these centers some insurance reimbursement is possible, through billing for treatment of concurrent problems. Existing insurance mandates require that both mental health and chemical dependency coverage be provided to the insured. Studies show that at least one-third of all gamblers have a history of chemical addictions and that as many as 40 percent are suffering from a concurrent mental disorder. Gamblers are being treated for chemical dependency and for depression, and treatment centers are receiving third party reimbursement for these problems.

Insurance reimbursement is the Holy Grail of the treatment centers. This would provide steady funds for treatment of many additional gamblers. However, as the health care debate in Minnesota begins to result in a universal benefit set, some clear problems with mandating reimbursement for gambling treatment at this point are becoming clear.

Before reimbursement can even be considered, the following issues must be addressed: 1) an assessment device must be constructed that channels clients into differing amounts of treatment to be prescribed for different levels of problems; 2) current treatment approaches must be tested and proven with sound outcomes research; 3) treatments must generate cost and efficacy data that show an appreciable benefit to problem gamblers and 4) some decision as to professional qualifications for treatment must be made.

Even after all of these elements are in place, gambling treatment will have to compete with other, long-established treatments for the increasingly scarce and increasingly managed, health care dollar.

### **G. Provider Standards**

An RFP is currently being sent out to establish standards which providers should meet in order to be eligible for state treatment grants. A controversy exists in this area. Currently, the Minnesota Council on Compulsive Gambling conducts a 60-hour training program for potential providers; well over 200 persons have completed this training. This training was once partially funded by DHS, but state funds are no longer available.

When asked, several persons trained by this program commented about two aspects of the training: a) some felt unable to conduct treatment after only 60 hours of training and b) some protested the national requirement that 2,000 hours of supervised experience be necessary before full national certification.

By sending out an RFP to design standards, DHS is independently pursuing its own training and educational standards. The intent is to design a process by which existing treatment professionals (of which Minnesota has many) can upgrade their existing skills through training about gambling problems; this is being developed as an alternative to national certification through the Minnesota Council.

After provider standards are adopted, DHS will need to design a provider training and upgrade process that will allow existing chemical dependency and mental health specialists a straightforward and simple route to becoming certified. It is also crucial that outcomes research provides answers to what works -- how can we train people if we have not fully tested our existing approaches?

### **H. Treatment: The Future**

The future of treatment in Minnesota is directly tied to the quality of research on treatment. The treatment professionals interviewed for this report were sincere, hard working and concerned about their clients. DHS did a good job of picking professional organizations to fund, but data is needed to validate the results of these pilot projects and to carry the argument for treatment programs in the face of what will be rising skepticism about program effectiveness.

After funding six centers in disparate portions of the state, a generous estimate of those helped puts the figure at about 1,000 persons in the past three years. The lowest available estimate of problem gambling prevalence indicates that at least .77 percent of Minnesotans, or about 35,000 persons, have experienced problems in the past year alone. A Star Tribune poll places the figure at over 100,000 persons with gambling problems.

Outcomes research has failed to provide an accurate estimate of the number of persons seeking treatment who are actually helped by treatment. As gambling grows, treatment programs are going to face hard questions about their results and about the cost-effectiveness of this approach, given the large estimates of persons with problems and the small number of persons actually helped.

The treatment programs might be validated and found to be useful through a continued pilot project approach that develops sound data on treatment effectiveness, cost- efficacy and quality of outcomes. Through this research, Minnesota can build a model for gambling treatment that is validated and generally accepted. The alternative is rising skepticism about program claims and costs.

## **HOTLINE**

The Minnesota Compulsive Gambling Hotline was created as one of the first components of the state's response to problem gamblers. There have been two phases of hotline operation. The hotline was originally operated in 1990 and 1991 by the Minnesota Council on Compulsive Gambling. In 1992, the Minnesota Institute of Public Health took over operation of the hotline.

The hotline provides a telephone number that troubled persons can call for information and referrals to persons who can help with gambling issues. The hotline has taken calls from a variety of persons, ranging from mildly interested callers to suicidal gamblers in the midst of crisis. The hotline number is posted at lottery retail sites, lawful gambling operations and the race track in Shakopee. Casinos are not required to post this number.

The performance of the hotline during 1990 and 1991 was the subject of a performance evaluation, the Lieberman study. Lieberman found that the Minnesota Council "far exceeded the specifications of the contract." The report was generally favorable and commended the State Council on Compulsive Gambling for its work in implementing the hotline. This research has been criticized as having been done by the national council, evaluating the state council, a possible conflict of interest.

In 1991, DHS sent out an RFP for operation of the hotline and, after reviewing bids, selected the Minnesota Institute of Public Health (MIPH) to operate the hotline, beginning in 1992. MIPH is a private organization that receives state funds to provide both chemical dependency and gambling education. The MIPH received \$240,000 for the 1994-1995 biennium to operate the hotline, and received an additional \$40,000 from the 1994 legislature.

Since beginning operations, MIPH has taken over 10,000 calls. Most callers range in age from 19-25 (16%), 26-40 (44%), and 41-62 (34%), and 62% of the callers are male. In 1994, 58 percent of callers cited casino gambling as the cause of their problem, 19 percent cited pulltabs, seven percent lottery, six percent bingo, four percent card playing, two percent sports books and a scattering mentioned other forms of gambling.

Over half (56%) of callers to the hotline were from the Metro area. Callers listed a broad range of sources from which they heard about the hotline, including the yellow pages (33%), miscellaneous (11%), mailings (8%) and gambling locations (7%).

There has been some interest in the numbers of calls received on the hotline for use as an indicator as to whether the gambling problem is growing in Minnesota. In the early years of the program, calls averaged between 200 and 300 per month. In recent months, calls have averaged between 400 and 500 per month. It is clear that there has been an increase in the number of callers per month.

When asked, Institute staff explain the variation in calls per month by the different amounts of advertising used each month. Each time a strong advertising campaign mentions the hotline number, the number of calls spikes upward. For example, a lottery-sponsored campaign resulted in a temporary increase in calls. It is probably not good methodology to attempt to relate the number of calls to the growing extent of gambling problems. The number of calls is directly related to the current level of advertising of the hotline number and only indirectly related to any rise in the gambling problem.

The purpose of a hotline is to provide a point of contact, anywhere in Minnesota, for persons troubled by gambling. The hotline is serving that purpose well. There is a constant need to advertise the hotline number and to post that number in places that troubled persons might come across. The hotline allows persons to call in an anonymous fashion and to get a little information and some idea of where to go for further help.

The hotline refers callers to treatment centers, Gambler's Anonymous meetings, individual counselors and other programs that offer help. There is some feeling by treatment providers that the hotline is not generating enough referrals. The hotline is currently doing research regarding callers that do not seek further assistance and attempting to see what happens to callers who have problems, but do not go to treatment. The goal is to see if the hotline should be more aggressive in getting people referred to help or if current policies work well in filtering out different levels of problems.

The MIPH notes a need for some sort of intermediate education program to which gamblers could be referred; DHS is making an attempt to define such a program for future uses across Minnesota. Many gamblers do not want or need to go to treatment and do not have intense problems. A short program of education could provide an entry point for these persons, a place to get information and an overview. The MIPH also notes a disturbing trend of many children calling for help because their parents are gambling.

**The hotline is a success, but requires continued efforts to advertise and make available the hotline number.** DHS should continue to let this contract on an RFP basis, to ensure quality. The purpose of the hotline, to provide a point of contact for troubled persons, is a need that will persist.

## **OUTREACH AND EDUCATION**

According to treatment providers interviewed for this report, the educational component of the state's compulsive gambling efforts is the most important and yet least developed portion of efforts to help troubled gamblers. Public education and outreach programs received \$88,000 in the original 1994-1995 budget, and an additional \$355,000 from the extra \$1 million appropriated for FY 1995. This represents the beginning of a new funding focus on education, but education still receives a total of only 15.5 percent of all program funds.

### **A. Outreach Efforts**

Since outreach efforts began, there have been mailings to over 20,000 professionals across Minnesota, over 100 presentations made to thousands of persons, a number of news media events, an advertising campaign funded by the Minnesota State Lottery and attempts to create a curriculum for youth education programs.

The MIPH is the contractor providing most outreach services to the state. In addition, each of the six treatment centers offers its professional staff as speakers and teachers who address the surrounding communities. The MIPH has designed educational posters and mailings, worked on educational materials for adult and youth gamblers and coordinated efforts to educate the public about gambling problems.

The Minnesota Council on Compulsive Gambling, a recipient of state funds, conducts its own education, outreach and publication efforts. The council has provided background information, training and advertising products as part of its mission of responding to troubled gamblers in Minnesota. The council is a private organization.

Mailings to professionals by DHS and the council provide background materials on gambling, what a gambling problem is, how to assess a person with a problem and what resources are available to help. This is a laudable effort, as is the willingness of providers, DHS staff, and researchers to talk to church groups, clubs, schools, college classes and any other interested parties.

Gambling organizations cooperate with public education and outreach efforts, mainly by advertising the hotline number at gambling outlets. Minnesota broadcasters have contributed almost \$1 million in 1994 to a public service campaign, designed by the state lottery, to use radio and television advertising to teach the public about problem gambling. The lottery also donates staff time, efforts and facilities to help DHS with its problem gambling programs.

One possible criticism of current education seminars and education efforts is the ad hoc nature of these efforts. Speakers from DHS, treatment centers, research groups, the lottery and the council all are available to talk about problem gambling if requested. However, some of these efforts are

aimed at training professionals, others are aimed at creating more treatment referrals, some are aimed at putting the problem in context and others are attempts to maximize media attention to the problems of gambling. A strategic plan would provide an overview of these efforts and would point out gaps, such as types of education that are not currently offered. DHS is currently attempting to create a uniform set of materials for outreach efforts.

In mid-1994, the department initiated efforts to educate at-risk groups, including minorities, the elderly and children. DHS sees this program as the major area for expansion in the next decade. There is a recognition that there are gaps in current efforts and that some groups are being targeted by gambling organizations and may need additional help. Outreach efforts, which occupy so much time and so much effort on the part of those who speak on these issues, need to be designed within a framework that makes sure that the message is getting to the most persons, in an effective manner, with an effective message.

## **B. Education or Treatment?**

Critics complain of a treatment bias on the part of DHS and refer to the emphasis on treatment centers and the lack of a coordinated and aggressive public education campaign. Several treatment professionals did mention that an education plan of some sort is the major need in coming years, and DHS lists this as a goal to be pursued in the next few years.

If we think back to 1990, it is possible to envision a different development for this program. DHS, with legislative direction, chose to expand this program with the creation of six treatment centers. DHS created a hotline and conducted some rudimentary education programs, but in 1992 received enough funds to expand -- and the expansion included treatment programs, as per the legislative mandate. The state could have instead expanded with a public health and education program that attempted to reach all school children, all at-risk groups and the general public. This preventive approach could have taken on a "gambling concerns" style, teaching the public how to gamble wisely and what to expect from gambling. Treatment centers, which treat a few persons, could have waited until education efforts were well under way and reaching all Minnesotans.

Instead, DHS and the Legislature chose the creation of treatment programs and are now beginning the first steps of creating a complete educational program that attempts to prevent gambling problems. Just as there are arguments for starting with education, there are also valid reasons for beginning with treatment. By starting with treatment, the state hoped to help those with the most serious gambling problems and learn what happens to a gambler who hits bottom, what course gambling takes in a troubled gambler and how that person can be helped. There are many persons crying out for help. However, even most treatment professionals agree that the time has come to shift focus to the creation of a major education effort. This may have just started with the increase in education efforts that resulted from increased FY 1995 appropriations.

No strategic timetable is in existence that would reveal when DHS intends to create the broad-based education programs that many professionals are requesting, and there is no blueprint to reveal

how much of existing resources should go to prevention efforts and how much to treatment. No data exists that provides a comparative basis for choosing between treating 30-40 more persons (the number helped with treatment's share of the 1995 extra \$1 million), or creating a new program to educate the elderly, or some other use of scarce funds. As a result, there is little sense of direction, especially regarding education efforts.

### **C. A Public Education Program**

The Minnesota Extension Service, the Minnesota Institute of Public Health and the Minnesota Council on Compulsive Gambling are all working to create a curriculum for educators. The goal is to create a curriculum that can be used in much the same way as currently existing chemical dependency curriculums. The extension service and MIPH are working together on this effort.

The seeds of a possible education program are being put in place by DHS. Eventually, an elementary curriculum will be written and offered to schools. School counselors will be trained to spot gambling problems, not only in children, but in their families. The prevention efforts will focus on teaching people the facts about gambling, and how to avoid the pitfalls of problem gambling.

Several concerns about education programs need to be addressed before the state can fully implement this approach:

- How much of additional budget expenditures should go to prevention and education -- some, most or all?
- Who should write the curriculum, and why are three groups involved in writing a curriculum, some cooperatively, others not? And why isn't the education community more formally and completely involved?
- Which curriculum style is better: a health focus, a social studies focus, a gambling probabilities focus or some combination of the three? What should be in a curriculum?
- What will a program look like? Given the distaste with which school districts greet state mandates, it may not be a good idea to mandate this education. If there is no mandate, will there be teacher training funds or other carrots with which to encourage schools to accept this program?
- Who should run the education program, DHS or the Department of Education? Is there value in keeping all gambling treatment programs in one place (DHS), or should the expertise of the Education Department be accessed?
- How should this new program be evaluated? What criteria for success must a prevention effort meet?

Every few years, the Department of Education conducts a survey of children and in their most recent survey asked gambling questions. The survey found that 15 percent of 12th grade males and five percent of females felt bad about the amount or consequences of their betting in the past 12 months. When asked if they felt they could not stop betting, four percent of 12th grade males and one percent of females said yes. This survey asks large numbers of children about their habits and problems and the results indicate that there are a number of kids with gambling problems. If the survey had asked about parental gambling problems, even more interesting information might have been forthcoming.

There are a number of competing messages about gambling in high schools. It has been noted by many educators that a trip to a casino is a "new rite of passage" for seniors at Minnesota high schools. With the legal age set at 18, most high school seniors are able to legally gamble at an Indian casino. There have also been Minnesota schools holding "casino nights" as a way to keep kids happy during lock-in dances. When asked, some school professionals groan at the thought of teaching another public health course. Vast ignorance exists in the education community about the problems of gambling, but there is also a growing awareness of gambling problems, if not among students then among their families.

It is not necessary in designing an education program to be punitive, or even anti-gambling. By the time a senior graduates from high school, that senior will have already made decisions about whether to gamble or not. Recognizing the fact that many children and most adults will gamble, Minnesota needs to begin an education program that teaches children what gambling is, why gambling organizations make profits, how probability works, what to do when parents are gambling too much and what warning signs can tell students about their gambling behaviors.

## **RESEARCH INTO PROBLEM GAMBLING**

When the program for compulsive gambling was created, legislators had no idea how many persons were affected, what sort of response was appropriate and whether actions taken to establish the lottery were likely to cause few or many persons to develop gambling troubles. Research was badly needed to answer these and other questions and to evaluate the state's first treatment efforts in order to improve upon early decisions.

Since the program began, over \$500,000 has been spent in Minnesota on research involving the causes, prevalence and community effects of problem gambling. The level of knowledge available has blossomed in recent years and the number of articles, books, and studies has become voluminous. Contrast this with the situation six years ago, when only a few national researchers were studying the problem and the entire field of problem gambling was new.

The Department of Human Services contracts with researchers chosen by the department and does not use an RFP system to choose researchers. This began with early program funding decisions in which research grants had to be made quickly or the money forfeited. In order to maintain funding,

DHS rewarded contracts to researchers known and respected by DHS. The decision to approve funding without competition for research contracts has continued to this day.

Research goals are established by DHS, with the consultation of an advisory board. In a prior section of this report, the quality of outcomes research was questioned. Below is a discussion of the prevalence and community impact research funded by the state. It is the conclusion of this report that serious problems with the nature of current research exist. Appendix One outlines quality problems currently affecting the usefulness of Minnesota research efforts. Appendix Two discusses the South Oaks Gambling Screen, the most commonly used research tool at this time.

### **A. Prevalence Studies.**

The most popular legislative question in the early years of this program was a prevalence question: how many problem gamblers are there in Minnesota? The question has generated widely different answers at the state and national levels.

Given the intense legislative interest over this question, DHS made finding an answer one of their early priorities. In 1990, DHS commissioned a survey to estimate adult prevalence. Next, DHS paid for two separate juvenile prevalence studies. Finally, in late 1994 a second adult prevalence study was completed.

The legislative interest over these questions is understandable. From an epidemiological basis, knowing the number of persons affected by a disease is crucial to designing public health programs, making treatment decisions and understanding the ways that the problem may be spreading. The studies have been something of a disappointment, however, in that they yield estimates that have limited policy impact.

All four DHS reports used versions of the South Oaks Gambling Screen, a much-criticized scale that uses 20 questions to attempt to estimate whether a person may be a probable pathological gambler. Appendix Two of this report summarizes the existing criticisms of SOGS. Authors of these reports defend SOGS as the best tool available and as being a decent screen for gambling problems.

The findings from each of the four reports suggest that a serious problem exists in Minnesota. For example, the adult studies show a doubling from 1990 to 1994 in the numbers of persons seeing negative consequences from gambling. The juvenile studies initially found that over 25 percent of children have potential problems with gambling.

When combined with anecdotal evidence of gamblers going off the edge, these studies are a powerful argument that Minnesota has a new and dangerous social pathology that may be growing, that affects tens of thousands of youths and adults, and that reveals the dark edge of the economic benefits of gambling. Even though this finding is useful, it is little more than common sense. Gambling has always been accompanied by social problems, moral debate, and by people who lose and lose big.

The following table summarizes some of the crucial statistics from the 1990 and 1994 adult prevalence reports:

<u>CATEGORY</u>	<u>1990 Study</u>	<u>1994 Study</u>
Respondents	1251	1028
Response Rate	91.0%	82.0%
Probable Pathological Gamblers	0.9%	1.2%
Gamblers with Increasing Negative Consequences	1.6%	3.2%
Have Gambled in Past Month	23.0%	41.0%

These numbers show an increase in persons gambling in the past month, probably explained by the inception of the Minnesota State Lottery and expansions in casinos. They show an increase in probable pathological gamblers, an increase that is, however, not statistically significant. Finally, there is a doubling of what the 1990 report called problem gamblers and what the 1994 report calls gamblers with increasing negative consequences.

There is merit in repeating the 1990 study using the same survey instrument, the SOGS scale, in order to get a picture of a changing population. There is merit in reporting the numbers in a comparative framework, in order to see the possible consequences of gambling expansion in the state. The 1994 report is well written and contains an extensive methods section with a solid discussion of the weaknesses of the SOGS scale. The 1994 prevalence estimate is a well-composed report.

The 1994 report provides demographic information. For example, gamblers identified as having a SOGS score of three or above tend to be never married, male and between 18-24 years of age. However, if only 1.2 percent of the sample of 1,028 persons were probable pathological gamblers, this is only 12 or 13 persons. This is not enough of a sample to provide any meaningful demographic data on troubled gamblers.

Although the 1994 report is well written and thoughtful, there are central problems that the report does not address. The SOGS scale itself is not validated for prevalence work. There are key questions about the assumptions contained in this report:

- Why is a SOGS score of five or more used to define probable pathological gamblers when treatment centers in Minnesota report that the average score of gamblers seeking treatment is 12 or more?
- When a SOGS score of three or four is used to define "gamblers with increasing negative consequences", is there any evidence to support the report's unstated assumption that these people have a tendency to progress to heavier gambling and more problems?

- Is a SOGS score of one or two really an indication that the respondent has "some difficulties"? Is there not a risk in classifying these persons based on positive responses to one or two questions?

The 1990 and 1994 reports yield an estimate that in the past year at least 40,000 and perhaps as many as 54,000 Minnesotans are probable pathological gamblers. In the past five years, treatment programs have treated less than 1,000 persons. According to these reports, at least 72,000 and perhaps as many as 144,000 are experiencing increased negative consequences from gambling, but only a fraction of that number have been reached by education programs.

From one perspective, the usefulness of further prevalence research is limited. The estimates of the scope and size of the problem far outstrip the programs available to help gamblers. It is likely that, no matter how much in funds the legislature appropriates, the numbers of gamblers estimated by prevalence research will always far outstrip the resources spent.

DHS plans on concentrating future research on special populations, including low income persons, the elderly and the Hmong. It is important to go beyond the prevalence approach, which surveys a thousand persons, finds a dozen probable pathological gamblers and fails to shed light on the life course of problem gamblers. In general, prevalence estimates provide little more than a rough indication of the scope of the problem, when policy makers need a more detailed understanding.

## **B. Community Impact Studies**

In Minnesota, there are bars that sell pulltabs, retail grocers that sell lottery tickets, churches that offer bingo, next door neighbors who play poker, casinos just down the highway and office pools on Vikings games. Surveys find that 80 percent of Minnesotans gamble in some form. The community impact of gambling is subtle and difficult to measure.

Measuring the community impact of gambling has been the goal of several reports funded by DHS. There have been studies of community impact on several Minnesota cities, including Willmar, Virginia and Brainerd. A detailed study of pulltab gambling from the perspective of gamblers and dealers was conducted. Studies of bankruptcy rates and of the personality and lifestyle of the compulsive gambler have been published.

Some of this research is of real interest. In [You Betcha!](#), a detailed study of the game of pulltabs is presented, including the strategies players use to beat the game and other players. This anthropological research is useful in understanding how the semi-professional gambler plays against the amateur. In this case, the study made it clear how important posting is and, at the same time, presented a number of strategies, both honest and dishonest, that dealers and players can use to beat the game even with posting. This sort of detailed explanation of the game and of the players is useful to regulators and legislators, some of whom do not gamble.

Community impact studies that focus on small Minnesota cities are somewhat useful, in that they detail how gambling has changed local culture and changed how the tourist dollar is spent. However, the changing culture of gambling is a statewide phenomenon and these reports miss that point.

There are major community impact questions that still need to be answered. A detailed study of casino gambling, modelled on the earlier pulltab study, would be inexpensive and useful. The impact of gambling in Indian communities is important and needs to be studied by the Indian community itself. At some point, it would be interesting to hear what a philosophical economist, one who is also a master essayist, had to say about Minnesota's plunge into gambling.

Recent studies by the Ford Foundation and the University of Minnesota have questioned the state's efforts to measure the impact of gambling on Minnesota. The Ford Foundation study found a probable impact from problem gambling and attendant social pathologies of about a quarter billion dollars per year. The University study questioned the impact of Indian casinos, finding no evidence that casino gambling had resulted in a significant increase in per-capita incomes in surrounding counties. Both studies called into question state research on community impacts. However, both studies are themselves already outdated, in that gambling at casinos has boomed since the data was compiled for these reports.

These studies question the benefits of gambling to the State. Media reports have cast aspersions on the state's efforts to measure community impacts. These questions about the community impact research now available are pertinent. There is too little being researched about the changing culture of Minnesota with respect to gambling.

It is clearly not the central focus of ongoing DHS research efforts to estimate the community impacts of gambling. DHS has more focused questions to answer. It is not the point of the compulsive gambling research to fully estimate community impacts in Minnesota. The State Planning Agency, various state universities and the gambling agencies themselves must do a better job of measuring community impacts from gambling. However, given the need for better community impact research, when DHS does fund such a study, care must be taken to fully measure the negative and positive sides of gambling.

### **C. Need For Continued Research**

As gambling has increased in Minnesota, changes in how discretionary income is spent have had some distributive effects on the economy and some fiscal effects on the people who choose to gamble. These common sense thoughts suggest a need for research. If gambling is growing, and anecdotal evidence about problems is being put forth, it is probably a good idea to look into the situation. In addition, if the state is going to spend several million dollars on problem gambling, research is needed in order to ensure effective programs and to learn what works and what deserves further attention.

The need for research is clear, but it is important to take this argument one step further. National research shows that a "conceptual crisis" is taking place in the field of problem gambling (Shaffer). The terms, words, phrases and ideas are not standardized and many people are talking past one another due to a lack of common meanings. There is no consensus on which treatment works, whether the problem is growing, how gambling itself creates or does not create troubled gamblers and whether state intervention is useful and effective.

**The main problem with Minnesota's research efforts to date is the failure to answer any of these cornerstone questions in a definitive manner.** This report and the two appendices on research call into question the outcomes research, prevalence estimate research and community impact research that has been done in Minnesota. Some of these results are useful, but none is definitive.

## CRIMINAL ASSESSMENTS

Minnesota Statutes 609.115 creates a compulsive gambling assessment for convicted felons; Minnesota Rules parts 9585.0010 to 9585.0040 contain the specific requirements of this provision. Within the probation community, this is known as the Rule 82 program. DHS appropriates \$40,000 per biennium for Rule 82 criminal assessments.

This program was created in 1991, funded in 1993, and was modelled on existing chemical dependency assessments conducted by the judicial system. The purpose of the program is to help convicted criminals whose crimes were caused by problem gambling find treatment for that problem, in order to aid in rehabilitation.

Compulsive gambling assessments are required if a person is convicted of a felony for theft, embezzlement of public funds or forgery. Probation officers determine whether or not compulsive gambling played a part in commission of the crime. If so, a full compulsive gambling assessment is conducted, often by one of Minnesota's six treatment centers, including administration of the South Oaks Gambling Screen (SOGS). A recommended level of care is included in the assessment. Program rules allow a reimbursement of \$100 per assessment from the Department of Human Services.

DHS records show that as of July, 1994, at least 180 assessments have been made, although this is a conservative estimate, since many assessments being done are not being reported to DHS. Only 131 persons filled out client data sheets giving data on their SOGS scores and assessment results. In only 22 cases, reimbursement was applied for and paid by DHS. These numbers represent a fraction of the number of cases that could come under this program.

DHS feels that there are problems with this program. The chain of communication between the courts, probation officers, treatment centers and DHS is not well established. Some probation officers interviewed for this report felt that the program was too cumbersome, while others felt that there is an increasing need for some sort of gambling intervention in the court system.

DHS has been considering some sort of inter-agency agreement that would transfer the program and program funds to the Department of Corrections. Corrections has expressed interest in this program. Interviews with court officials and with treatment professionals have generated the following comments:

- Some feel that this program needs to be administered by Corrections, in order to generate the sort of enthusiasm needed to make the program work better.
- Several treatment professionals and court officials recommended that the program be extended to misdemeanor offenses for theft and other property crimes.
- One very innovative suggestion was to extend this assessment option to family court judges, who could order assessments when indicated.
- The current reimbursement system is too bureaucratic and is, therefore, not workable and not used. A new way to get funds out to courts for assessments needs to be designed.

Research on gambling problems indicate that many crimes committed by troubled gamblers are misdemeanors. It appears that troubled gamblers seem to experience family problems with greater frequency than criminal problems. It is commonly held that this assessment program has not served its purpose, and that it needs to be shaken up and perhaps transferred to a different agency. The Legislature could also expand the program into new areas, in order to make assessments a judicial tool in a variety of situations.

## **MINNESOTA COUNCIL ON COMPULSIVE GAMBLING**

The Minnesota Council on Compulsive Gambling is a private organization that is receiving \$58,000 in state funds for the 1994-1995 biennium. This represents a small portion of the council's budget.

The council conducts think tank symposiums, funds and prepares written papers on problem gambling, conducts a 60-hour training program based on national standards, holds educational seminars and has prepared a blueprint for public policy on problem gambling. The council is part

think tank, part lobbying organization and is affiliated with the National Council on Compulsive Gambling.

The council operated the hotline until losing the contract in a competitive bid process in 1991. This decision caused bad feelings when the council retained control of the original 800 telephone number, as was its right, and therefore slowed the start-up of the new hotline, which is now operated by the Minnesota Institute of Public Health. There is an ongoing argument between DHS and the council over the council's advertising of its own hotline, in competition with the state hotline.

There is also an ongoing argument over training for providers, with the council conducting its 60-hour training program in accordance with the national council, and with the department choosing to go its own way and develop an independent set of Minnesota standards. Persons trained by the Council have at times been critical of the training they received, including persons interviewed during the preparation of this report. Other persons are satisfied with the training they have received.

The council has been funded, despite some legitimate concerns expressed by DHS, because legislators see the council as an independent voice on compulsive gambling matters. The council has been a thorn in the side of DHS and relations have not been marked by comity. A DHS staff person was quoted as saying that, "there is a need for a council in Minnesota," but there are also strong feelings about the relationship between DHS, many practitioners, and the council.

Minnesota spends a small portion of funds on the council and, in return, receives a critical voice on problem gambling issues. However, it is not common policy to fund an independent think tank that is not an advisory board to the department, and is not directly accountable for a work product. DHS needs to ensure that the state is receiving a benefit from this admittedly small appropriation. The council has received some legislative support, but needs to work to ensure that infighting with DHS and others in the field does not raise conflict to the level where cooperation is impossible.

## **ADVISORY COMMITTEE**

The Department of Human Services established an advisory committee to serve as a think tank and a sounding board for policy decisions made by the department. This advisory board has been of benefit to DHS, but has also been the source of conflict-of-interest concerns.

The advisory board has recently been expanded and restructured, in part to respond to concerns that it was dominated by persons and organizations funded by the department. The current advisory board has 32 members and is organized with a number of specific subcommittees.

The board is to be purely advisory, and when funding decisions are made, persons competing for funding excuse themselves from the discussions. The decision to include many persons who

receive funding on the advisory board was made to ensure an interested and spirited debate. When asked, a number of members noted that the new board structure is working very well and that more work is getting done. The new subcommittee structure has generated a great deal of work and interest.

Several board members did raise concerns about a tendency on the part of the advisory board to concentrate on smaller questions of current budget expenditures. Later in this report there is a call for a strategic plan for future budget and program decisions related to problem gambling. The advisory board should be directly concerned with designing that detailed plan and should not be as involved in minor policy matters.

It is important that DHS have an advisory board give direction to program administrators. However, contracts awarded by the board do not always have to go to current recipients and the board contains many persons (at least 11 of 32) who receive funds. Despite an opinion from the Attorney General stating that the current board structure is not improper, a time may come when DHS may have to decide not to fund a particular person or organization that is on the advisory board. Perhaps, the advisory board should concentrate on matters of strategy and direction, and not on funding.

## **DEPARTMENT OF HUMAN SERVICES ADMINISTRATION**

Administration by the Department of Human Services amounts to \$273,000 in FY 1994-1995, which is 9.5 percent of total program funds. The department funds 1.75 positions, including a full-time administrator, a half-time budget analyst and a quarter-time administrative assistant. Advisory committee expenses are also paid through this budget. Legislation has repeatedly capped the amount DHS spends on administration (most recently at 12 percent), but the department spends lower than this cap amount.

Critics have suggested that the state should not have any staff for this program. One critic suggested that a half-time person in the Department of Administration should simply contract out for treatment and research. Others claim that this approach would be short-sighted. They argue that current DHS staff provide a central controller for the various efforts, and that the restructured advisory committee in conjunction with DHS staff is providing an aggressive and innovative approach to running the program.

Comments from many persons interviewed for this report have noted that current DHS staff work exceptionally hard at running these programs. The Legislature benefits from having one voice to answer questions about the range of compulsive gambling programs. There is a need to "get funds out to the persons in trouble," as one critic of DHS noted. However, there is a concurrent need to find out what works and to design a strategy for the next few bienniums, in order to respond to troubled gamblers. The amount spent on administration is modest, and may need to increase by modest amounts in coming years.

## **BUDGET HISTORY**

The 1994 session of the Legislature appropriated an extra \$1 million over and above prior appropriations for fiscal year 1995. It has been allocated to each of the various program components mentioned in this report. The fact that this money was spent in this fashion points up some budgeting questions regarding how compulsive gambling programs are funded.

How the budget is constructed and whether funds should be raised directly from gambling sources are annual legislative issues. With a new budget cycle beginning for the 1995 session, there are a number of budget issues as yet unresolved. How much should be spent on this program? Should each form of gambling be assessed in proportion to its total receipts, or in proportion to its causal relation to problem gambling? What about the special funding role taken by the Minnesota State Lottery?

### **A. Overall Funding**

The Compulsive Gambling Program at DHS began in July, 1989, but was preceded by a one-time appropriation of \$50,000 in 1985. Half of this money was spent on training and on a report outlining the future blueprint for compulsive gambling activities. This 1986 report has been a blueprint for DHS program expenditures ever since.

In 1990, the Legislature began the Compulsive Gambling Program with a 1990-1991 biennial expenditure of \$600,000, appropriated from the Minnesota State Lottery. The program more than doubled for the 1992-1993 biennium to \$1,340,000, of which \$600,000 came from the lottery and \$740,000 from the general fund.

The budget increased again for 1994-1995 to a total of \$1,847,000. Of this appropriation, \$1,075,000 was from the state lottery and \$772,000 from the General Fund. However, the 1994 Legislature added an additional \$1 million from the state lottery prize fund to the FY 1995 budget. This brought the 1994-1995 biennial budget for these programs to \$2,847,000, of which \$2,075,000 was appropriated from the State Lottery.

This program is on the rise. The budget has increased each biennium, at a time when some other discretionary state programs were frozen or reduced. The increase has been modest, in keeping with the original intent of the Legislature to carefully expand the program in order to make expenditures effective. Future budget requests are expected to increase, even when most other programs are steady, due to the perceived need for larger budgets to respond to this problem.

In general, the Legislature has appropriated a somewhat smaller amount than asked for by the Department. Although funds reached a high water mark of \$2.847 million in the last biennium, this was just half of the total request for that biennium from DHS. The program generates increasing

demands for funds. In 1995, the Legislature will face budget requests which would more than double, and possibly triple, the appropriations for the last biennium.

### **B. Proportional Funding?**

A majority of funds for this program come from the state lottery. The lottery provided all of the funds for the start-up of the program, and well over half of the funds since that time. Research into problem gamblers shows that lotteries are not the major cause of gambling problems (Lorenz, 1990). The lottery provides the majority of program funds, not because lotteries cause most gambling problems, but because the lottery is available and has the money to do so.

The compulsive gambling bill has started in the State Senate in each of the past several years. The bill is usually folded into the larger omnibus gambling bill. In recent years, there have been several attempts to fund this program with proportional contributions from each type of legal gambling in Minnesota.

The proportional budgeting approach would have placed license surcharges on lawful gambling organizations, raising funds commensurate with the total of \$1.3 billion in pulltab and lawful gambling wagering each year. The lottery would contribute funds commensurate with total wagering of about \$330 million each year. Indian casinos would contribute funds commensurate with an estimated total handle of \$3 billion. National literature (Lesieur) and local researchers (Laudergan) have supported the idea of proportional funding of these programs.

Although the 1993 Legislature funded these programs with lottery and general fund dollars, the Legislature did direct the governor to seek funding from Indian casinos, in order to receive a contribution in proportion to total casino wagers. Letters were sent from both executive and legislative branch officials to the Minnesota Indian Gaming Association. The Indian gaming community has not yet responded to these requests.

Indian gaming operations do contribute to compulsive gambling treatment and education programs. Contributions are typically made directly to a treatment program. One example: Little Six, Inc. of Shakopee funds training for its employees, education for gamblers and treatment through Gambler's Choice treatment center in Minneapolis for gamblers in need of treatment who cannot afford to pay. However, to date no casino has made a direct contribution to the state's programs and there is little indication that there ever will be a direct contribution of the amounts requested by the state. There also is no total figure available on Indian gaming's contributions to compulsive gambling programs, although there are indications that such contributions are not extensive.

The principle of proportionality is not a budgeting principle. It is the philosophy that funds should come in proportion to the amount gambled, or in a more refined statement, in proportion to the amount that a form of gambling causes troubles for gamblers and their families. Minnesota has not chosen a proportional approach, in part, because the state is not able to compel payments by

Indian casinos. The bulk of funds come from the state lottery, with some additional money from the general fund.

### **C. Lottery Contributions**

The Minnesota State Lottery provided 72.88 percent of the total program funding for compulsive gambling in the 1994-1995 biennium. The lottery has an interest in these programs, in the same manner as the lottery takes an interest in the natural resources programs funded with lottery earnings. However, it is not clear exactly what the interest of the lottery is, and whether the lottery should be more involved with these programs.

The lottery administration is at least accepting of the Legislature's decision to fund these programs with lottery funds, and is often supportive of the programs themselves. In spending lottery earnings, the Legislature is only legally constrained to follow the State Constitution, which dedicates 40 percent to the Natural Resources Trust Fund. It is a legislative prerogative (with gubernatorial approval) to spend the rest as it chooses.

It is a mistake, however, to think that appropriating lottery earnings in this manner is a free decision. Every dime diverted from administration or prizes is, as a matter of fact, actually diverted from the 60/40 split. By spending the money, the Legislature in effect reduces the amounts that the lottery would have contributed to the trust fund or the general fund.

### **D. Formulas.**

There have been both national and local calls for funding by formula. The idea is to "remove the politics" from the budget process by dedicating funds to compulsive gambling. Iowa is often cited because Iowa dedicated funds from riverboat gambling to compulsive gambling programs.

There is a misperception about funding by formula on the part of proponents. In part, this proposed method is tied to the proportionality idea discussed above. Proponents want to tie each form of gambling to funding for troubled gamblers. However, proportionality runs into a road block -- the state cannot require Indian gaming to contribute, and without an Indian gaming contribution, proportional budgeting is impossible.

The other idea behind formulas is to remove the politics -- the Legislature and the Governor -- from budgeting decisions. Formulas are supposed to directly allot funds to the compulsive gambling programs, without political interference. This is a fallacy on the part of formula proponents. Formulas set by one Legislature are amenable to change by the next Legislature. Formulas are not much safer than direct budget figures. Each can be changed from year to year. Thus, there is no real substitute for a biennial budgeting process that requires the various programs to justify their existence from year to year.

Such budget justification is important if it requires programs to prove quality outcomes. This is the purpose of the Legislature's budgeting cycle. There is no way to remove the Legislature from budgeting decisions in this area, and to do so is a misguided idea.

### **E. The Extra Million in 1995**

In 1994, the Minnesota Legislature appropriated an extra \$1 million, from the lottery prize fund, for compulsive gambling programs in FY 1995. This extra money provides some clues as to the shifting priorities shown by the Compulsive Gambling Program. (See chart.)

<u>PURPOSE</u>	<u>FY 94-95</u>	<u>%</u>	<u>EXTRA</u> <u>MILLION</u>	<u>PROGRAM</u> <u>TOTAL</u>	<u>%</u>
Patient Treatment	989,000	53.54%	300,000	1,289,000	45.27%
Public Awareness	88,000	4.76%	355,000	443,000	15.56%
Research	120,000	6.49%	180,000	300,000	10.53%
Hotline	240,000	12.99%	40,000	280,000	9.83%
Administration	203,000	10.99%	70,000	273,000	9.58%
Training	51,000	2.76%	40,000	91,000	3.19%
Outcome Studies	66,000	3.57%	7,000	73,000	2.56%
MN Council	50,000	2.70%	8,000	58,000	1.75%
Felony Assmt	40,000	2.10%	0	40,000	1.40%

The extra money was divided by DHS among each of the major providers and funded groups: research got a share, treatment got a share and public awareness received a substantially larger share. It is indicative that the extra million went to so many different purposes. This money was divided like a pie, with each of the existing funded organizations receiving a slice. However, the focus did shift and resulted in education efforts receiving a much larger slice of the pie.

The ways in which the extra money was allocated point up a major need in the area of compulsive gambling. The state needs an overall and longer term strategic plan. When the extra \$1 million became available, DHS and the advisory council considered the need for new priorities, but, in part due to a limited time frame, this task was only partially accomplished. Several people interviewed for this report raised questions about the strategic purposes behind this new division of funds, in part, because there are many competing demands for new funds.

The Legislature did not direct that the funds be spent for any particular purpose, leaving DHS to decide how to spend it. DHS and the advisory committee spent the funds mainly through adding extra funds to existing contracts. This may have been the only practical alternative. DHS did shift priorities, in a small way, to education programs. However, the basic allocation emphasized established efforts. This division was practical, but short-sighted. A strategic plan would have provided a blueprint for expenditures over the next several bienniums and would have then offered

a set of rationales for expenditures. The extra million would have fallen under that strategic umbrella.

A strategic plan would have provided a basis for choosing between a short-term increase in the number of persons treated (about 40 persons in 1995) and the creation of better public awareness programs. A timeline for program expansions would guide future budget requests by giving some sequence to the growth of this program.

#### **F. Total Budget Needs For Troubled Gamblers**

The Legislature has increased funds for the troubled gamblers program each year of its existence. Indications are that this program needs to continue growing. As has been seen, education programs are barely started and a major education effort is needed. A long term plan would show the Legislature where the program is going and what important goals can be met.

Although the needs may be growing, the Legislature needs to remember its original intent in starting this program small. The original intent was to study the problem, to develop pilot projects in order to test alternative approaches and to grow slow, in order to learn and create a sound model for further expansion. These programs have not yet provided a definitive understanding of this problem. The programs have not settled on a treatment design that generates general approval. Efforts have not yet produced a broad-based education and prevention effort.

The total 1994-1995 biennial budget for this program was \$2,847,000. The figure should increase during the next biennium. However, budget requests for a tripling of this program may be premature. The program needs to grow at a modest pace and to provide more definitive results as it grows. A strategic plan for growth is also needed to provide a blueprint for future expansion.

## PART II: CREATING A STRATEGIC VISION

In 1986, the Mental Health Division of the Department of Human Services (DHS) reported to the Legislature on the treatment of compulsive gamblers. At that time, there was no state program to combat compulsive gambling. There were also no lottery games, no casinos, and the total amount wagered in Minnesota was a mere fraction of the amount wagered in 1994.

The 1986 report is probably responsible for the term "compulsive gambling" becoming the accepted nomenclature for Minnesota's troubled gamblers.<sup>1</sup> The 1986 report was a model in other ways -- a primitive prevalence survey found that two percent of respondents had problems with gambling; the problem was defined as a mental disorder, but treatment was thought to be most effective if based on a 12-step model designed by Alcoholics Anonymous and adapted by Gambler's Anonymous; proposals were made to fund further research, to train counselors, to operate treatment centers, to explore reimbursement by health insurance.

The 1986 report is the intellectual progenitor of the department's efforts on compulsive gambling from 1990 through 1994. However, the 1986 report is outdated, and no longer provides a strategic plan for Minnesota's approach to troubled gamblers. DHS has not put together a long-term strategic guide for compulsive gambling programs, and there is a need for a long term vision for these programs.

A long-term plan can only be constructed through consultation with treatment professionals, educators, legislators, gambling organizations, law enforcement officials and other interested parties. However, such a plan, written in consultation with these groups, could provide an outline that would guide spending decisions and yield increased knowledge about this problem. This section briefly describes some of the possible components of such a plan.

1. Gather cornerstone and definitive research on compulsive gambling issues.

It is clear that the level of knowledge in this field is not sufficient. Research needs to go beyond exploring some facets of the problem and concentrate on settling some of the major questions about problem gamblers. Minnesota needs to settle the terminology confusion through careful writing and longer methods sections in reports. Research needs to test different treatment models and to yield results that provide a guide to what actually works and is cost-effective. A natural remission rate for troubled gambling should be researched, as a benchmark to compare with treatment effectiveness. Research questions should not focus on media events, such as prevalence estimates,

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<sup>1</sup> *The term "compulsive gambling" is a misnomer. A compulsion involves an activity or behavior that a person is compelled to do, from which little or no satisfaction is derived. Problem gamblers usually enjoy gambling and there are few studies that find a classic compulsion at the root of this gambling behavior. It may be time to rename the state program, perhaps to be known as the Pathological Gamblers Program or the Troubled Gamblers Program.*

but should instead answer cornerstone questions, such as finding the link between gambling problems and concurrent mental health and chemical addictions.

## 2. Educate Minnesotans.

There is no broad-based education program aimed at youth. Such a program could be modelled after current efforts for chemical dependency and safe sex. DHS has started to create the seeds of such an approach, but needs to involve educators and to be more ambitious about the scope, funding, and importance of this program. The prevention of gambling problems may be highly susceptible to education, more so than other addictions (a topic for research). It is clear that many people are going to gamble, so why not enable them to gamble smarter and to recognize problems in themselves and others?

## 3. Test alternative treatment strategies.

It is important to remember that the six treatment centers are still pilot programs and must yield definitive research on their cost-effectiveness and outcomes if they are to fulfill their function. A scattered site model needs to be tested. The important point is that current treatment approaches may provide their best service to the state by showing the way to better approaches in the future.

## 4. Explore a continuum of services.

Minnesota does not yet provide a continuum of services. Education and outreach programs are still somewhat sketchy. Services to target populations, such as seniors, are just getting underway. There is a need for a short, one-day intensive education and crisis intervention seminar, available for misdemeanor sentencing, high-school-aged gamblers, and other persons who are at risk for problem gambling. Existing programs should develop better links with inpatient treatment programs, including the ability to refer suicidal gamblers to these services and to secure funding for these referrals. A relapse program needs to be established. These needs are not all best addressed this year, or next year. Some must wait for research that tests earlier approaches.

## 5. Prioritize responses to troubled gamblers.

A strategic plan is also an opportunity to prioritize responses, to decide what must come first, and which approaches reach the most persons. In creating such a plan, DHS must not shy away from offending people. The key is to help the largest number of people, in the most effective manner, and yet to still develop a continuum of services to help all sorts of troubled gamblers. This will necessitate delaying some approaches, emphasizing others, and emphasizing quality as well. A strategic plan should not read as a wish list, with everything and the kitchen sink competing for budget dollars now, today, without regards to effectiveness or the readiness of the state to deliver quality services. It should instead resemble a timeline, with some attempt to sequence program expansions.

## 6. Multiple Agencies.

For the moment, there is merit in having DHS supply most of the compulsive gambling services. This program is small, and provides one voice on these matters. However, it is time to further involve the Department of Education in helping DHS design a curriculum and a teacher training program for compulsive gambling education. It may be time to transfer the criminal assessments program to Corrections. As the compulsive gambling program expands, other agencies may assume responsibility for portions of the program and the strategic plan should reflect these changes.

#### 7. Two track plans.

The timeline associated with a strategic plan should have at least two tracks. One track should specify what the state needs to know each biennium, for the next ten years. The second track should estimate what the state needs to be doing. The key is to settle some issues, to find definitive treatment approaches, to move from Shaffer's "conceptual crisis" to a more solid understanding of what works and what needs exist.

#### 8. State and Legislative Commitment.

The state needs to commit to a budget for this program that is stable, allows research to go forward and that does not get sidetracked on issues of who pays. It is clear that the Legislature has been committed to increasing this program budget each biennium. Given the scope of this problem, that growth is likely to continue for the next several years. However, each year legislative oversight needs to increase and the key legislative concern must be quality: quality research, quality outcomes, a program that justifies itself by knowing more each year about gambling, troubled gamblers and what works to help them.

## APPENDIX ONE

### THE NEED FOR CORNERSTONE AND DEFINITIVE RESEARCH

The state has spent almost \$500,000 on research projects related to compulsive gambling. There have been several research questions: How many Minnesotans have problems? What are the outcomes from treatment programs? Is there an impact from gambling on Minnesota communities? What works and what is the real nature of this problem?

The field of compulsive gambling treatment and education has been compared to the chemical dependency field in the 1950's and 1960's. There are many theories, many approaches and a paucity of good data. This is a rich field that is ripe for research, with an opportunity to break ground in providing definitive descriptions and outcomes research in this area. The need for further research funding is clear.

Minnesota needs top quality research. The following recommendations for research might provide some guidance for future research efforts:

- Research should go out on a request for proposal basis. In order to maintain a high level of research, the Request for Proposal (RFP) should specify quality methods that are needed and for which the state will be willing to pay. The state should pay the increased costs of high response rates, high follow-up rates and definitive answers to cornerstone questions.
- Research should spend time and effort on using sound methods. The methods sections of all future research should be extensive and should justify research choices, in order to provide a sound basis for debate on these issues.
- Research should be peer-reviewed as part of acceptance by the state. The state will, of course, pay for any contracts it signs, but should reject research that does not meet quality standards specified in the RFP.
- Researchers should be encouraged to publish research in referred journals, as has been done by Winters, Stinchfield, Laundergan and others.
- Research should begin answering some of the basic definition questions. For example, the SOGS scale should not be used in the future, until it is both completely validated and until definitions of problem gamblers, at-risk gamblers, pathological gamblers and probable pathological gamblers are settled methodologically.

- A "methods and terms" summit meeting of all interested researchers needs to be held, which first attempts to settle the raging debate over use and misuse of terms and second attempts to define the cornerstone methodological standards that all future research must satisfy.
- Research should stop simply publishing point estimates of the number of gamblers, or the success rate. All point estimates should be accompanied by interval estimates, error statements and methodological caveats.<sup>2</sup>
- The goal of research must be strategically defined. That goal is not justification for future funding increases or mentions in media articles. The goal must be a cornerstone approach, answering crucial questions in a definitive manner so that, by the end of this decade, Minnesota can articulate a workable, efficient, and validated model for addressing problem gambling concerns.

In the past, criticisms of methods used in research reports have generated some dissension. Researchers have correctly asked for specific criticisms. This appendix provides a detailed criticism of outcomes research in order to illuminate some of the need for definitive research in Minnesota.

### **TREATMENT OUTCOMES**

A report evaluating treatment outcomes at the six Minnesota treatment centers is funded and made each year. The report uses data collected by the Hazelden Foundation from each of the six treatment centers. Clients are initially assessed, given another questionnaire at release and followed up at the six-month and 12-month points after treatment.

The reports have found a 55 percent success rate for existing programs, a figure often quoted by treatment centers to justify their existence. However, there are 377 persons reported as entering treatment, and only 41 persons who have stopped gambling 12 months after treatment. This is not 55 percent of the 377 who entered treatment. It is not even 55 percent of the 124 persons who had completed the program 12 months prior to this time. It is only 55 percent of those who responded to the survey questions, and only 41 persons in total.

The outcomes research funded by the state uses no control groups. There is no attempt made to find out what happens to gamblers with high SOGS scores who do not seek treatment. Clearly, some fraction get better on their own. Is this fraction -- the natural remission rate -- lower or higher than the 55 percent success found in DHS research?

The 55 percent results on troubled gamblers were compiled through a dwindling "N", a shrinkage in the number of persons used to make conclusions, as follows:

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<sup>2</sup> *The 1994 adult prevalence report did a much better job in this regard, providing better narrative on methodological issues as well.*

- An unknown number of clients are treated
- 463 clients agree to fill out forms
- 416 complete admissions questionnaire
- 377 admitted to treatment
- 273 complete treatment
- 245 complete questionnaire at discharge
- 153 of those completing treatment complete six-month follow-up
- 83 are not gambling at six-month follow-up
- 73 of those completing treatment complete 12-month follow-up
- 41 were not gambling at 12-month follow-up
- 57 people provided data at discharge, six-month, and 12-month follow-ups

Thus, when the 55 percent success rate is mentioned, it applies only to a small base of persons. Remember, many who were treated refused to even fill out the forms; others dropped out of the program and are not counted as failures; some refused or were unavailable to answer follow-ups and, therefore, became non-responses and were not counted as successes or failures.

The media response to this study was to highlight the high dropout rate. This was an intelligent response on the part of journalists, who saw through the 55 percent estimate and tracked the actual persons. The use of the 55 percent figure merely confuses matters.

Existing outcomes research does not ask enough of the correct questions. For example, the annual report lacks an adequate definition of treatment success. Some treatment programs say that success is abstinence, others that a change in gambling lifestyle is success. This mirrors the confusion in national research, with Rosecrance arguing for lifestyle changes and many others urging abstinence. **The annual report needs to be open about the confusion about a clinical definition of success, and attempt to construct a comparative approach that would compare success at different programs with some sort of natural remission rate.**

A successful outcomes study would provide a different sort of research than has been seen to date, as follows:

- Each program should be evaluated separately. Lumping all of the client data together masks treatment differences, and makes an untenable assumption that all programs are equal. As a result, the ability to judge each particular program is weakened.
- Outcomes research should test the success of the theories behind the treatment focus of each center, in order to provide data that can be used in constructing a new model for compulsive gambling treatment.
- Outcomes research should more fully evaluate the specific treatments each person receives.
- Outcomes research should report all persons dropping out after receiving some treatment as a possible treatment failure. If a treatment theory recommends 26 treatments, a person leaving after five treatments may not be a success for the program. Perhaps the person is cured after five visits, which means that the prescribed 26 treatments were inappropriate, or perhaps the person is not cured and has not been helped. Research needs to frontally address this question.
- Outcomes research should ask cost questions in order to measure the cost effectiveness of each program. Minnesota is not committed to keeping the existing six centers open forever. Cost figures would provide a basis for future decisions as to whether each center is needed.
- Outcomes research should spend more money on follow-up, in order to avoid low response rates that mar the quality of the final reports. You pay for what you get, and funding fewer research reports of higher quality may be one way to proceed.

Additional criticisms of the research design are possible, but the crucial point is that further research must provide definitive answers to some of the basic questions of problem gambling. What

is happening to gamblers as they lose control? What kinds of treatment really work? Is a universal model for treatment ever going to be constructed? If current efforts are unable to answer these questions, the methods sections of those reports should state why these questions cannot be answered. To be fair, DHS is aware of many of these concerns, and is attempting to begin addressing them.

The key failures of the current outcomes evaluation efforts come from: (1) the lack of answers provided to treatment specialists, who cannot find proven, successful treatment approaches from reading these reports; and (2) the lack of answers to policy makers, who cannot accurately assess the outcomes of these programs or compare these outcomes to educational alternatives or other addiction or mental health programs.

## **APPENDIX TWO**

### **QUESTIONABLE USES OF THE SOUTH OAKS GAMBLING SCREEN**

The scale most commonly used to estimate the amount of compulsive gambling in Minnesota is the South Oaks Gambling Screen (SOGS). This scale is very popular and is put to a number of uses, ranging from research uses to clinical uses, from illustrative to prescriptive, from accurate to inflated. This screen was developed and tested for validity and reliability by Lesieur and Blume

(1987). The SOGS scale has been used in a number of questionable ways in Minnesota research. There are both methodological and policy questions to be raised about SOGS.

## METHODOLOGICAL QUESTIONS

It can be argued, on a number of grounds, that the SOGS scale is overused in Minnesota and it should be researched more thoroughly and made valid before being stretched into new and interesting shapes by the ongoing debate over gambling.

First, the true SOGS scale was developed several years ago, before the national boom in gambling. Lesieur originally validated this scale in 1987 and the scale has not been comprehensively revalidated since. Stinchfield and Winters have pointed out that this scale needs to be revalidated, given the changing cultural attitudes towards gambling. It is fair to say that SOGS may be outmoded, as gambling changes and public acceptance of gambling grows.

Second, SOGS was validated for clinical use, not for population estimates. SOGS is a clinical screen. A population estimate is a very different methodology. SOGS should have been revalidated for population uses.

Third, there is a discrepancy to be accounted for: treatment programs are reporting average SOGS scores of entrants at over 12. The original prevalence estimates used a cutoff point of five for probable pathological gamblers. Why is there a difference?

Fourth, uses of SOGS have not been pure; adaptations have been made. The juvenile SOGS scales (SOGS-Ma) have reworked questions, including some very soft versions of original SOGS questions. Adult prevalence studies have used the SOGS-M, a Minnesota version. None of these new versions have been validated.

Fifth, cutoff points have been adjusted from one report to the next. The original juvenile prevalence report used one set of cutoff points and the follow-up used different cutoffs. This flexibility in interpretations gives rise to methodological confusion.

Sixth, research reports have fallen into the habit of reporting point estimates, instead of reporting both point and interval estimates with error figures. Most polls give plus/minus figures for error, and research reports must begin to do the same. The problem with providing these error figures for SOGS is that, not being recently validated, even error estimates are guesses.

Seventh, SOGS has not been validated for phone or mail use, only for in-person interviews.

Eighth, use of SOGS has contributed to the terminology confusion currently plaguing research in this area. The following is the original scale from the 1990 adult prevalence study:

### Minnesota SOGS-M

Probable pathological:	0.9%
Potential pathological	0.6%
Problem Gamblers	7.0%
Non-Gamblers	37.0%
No Problem	54.6%

Thus, this study concludes that 8.5 percent of all Minnesotans are problem gamblers or worse. This is a baseline estimate taken in April of 1990, before the lottery, before the most rapid expansion of Indian gaming. However, none of these terms is accurately defined or validated. The use of the term "problem gamblers" was particularly difficult to defend. The methodological problem is that a high number of false-positives is likely -- people identified as having a problem with gambling, but not actually having such a problem.

The original adolescent survey found that 19.9 percent of children were at risk, and 6.3 percent were problem gamblers, resulting in a whopping total of 26.2 percent. The next version arbitrarily changed the cutoff points, lowered the estimates and resulted in a more palatable figure. After all, treatment centers were reporting few children seeking treatment and the 26.2% figure was not believed by anyone. Are the new cutoff points any better? New methods did not yield the new cutoffs and so the new figures are not much better.

The original cutoff points in this adolescent survey did not even fully involve SOGS, being a combination of a SOGS-Ma (the juvenile Minnesota SOGS scale) score of one or gambling weekly, for at-risk gamblers, and SOGS-Ma of two or more, or gambling daily. This means that the cutoff points were not even fully contained within the non-validated screen.

It is possible to further criticize SOGS-Ma. Questions 5, 6, 7, and 9 are soft questions, modifications of SOGS that allow many reasonable kids to answer yes, thus classifying each child as a potentially at-risk gambler.

The 1994 prevalence study used the SOGS-M, the Minnesota version of SOGS. Using sound survey research techniques, 1,028 persons were interviewed. However, when looking at the actual number of persons who answered the SOGS portion of the study, we see that only a limited number of persons answered in the affirmative on most SOGS questions. For example, questions 25 had 22 "yes" answers, question 26 had nine "yes" answers and question 29 had nine "yes" answers.

The 1994 prevalence research yields estimates that 1.2 percent of the surveyed persons -- or 12 persons interviewed -- scored over five on SOGS-M and, thus, were probable pathological gamblers. A total of 3.2 percent of the surveyed sample -- or 33 persons -- scored three or four on SOGS-M and were seen as gamblers with increasing negative consequences. These low figures of 12 and 33 persons mean that the demographic and epidemiological portions of the prevalence studies are weak, because comments are made about very few persons.

The advisory council on gambling at DHS did debate the wisdom of doing a second prevalence study, especially after the 1990 study was criticized by the press and legislators for its use

of SOGS. The decision to go forward was made in part because the window was open to create a baseline figure, using the 1990 SOGS-M scores and comparing them to the 1994 scores. The advisory council should have instead done a validation study (since underway) and then a follow-up prevalence estimate. The problem at this point is that SOGS has become malleable, changed to fit research needs and, therefore, has become questionable.

## LITERATURE ON SOGS

If we return to the 1987 Lesieur and Blume article, we see that this original creation of SOGS was much more careful than subsequent uses of SOGS. In the 1987 article, Lesieur and Blume (1987) said that SOGS was, "a valid, reliable screening instrument for the rapid screening of alcoholic, drug-dependent and other patients for pathological gambling."

This modest claim was accompanied by caveats: "However, the true sensitivity and specificity of the South Oaks Gambling Screen with the general population remains unknown." (Lesieur; 1987: page 1186.)

The caveats continue: "Differing base rates of pathological gambling in these populations may cause the false-positive and true-positive and negative rates to vary. Consequently, caution is advised until further testing has been conducted with these groups."

McCormick used SOGS to measure gambling problems with substance abusers. He used scores of four or less to mean, "no significant gambling problem", used 5-9 to mean probable pathological gamblers and ten or more to mean severe pathological gamblers. His cutoffs are different than originally used in Minnesota prevalence studies.

Volberg (1990) argues that, "Information about the number of pathological gamblers in the general population is needed to plan for adequate funding, for program development and staffing, for the adoption of appropriate treatment modalities and for outreach and prevention efforts." She argues that the SOGS scale is, "the best measure presently available to estimate the prevalence of pathological gambling in the general population."

Volberg's arguments are also made by Minnesota researchers. The problem is simple: these are not research arguments and are not research-based estimates of validity or reliability. These are political arguments and they are pragmatic arguments. Note that the SOGS scale was developed and validated originally for clinical use, based on DSM-III guidelines. Volberg, herself, calls for a variety of other screens to be tested and is confident that a treatment screen may be developed that differs from a prevalence screen. The point is, methodological concerns are reducing the usefulness of SOGS.

Legislators and the media called into question the reliability and usefulness of SOGS for prevalence research after it was first used in 1990. The response at that time should have been a suspension of the use of SOGS until SOGS was validated. Instead the use of SOGS has mushroomed. SOGS scales are administered in clinical settings, as part of criminal gambling

assessments, by counselors, in research studies and in general education classes and handouts. SOGS is becoming part of common parlance in the problem gambling community, without advancing in reliability or validity as a research instrument.

Stinchfield and Winters, researchers at the University of Minnesota, are about to conduct the first validation of SOGS in Minnesota. Their work will attempt to reconcile the problems listed in this appendix, as well as problems cited by researchers in the literature. Methodological validation is badly needed. There are another set of questions about SOGS that may be raised on policy grounds.

## **POLICY QUESTIONS**

There are policy questions to be raised as well. Of what use are these numbers in the SOGS study to decision makers?

Rachel Volberg is a national researcher on compulsive gambling who has used SOGS in a number of states to make prevalence estimates. She argues that prevalence estimates provide answers to the most common questions of the policy makers: How many people are suffering and is the problem growing?

In a South Dakota study by Volberg, she found a slight, statistically insignificant decrease in the number of problem gamblers, even after video poker was legalized. If this is any indication, there may not be an increase of gamblers with an increase of outlets. This is interesting, but unreliable information. Once again, the methodological concerns with SOGS undermine research results by calling the data into question in the first place.

Second, these studies in combination with other literature and anecdotal testimony are used to justify funding increases. Therefore, larger numbers of troubled gamblers mean more money and the people doing the studies are the people spending the money.

Is it useful to have an estimate every few years of the number of at-risk people, especially when conducted with an instrument that is slightly questionable? The Star Tribune has conducted an unscientific opinion poll. This poll is almost as useful as the more expensive prevalence estimates that use SOGS. The Star Tribune poll shows that about four percent of Minnesotans (six percent of gamblers) say that they have had a recent problem with gambling. This is an increase in those citing problems with gambling. A third say they know of someone with some sort of problem and there are indications that casino gambling may be causing a new crop of problem gamblers to arise. This poll does not pretend to be definitive, but it does provide a basic estimate of the extent of the problem, at no cost to the state.

In addition to the prevalence estimates, a key value of a scientific study lies in the family, social and psychological profiles that can be developed about gamblers. This portion of prevalence

studies is crucial to understanding how gamblers become problem gamblers. However, can a study that only finds 12 pathological gamblers say anything useful on this topic?

DHS is wisely moving to validate SOGS. DHS is also moving towards specific studies of target populations, including the elderly, the Hmong and other possibly at-risk groups. These studies should be based on a validated screening instrument, one tested on the specific culture being studied.

The crucial use of SOGS may come when SOGS is studied, and is able with other research instruments to provide epidemiological data, data that tracks the life cycle of a troubled gambler. Also needed from the SOGS study is data that reveals conversion points, points at which a gambler gets into trouble and data that reveals the nature of gambling problems as a social, family and youth problem. There is a richness that is needed from prevalence studies and from SOGS.

## **APPENDIX THREE**

### **STATE'S SIX TREATMENT PROGRAMS**

The original intent of DHS was to fund six pilot projects, in different regions of the state, providing different modalities of treatment. The goal as stated in early DHS proposals was not so much to create a full treatment program as to provide a small test of various approaches, in order to find the most cost-effective and client-effective approaches for future program expansion.

The six programs funded by DHS are different in approach and scope. A brief description of each program follows:

#### **1. GAMBLER'S CHOICE**

Gambler's Choice, a long-time chemical dependency program, is located in Minneapolis at the Intervention Institute. The program has worked with problem gamblers since 1977, originally funding the work directly, without state funds. In the early years of the program, gamblers seeking treatment were sports betters, craps players, high stakes poker gamblers and Las Vegas travelers. In recent years, pulltabs gamblers began showing up, and recently casino gamblers have dominated.

Gambler's Choice uses a 12-step model, integrating both mental health and chemical dependency treatment approaches. Treatment lasts for six months, with sessions twice per week. Therapy is group-based.

About one third of the program's funds come from the state. Other sources include sliding scale fees paid by gamblers, gifts from non-profit contributors and limited insurance reimbursement. Gambler's Choice has received \$249,372.39 from the state since 1992.

The gamblers who come to Gambler's Choice average \$41,000 in household income and are typically 30-50 years old. Very few adolescent or youth gamblers come for treatment. A slight majority of gamblers are male, but female gamblers have been increasing in recent years. The average gambler has a South Oaks Gambling Screen (SOGS) score of 14-15, a very high score on this 20-point scale. The program also uses DSM-IV, Beck's Depression Inventory and other assessment devices. Most clients have depression or other mental problems and as many as 60 percent of clients have dual addictions, including chemical dependency (Specter).

Program staff recommend that a gambling severity index be developed, in order to gauge the intensity of treatment needed by each client. Some clients are probably treatable through a short education program, while others need more intensive counseling. There is currently no measure that could provide an indication of which approach is needed for which gamblers.

This program gives the impression of being a long-established and professional chemical dependency program that offers these insights to the field of gambling treatment. In the past, the program staff have met state standards for financial and program activities for chemical dependency programs and would welcome similar standards when the state can develop them for gambling programs. This program could meet a matching funds requirement.

## **2. FAIRVIEW RIVERSIDE COMPULSIVE GAMBLING PROGRAM**

Fairview Riverside Compulsive Gambling Program is located in Minneapolis and is associated with St. Mary's Chemical Dependency Services. The program began operations in May, 1992, and has treated about 126 persons to date. The program has also counseled 190 family members.

Early in the program gamblers were 2:1 male. Currently, about 55 percent are male, and the number of women with problems is on the rise. (One speculation: women reach financial bottom sooner after beginning gambling.) Ages range in the 30's and 40's, with very few youthful clients.

Clients are assessed with Fairview's unique version of SOGS, with DSM-IV, Minnesota Multiphasic Personality Inventory (MMPI) and other scales; 150 persons have been assessed and 126 treated. Fairview attempts to move potential clients quickly into treatment services, in order to lessen the number of dropouts. (Most treatment programs have fairly high dropout rates between assessment and initiation of treatment.)

Fairview has costs of about \$3,200 for a full treatment cycle. Fairview has received \$222,062 in state grants. The Riverside Clinic has absorbed about \$100,000 in losses in order to keep this center operating.

A five-week model of treatment is used at Fairview and clients attend four times per week. Each night, clients receive two group sessions and one educational session. Aftercare sessions occur once per week for two years following program completion. A large number of clients have concurrent disorders and family problems.

A family component is built into the Fairview approach. Family attendance is required as part of the program. There are also financial reviews, and attendance at Gambler's Anonymous meetings is encouraged.

The program is both behavioral and cognitive in approach. The program attempts to track the emotional course of the addiction. Problem gambling is seen as an impulse control disorder tied to disassociative behavior (escape for the gambler from long-standing family, mental and social problems). Women show a victim's profile on the MMPI and men show a defiant attitude towards authority.

Program staff argue that the state badly needs a relapse program, which is included in DHS program plans for 1996-1997. Some argue that at least 200 of the 377 patients studied in the DHS outcomes research are in relapse and need more treatment. Program staff also call for better education efforts.

This program has a 90 percent completion rate, which is high, in part, because the program is short. Program staff note that gambling is "more about escape than anything else." Program staff call for a cost-analysis of treatment effectiveness, which is included in DHS plans for 1996-1997.

### **3. GAMBLERS INTERVENTION SERVICES**

Gamblers Intervention Services is located in Duluth. Gambler's Intervention only treats gamblers and their families. State grant funds are combined with other funds to create a treatment center for 200 to 300 persons per year.

This program uses an integrated combination of mental disorders and chemical addictions treatment. This is combined with a social approach that emphasizes family involvement.

Assessments include the California Personality Inventory (CPI), MMPI, SOGS, DSM-IV, a medical review and a chemical dependency assessment. SOGS scores average from 13 to 19. The University of Minnesota-Duluth medical school is currently comparing and cross-validating these scales.

Clients are in their low 30's to 40's, half are female, and 70 percent make less than \$25,000 per year. Few minorities are in the program, but a low-income center has just opened. Seniors do not come in for treatment often and only a modest youth component exists. Families are encouraged to attend counseling sessions, and many family members have been counseled. Additional staff for family treatment has been hired and the family aspect of this program is expanding.

A treatment cycle consists of 24 steps to be completed by a client, although it may take 30 or more tries to complete the 24 steps. Gambling is separated as the treatment focus, and other treatments are available through referrals as needed.

A sliding fee scale is used to assess charges on all clients who are able to pay, but those who cannot pay are not turned away. (All of the programs have indicated that some of their clients cannot and do not pay for treatment.) The program receives funds from the non-profit sector and could meet a matching funds requirement.

Program staff note that this program primarily treats a low-income clientele, which makes it different from the other state programs. The program treats only gambling problems and is not located with other programs. Program staff raised the point that most of the problems and most of the solutions are coming to center on casino gambling in Minnesota.

#### **4. PROJECT GAMESTAR**

Project Gamestar is located in St. Cloud, sited with the Central Minnesota Mental Health Center. The program takes a mental health approach.

Patients are assessed with SOGS, DSM-IV, MMPI, Beck Depression Inventory, Shipley IQ test and the McAndrews scale for alcoholism. A large number of the clients are also suffering from mental disorders including depression and anxiety reactions. Sober, once-treated chemically dependent persons are often at high risk for gambling problems (a fact noted by several programs). Program staff speculate that persons who have addictive personalities may migrate from chemical to gambling addictions.

Referrals come from the hotline, corrections agencies, family pressure, yellow pages, etc. Criminal assessments of felony offenders are done at the behest of the area probation officers.

It is reported that 52 percent of clients are male. Clients range in age from 17-79, mostly in middle ages, mostly lower-middle class and many divorced. For the most part, family members will not get involved, despite staff encouragement, and as a result very few family members have received counseling.

The program has received \$248,000 in grants from the state, assessed 105 persons and treated 52 persons. Cost for full treatment is just under \$4,000 per person.

Treatment lasts nine months, with three visits per week. GA meetings are also suggested. Therapy is group-based, with additional assignments including financial planning, autobiographies and other complimentary work. The approach is behavioral, tracking behavioral triggers and feelings that bring on gambling behavior.

Abstinence is the goal of this program. Relapses occur, and the program accepts relapsed gamblers until the third relapse. One night of aftercare per week is held for gamblers who have completed the program. The program has recently changed focus to a more behavioral approach and, as a result, is modifying treatment content.

Program staff note that one aspect of operating a treatment center is the requirement that public education and outreach activities be done. This center has done numerous speeches and presentations. (As a requirement of DHS, all other centers also have staff who do public speaking on problem gambling issues.)

## **5. VANGUARD COMPULSIVE GAMBLING TREATMENT PROGRAM**

Vanguard Compulsive Gambling Treatment Program is located in Granite Falls. The program is the only treatment program for gambling in Minnesota that has housing available. The program is associated with a chemical dependency treatment center in Granite Falls.

Referrals come from all over Minnesota, and each of the other five centers has referred clients who are in need of the more intense residential approach at Vanguard.

Clients are assessed during a two day, overnight assessment. The assessment includes SOGS, MMPI, DSM-IV, Rosenthal's Inventory, scales designed by Rambeck and Custer and the Gambler's Anonymous 20 questions. A psychologist interviews each client. The assessment is done overnight in part to avoid losing clients through the assessment process, giving clients time to acclimate to the program.

Clients pay for room and board, and state grants pay for treatment. This program will receive \$431,428 in state funds between 1992 and 1996. Vanguard has space for up to 12 women in a wing of a larger chemical dependency center and space for up to 11 men in a separate house. Although some clients receive treatment on an outpatient basis, most stay in residence during the five week treatment cycle. Treatment begins each Monday with family day, during which family members attend education and group counseling sessions and have a family counselor available to them.

Treatment on other days consists of both educational and group sessions. Some group sessions are dialogue groups and others focus on assignments. The treatment builds on the first five

steps of 12-step programs, but also integrates financial counseling, family counseling and mental health approaches that center on emotions and on impulse control.

Clients often come to Vanguard after some triggering event: a loss, a death, a major life change that has triggered problem gambling. (This is also noted by other programs, especially the impact of loss and death on initiating gambling problems.) There is also an underlying tendency of problem gamblers to be abused and abusers, having experienced child abuse and abandonment themselves; Vanguard has added a measurement scale to its assessments due to these problems.

Half of the clients have some level of chemical dependency. Chemical dependencies are treated first and gambling later. The program was evenly divided between male and female clients, but in recent times two-thirds are men (this is the opposite of other programs that have been seeing more women). Ages range from 25-45, with good educations and middle-income backgrounds.

After five weeks with the program, 80 percent complete treatment and enter aftercare with possible referrals to additional counseling. Vanguard keeps track of clients and claims a 69 percent success rate (success is defined as abstinence) at the 12-month point following treatment. Vanguard has re-treated a number of patients, and has a short-term, two-week relapse program. Vanguard also has a two-day crisis intervention program.

Program staff made the point that current evaluations of treatment programs lump them all together. Vanguard uses a different approach and often gets referrals of especially difficult problem gamblers from other programs. This program should not be evaluated as part of a common pool of treated persons.

## **6. UPPER MISSISSIPPI MENTAL HEALTH CENTER**

Upper Mississippi Mental Health Center is located in Bemidji. Satellite programs are being established in Baudette and Walker. The program consciously chose not to adopt a 12-step model, and instead uses a mental health model based on a rational cognitive approach.

The program receives referrals from the hotline, Gambler's Anonymous, self-referrals, Rule 82 referrals, word-of-mouth and as a result of a weekly newspaper ad. A recent effort involves informational talks with area bankers, to educate bankers. One result: bankers have refused loans to persons with gambling debts and referred them to treatment.

The program has treated 45 persons since the program began in 1990. State grants of \$174,914 have funded this program.

Treatment consists of nine weeks of group therapy, with two sessions per week. There are also four individual sessions and one aftercare planning session. The goal is total abstinence.

The program relies on DSM-IV as an assessment tool, with some use of GA-20, SOGS and other scales. Average SOGS scores are high and they do not see many people in the mid-range scores; they typically score either 0 or at least 12. The program attempts to define each individual's needs and often treatment is tailored to a specific problem concurrent with gambling. Clients are often depressed and there is usually a triggering event that leads to gambling problems -- a death, a job change, retirement or an illness.

There is little or no family involvement in the program due to the nature of the clients, many of whom do not have families. There is a current effort to form a group for spouses of gamblers.

The program thinks of gambling as an illness, with symptoms of powerlessness and unmanageability. The program staff feel that there may be some predisposition for one portion of the population to becoming a problem gambler.

The program has a high success rate; those who complete the program do well and avoid gambling. However, dropouts are a problem. There is also a weak aftercare program. Gambler's Anonymous chapters are uncommon in the area. Program staff note that aftercare is a problem with most state treatment centers and call for some sort of study of appropriate aftercare strategies.

## **CONCLUSION**

The SOGS scale is not completely useless, as some critics have suggested. The SOGS scale needs to be validated for prevalence use and revalidated for clinical use, given the changing nature of gambling and the increasing variety of uses to which people, researchers and nonresearchers, want to put SOGS. It is putting the cart before the horse to base all of Minnesota's screening, assessment and research on a possibly outmoded tool.

In the short term, the upcoming Stinchfield and Winters study needs to validate prevalence uses of SOGS and to provide data on the real, research-proven cutoff points. In the long term, Minnesota needs to study the SOGS scale as it interacts with chemical dependency measures, MMPI data and other scales commonly given to troubled gamblers. Finally, as Minnesota begins to move the debate beyond prevalence estimates to the more complex questions about the troubles suffered by some gamblers, only high quality research can light the path.

## BIBLIOGRAPHY

Aasved, Mikal J. and J. Clark Laundergan. "You Betcha! Gambling and its Impacts in a Northern Minnesota Community." Center for Addiction Studies University of Minnesota, Duluth. July, 1991.

Aasved, Mikal. "Don't Bet the Farm: The Expansion of Legalized Gambling and Growing Bankruptcy Rates in Minnesota: Is There a Link?" Department of Human Services, Mental Health Division. December, 1991.

Aasved, Mikal and James M. Schaefer. "Deal Me In! Gambling and its Impacts in a Central Minnesota Vacation Community." Department of Human Services. August, 1992.

Aasved, Mikal and James M. Schaefer. "Who Needs Las Vegas? Gambling and its Impacts in a Southwestern Minnesota Agricultural Community." Department of Human Services. August, 1992.

Bland, R.C. and S.C. Newman, H. Orn and G. Stebelsky. "Epidemiology of Pathological Gambling in Edmonton." Canadian Journal of Psychiatry, Vol. 38. March, 1993.

Blaszczynski, Alex. "Boredom Proneness in Pathological Gambling." Psychological Reports, Vol. 67, pp. 35-42. August, 1990.

Blume, Sheila B. "Pathological Gambling and Switching Addictions: Report of a Case." Journal of Gambling Studies, Vol. 10. Spring, 1994.

Bohm, Peter and Hans Lind. "Preference Reversal, Real-World Lotteries and Lottery-Interested Subjects." Journal of Economic Behavior and Organizations, Vol. 22, pp. 327-348. 1993.

Chavira, Ricardo. "The Rise of Teenage Gambling." Time Magazine. February 25, 1991.

Clines, Francis X. "Trying to Develop Immunity to Atlantic City Flu." The New York Times. February 12, 1993.

Cox, Sue. "Public Policy Implications: How Governments are Addressing Pathological Gambling." Texas Council on Problem and Compulsive Gambling. April

28,  
1994.

- Davis, Gary and Dennis Brissett. "Personality and Lifestyle Profile of the Compulsive Gambler: A Preliminary Report." Center for Addiction Studies, University of Minnesota, Duluth. July, 1991.
- England, S. Legg and K.G. Gotestam. "The Nature and Treatment of Excessive Gambling." Acta Psychiatrica Scand., Volume 84, pp. 113-120. 1991.
- Gafner, G. "Compulsive Gambling and the Aging Marital System." Clinical Gerontologist. Vol. 10. 1990.
- Goffman, Erving. "Interaction Ritual." Aldine Publishing Company. 1967.
- Hraba, Joseph and Waiman Mok and David Huff. "Lottery Play and Problem Gambling." Journal of Gambling Studies, Vol. 6, p. 4. Winter, 1990.
- Koth, Barbara A. "Minnesota Casino Gambling and Discretionary Income Shifts: Preliminary Results." Tourism Center, Minnesota Extension Service. February 10, 1993.
- Landess, Ira. "Problem Gambling Masks Severe Depression." The New York Times. December 8, 1992.
- Laundergan, J. Clark and James M. Schaefer, Karla F. Eckhoff and Phyllis L. Pirie. "Adult Survey of Minnesota Gambling Behavior: A Benchmark, 1990." Center for Addiction Studies, University of Minnesota, Duluth. November, 1990.

Laudergan, J. Clark and Karla Eckhoff. "Comparison of 1985 and 1989 Minnesota Survey Findings on Gambling Behavior in Minnesota." Center for Addiction Studies, University of Minnesota, Duluth. July, 1991.

Laudergan, J. Clark and Michael O. Emerson and James M. Schaefer. "Adult Survey of Minnesota Gambling Behavior: A Needs Assessment: Changes 1990 to 1994." Center for Addiction Studies, University of Minnesota, Duluth. September, 1994.

Lesieur, Henry R. and Robert L. Custer. "Pathological Gambling: Roots, Phases and Treatment." Annals, AAPSS, Vol. 474. July, 1984.

Lesieur, Henry R. and Sheila B. Blume. "The South Oaks Gambling Screen (SOGS): A New Instrument for the Identification of Pathological Gamblers." American Journal of Psychiatry, Vol. 144, p. 9. September, 1987.

Lesieur, Henry R. "Evaluation of Patients Treated for Pathological Gambling in a Combined..." British Journal of Addiction, Vol. 86. August, 1991.

Lesieur, Henry R. "Evaluation of Patients Treated for Pathological Gambling in a Combined Alcohol, Substance Abuse and Pathological Gambling Treatment Unit Using the Addiction Severity Index..." British Journal of Addiction, Vol. 86, pp. 1017-1028. 1991.

Lesieur, Henry R. "Compulsive Gambling." Society. May/June 1992.

Lieberman, Louis, Ph.D. "Evaluation of the Minnesota Gambling Hotline Program." National Council on Problem Gambling. June 1, 1991.

- Lorenz, Valerie C. "State Lotteries and Compulsive Gambling." Journal of Gambling Studies. Winter, 1990.
- Marriott, Michel. "Fervid Debate on Gambling: Disease or Moral Weakness?" The New York Times. November 21, 1992.
- McCormick, Richard A. "Disinhibition and Negative Affectivity in Substance Abusers With and Without a Gambling Problem." Addictive Behaviors, Vol. 18, pp. 331-336. 1993.
- McElroy, Susan and James Hudson. "The DSM-III-R Impulse Control Disorders Not Elsewhere Classified: Clinical Characteristics and Relationship to Other Psychiatric Disorders." American Journal of Psychiatry, Vol. 149. March, 1992.
- McEvoy, Alan. "Confronting Student Gambling with School Programs." Education Digest. September, 1991.
- Mok, Waiman P. and Joseph Hraba. "Age Differences in Gambling Behavior." Department of Sociology, Iowa State University.
- Murray, John B. "Review of Research on Pathological Gambling." Psychological Reports. June, 1993.
- Politzer, Robert M. and James S. Morrow and Sandra B. Leavey. "Report on the Cost-Benefit/Effectiveness of Treatment at the Johns Hopkins Center for Pathological Gambling." Journal of Gambling.

Behavi  
o r ,  
Vol. 1.  
F a l l -  
Winter,  
1985.

Rosecrance, John. "Attributions and the Origins of Problem Gambling." The Sociological Quarterly, Vol. 27, Number 4, pp. 463-477. 1986.

Rosecrance, John. "Gambling without Guilt: The Legitimization of an American Pastime." Wadsworth, Inc. 1988.

Rosenthal, Richard J., M.D. and Valerie C. Lorenz, Ph.D. " The Pathological Gambler as Crimin  
a l  
Offend  
e r . "  
Clinical  
Forensi  
c  
Psychia  
t r y ,  
V o l .  
1 5 ,  
Numbe  
r 3.  
Septem  
b e r ,  
1992.

Rugle, Loreen J., Ph.D. "Initial Thoughts on Viewing Pathological Gambling from a Physiol  
ogical  
a n d  
Intraps  
ychic  
Structu  
r a l  
Perspe  
ctive."  
Journal  
o f  
Gambli  
n g  
Studies

Spring,  
1993.

Schaefer, James M. and Mikal J. Aasved. "Minnesota Slots: An Observational Study of Pull-Tab Gambling." Center for Addiction Studies University of Minnesota, Duluth. November, 1990.

Shaffer, Howard J. and Sharon Stein and Blase Gambino. "Compulsive Gambling: Theory, Research, Practice." Lexington Books. 1989.

Specker, Sheila M. and Gregory A. Carlson, Karen M. Edmonson, Paula Johnson and Michael Marcotte. "Psychopathology in Pathological Gamblers Seeking Treatment: Gender Comparisons."

Department of Psychiatry, University of Minnesota Medical School, pre-publication copy.

Steufen, Randall and Rachel A. Volberg. "A Study of Gambling Participation and Problem Gambling." Prepared for the South Dakota Business Research Bureau. March, 1994.

Stinchfield, Randy D., Ph.D. and Ken C. Winters, Ph.D. "State-Funded Compulsive Gambling Treatment Programs in Minnesota: Analysis of Treatment Effectiveness." Presented to Hazelden Foundation and Compulsive Gambling Treatment Program, Department of Human Services and Center for Adolescent Substance Abuse, Adolescent Health Program, Department of Pediatrics, University of Minnesota. September, 1993.

Stinchfield, Randy D., Ph.D. and Ken C. Winters, Ph.D. "Treatment of Effectiveness of Six State-Supported Compulsive Gambling Treatment Programs in Minnesota." Department of Pediatrics, University of Minnesota Medical School. June, 1994.

Vatz, Richard E. and Lee S. Weinberg. "Refuting the Myths of Compulsive Gambling." U.S.A. Today. November, 1993.

Volberg, Rachel A., Ph.D. and Steven M. Banks, Ph.D. "A Review of Two Measures of Pathological Gambling in the United States." Journal of

Gambling  
Studies, Vol. 6, Summer, 1990.

Volberg, Rachel A., Ph.D. "The Prevalence and Demographics of Pathological Gamblers: Implications for Public Health." American Journal of Public Health. February, 1994.

Winters, Ken C., Ph.D. and Randy Stinchfield, Ph.D. and Jayne Fulkerson, M.A. "Adolescent Survey of Gambling Behavior in Minnesota: A Benchmark." Center for Addiction Studies, University of Minnesota, Duluth. October, 1990.

Winters, Ken C., Ph.D. and Randy Stinchfield, Ph.D. and Jayne Fulkerson, M.A. "Toward the Development of an Adolescent Gambling Problem Severity Scale." Journal of Gambling Studies, Vol. 9. Spring, 1993.

Winters, Ken C., Ph.D. and Randy D. Stinchfield, Ph.D. "Gambling Behavior Among Minnesota Youth: Monitoring Change from 1990 to 1991/1992." Report for the Center for Addiction Studies, University of Minnesota, Duluth. January

y ,  
1993.

### ARTICLES (AUTHORS UNKNOWN)

"A Blueprint for Responsible Public Policy in the Management of Compulsive Gambling."  
Minnesota Council on Compulsive Gambling. February, 1994.

"Clinical Studies in Pathological Gambling: Is Controlled Gambling An..." Dissertation.  
Abstracts International, Vol. 51. November, 1990.

"Compulsive Gambling Coalition." Testimony before Minnesota Senate Gaming Regulation Committee. 1994.

"Compulsive Gambling." Minneapolis Star Tribune and WCCO News. Minnesota Poll, July 11,  
12, 13,  
14, 15,  
1994.

"Gambling: A Pastime that Can Turn Destructive." Mayo Clinic Health Letter. November,  
1993.

"Gambling: Choices and Guidelines." Minnesota Department of Human Services and Minnes  
o t a  
Institut  
e of  
Public  
Health.  
1993.

"Legislative Report on the Minnesota Compulsive Gambling Treatment Program."  
Minnesota Department of Human Services, Mental Health Division. January, 1994.

"Minnesota Compulsive Gambling Treatment Program." Legislative Report by Minnesota  
Department of Human Services, Mental Health Division. January, 1994.

"Overview of Problem Gambling Research." National Conference of State Legislatures. T h e  
Promus  
Compa  
nies .  
1994.

"Pathological Gambling." Diagnostic and Statistical Manual of Mental Disorders, American Psychiatric Association. Fourth Edition.

"Property Division/Dissipation of Marital Gambling." Court Opinions. The Family Law Reporter. January 1, 1991.

"Public Policy Think Tank Report." Minnesota Council on Compulsive Gambling Training Institute. February 28, 1994.

"Sex Offender Treatment Programs." Program Evaluation. Division Office of the Legislative Auditor, State of Minnesota. July, 1994.

"Taking Aim at State Contract Waste." Star Tribune Editorial. April 29, 1993.

"Treatment of Compulsive Gamblers." Final Report to the Legislature by the Mental Health Division, Minnesota Department of Human Services. February, 1986.