Evaluation of State-Supported Pathological Gambling Treatment in Minnesota

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Executive Summary

This report describes a treatment outcome evaluation of eleven state-supported pathological gambling treatment programs/providers who treat Minnesota residents. Ten providers offered outpatient treatment and one offered residential treatment. The eleven providers offer multiple treatment methods including individual counseling, group counseling, education, Gamblers Anonymous (GA) twelve-step work, and family groups. The therapeutic orientation of most of the providers was eclectic with an emphasis on the twelve steps of Gamblers Anonymous (GA) and a treatment goal of abstinence.

The research design is a longitudinal study and this report includes clients who were recruited from the eleven providers between January 2006 and September 2007. Treatment providers invited 682 clients to participate in the evaluation and 455 gave consent to participate. Of these 455 clients, eight were not admitted to treatment and one was a treatment repeater, which yielded a final sample of 436 clients. This sample included 207 men and 229 women. The study employed a pretreatment-posttreatment design with multidimensional assessments administered at admission, discharge, six-months and twelve-months post-discharge. Variables assessed include a range of clinical and outcome variables. In this summary, information about the sample characteristics will be given first, followed by answers to each of ten research questions that guided the evaluation.

Client demographics and clinical history include:

- 48% were male;
- half of the sample was between 30 and 49 years of age;
- the sample was predominantly white (85%);
- 23% were college graduates;
- almost two-thirds (64%) were employed full-time;
- one-third of clients report an annual income less than $30,000 .
- over half (54%) of the sample had previously received professional treatment for their gambling problem;
- almost half (48%) had attended GA in the 12 months prior to admission;
- one-fourth had received chemical dependency services and over half (52%) have used mental health services;
- all clients received a diagnosis of Pathological Gambling;
- 52% had a co-existing psychiatric disorder and 38% were taking a psychoactive

prescription medicine.

- The majority of women (81%) prefer slot machines/video poker. Men are more varied in their preferred game than women and have a split between slots/video poker (41%) and cards (33%).

- In the six months prior to treatment, 9% of the sample gambled on a daily basis and another 75% gambled at a weekly rate, for a total of 84% gambling weekly or more often.

- Clients had a variety of financial problems due to gambling including borrowing money, writing bad checks and not paying bills.

- Two thirds of the sample said they missed work in order to gamble in the past year.

- Almost one in five (15%) clients reported they were on parole, probation, or were awaiting charges as a result of gambling-related legal problems.

- In terms of substance use, 57% report daily tobacco use, and almost one-fourth are weekly to daily alcohol users. Very few reported illicit drug use.

This report on the treatment outcomes of eleven state-supported gambling treatment providers was guided by ten research questions. Each question will be addressed here in a summary of the findings.

(1) What differences exist between participants and non-participants? Did differences between participants and non-participants affect the research findings?

The sample of clients who refused to participate in the study was compared to the enrolled sample on gender, age and race, the only variables we could obtain on the refused sample. These comparisons showed that the enrolled sample was not significantly different from the refused sample and we can be confident that the enrolled sample is not a biased sample. That is, the enrolled sample is representative of the type of client who typically comes to treatment and will not introduce any bias in to the results. Conversely, the refused sample is also not significantly different from the enrolled sample and we can assume that the refused sample is essentially random and there is no systematic reason these clients refused to participate.

(2) What co-morbid disorders are present among pathological gamblers that may affect the course and outcome of treatment as determined by a standardized and comprehensive diagnostic work up of a sample of clients?

About one-third of the sample (n=436) reports difficulty in relating to others, daily living and role functioning, depression and anxiety on the Behavior and Symptom Identification Scale (BASIS-32). The Addiction Severity Index (ASI) items indicate that over half of the sample had

problems with depression and anxiety in the 30 days prior to admission. Treatment providers reported that over half of the sample had at least one other psychiatric diagnosis in addition to Pathological Gambling, and over one-third were taking psychoactive medications during the course of treatment. Over half of the sample indicated that they had been seen for mental health treatment in the past.

(3) What are the outcomes of gambling treatment and what percent of problem gamblers improve after treatment?

The data from all eleven providers were aggregated and the outcomes of the entire sample were reported. Outcome was defined with three methods: (a) abstinence; (b) statistically significant change from pretreatment to posttreatment; and (c) clinically significant change from pretreatment to posttreatment. Outcome was measured across multiple domains of gambling frequency, gambling problem severity, financial problems, illegal activity, and psychiatric symptoms.

Clients reduced their gambling both during and after treatment. The majority of clients (84%) were gambling at a weekly or more frequent level before treatment and only 5% were gambling at this rate at discharge, 11% at six-months follow-up and only 8% at 12 months follow-up. In terms of abstinence, 62% were abstinent during the course of treatment and 41% were abstinent at six months after treatment and 37% at twelve months after treatment.

All variables used to measure outcome showed statistically significant improvement from pretreatment to posttreatment, including gambling frequency, stage of change, South Oaks Gambling Screen (SOGS), DSM-IV diagnostic criteria for Pathological Gambling, financial problems, gambling debt, illegal activity, BASIS-32 scales, and Addiction Severity Index (ASI) psychiatric domain.

In terms of clinically significant change for gambling frequency, a client had to move from being a weekly or daily gambler prior to treatment to a monthly or less frequent gambler after treatment. Clinically significant change on gambling frequency from admission to discharge for outpatient treatment indicated that the majority of clients (53%) moved from the clinical to the normative range, 7% stayed in the clinical range at both assessments, 11% stayed in the normative range at both assessments, no one moved from the normative to the clinical range, and 30% were unknown due to missing data at discharge. In comparing gambling frequency between admission and six months follow-up, half of the sample (51%) moved from the clinical to the normative range, 10% stayed in the clinical range at both assessments, 10% stayed in the normative range at both assessments, one client moved from the normative to the clinical range, and 28% are unknown due to non-contact at six-months follow-up.

In terms of the gambling problem severity measure of SOGS, a little less than half of the sample (44%) moved from the clinical to the normative range, about one-fourth of the sample (27%) stayed in the clinical range at both intake and follow-up, and 29% are unknown due to non-contact at six-months follow-up. The large percent of clients in the clinical range at both assessments may be partially explained by the fact that it appears that some respondents did not understand the time frame of the SOGS questions. They may have assumed that these questions, like the GA 20 questions that are reviewed at GA meetings are meant to be endorsed if they ever were true for them, because many of these clients had not gambled during the six-month

posttreatment period, but nevertheless still endorsed SOGS items. Therefore, we believe this may represent an over-reporting of SOGS symptoms at follow-up. In terms of clinically significant change for DSM-IV diagnostic criteria from admission to six months follow-up, over half the sample (53%) moved from the clinical to the normative range, 16% stayed in the clinical range at both intake and follow-up, 3% stayed in the normative range at both assessments, and 28% are unknown due to non-contact at six-months follow-up.

Overall, these results show relatively high rates of improvement among clients for the multiple outcome measures employed in this study, including gambling frequency, gambling problem severity, mental health, financial problems, and illegal activity.

(4) What is the association between treatment differences (e.g., modality of treatment, therapeutic orientation, services delivered) and treatment outcome variables?

First, the focus of this question addressed treatment modality, that is, residential was compared to outpatient treatment. Clients from the ten outpatient treatment providers were combined into one sample. Client and treatment variables were compared between residential and outpatient treatment clients. There were mixed results. There were some differences and similarities between residential and outpatient treatment clients. There were no significant differences between residential and outpatient providers on client gender, race, marital status, employment status, preferred game, legal status, age, educational level, income, gambling frequency, gambling debt accrued during the twelve months prior to treatment, number of days absent from work due to gambling during the six months prior to treatment, and stage of change.

There were significant differences for previous gambling treatment (more residential clients than outpatient clients), Addiction Severity Index Psychiatric Scales (residential clients had greater psychiatric symptom severity than outpatient clients), treatment completion (91% of residential clients versus 54% of outpatient clients), SOGS and DSM-IV scores (residential clients had higher gambling problem severity scores on average, than outpatient clients), number of GA sessions attended prior to treatment (residential clients attended more GA meetings prior to admission on average than outpatient clients), and hours of treatment services (residential clients had more hours of treatment services on average than outpatient clients). In summary, residential clients appear to have greater gambling problem severity, greater comorbid psychiatric severity, are more likely to have had previous treatment, and are more likely to complete treatment and receive more hours of treatment services than outpatient clients.

Next, the relationship between treatment modality and outcome was examined. There were no significant relationships between treatment modality and treatment outcome. That is, residential and outpatient treatment modalities yielded similar outcome rates on gambling frequency and SOGS scores.

(5) What is the association between client subtypes (demographic, gambling severity, psychosocial functioning and co-existing psychiatric problems) and treatment outcome?

There were many client variables unrelated to outcome including gender, age, race, marital status, living arrangement, employment status, education, income, pretreatment gambling problem severity, prior GA participation, prior gambling treatment episodes, preferred game, and

psychiatric co-morbidity. There were a few client variables related to outcome including having children (and the number of children), stage of change, BASIS-32 scale scores (but only for discharge outcome among outpatients), treatment completion, number of treatment sessions attended, and effort at recovery (but only for outpatient clients, since residential clients did not complete this scale).

The next step was to enter these client variables correlated with outcome in a multiple regression to see which variables contribute to the relationship when all variables are considered in the same analysis. Client variables of having children, stage of change, BASIS-32 scales, treatment completion, and number of treatment sessions attended were entered in a multiple regression of gambling frequency at discharge for outpatient clients. Four variables contributed to the overall regression and 21% of the variance in outcome at discharge was explained by these four variables: client effort at recovery, BASIS-32 Psychosis scale, stage of change and having children. Three of these client variables are related to client motivation. Effort at recovery is a list of tasks the client can do to work toward recovery, so the more motivated the client is to recover the more effort they are likely to make toward recovery. If a client has children, they may be more motivated to recover for the sake of their children than clients with no children. The stage of change item purports to measure a client's level of motivation to change. The BASIS-32 Psychosis scale may indicate the level to which a client can or cannot function and participate in a psychosocial form of treatment. This same analysis was computed for predictors of outcome at six months follow-up for outpatient clients and two variables emerged: Client effort at recovery and treatment completion accounted for 17% of the variance in outcome at six months follow-up for outpatient clients.

In summary, there were a few client variables that were associated with outcome, including client effort at recovery, BASIS-32 Psychosis scale, stage of change, children, treatment completion, and number of treatment sessions. However, these client variables were weak predictors of outcome and accounted for a modest proportion of the variance in outcome.

(6) What is the inter-relationship of client subtype, treatment differences, and treatment outcome?

This question moves from two-way comparisons to three-way interactions, that is, client subtype by treatment differences by treatment outcome and this introduces a new level of complexity. We have already shown that there were modest relationships between client subtypes and treatment outcome. The only exception was that having children, stage of change, treatment completion, number of treatment sessions attended, and client effort at recovery and BASIS-32 Psychosis scale (for outpatient clients) were correlated with outcome but they were relatively small correlations. Furthermore, there was no relationship between treatment difference (residential versus outpatient) and outcome. Although residential clients had greater levels of gambling problem severity and psychiatric comorbidity than outpatient clients, they nevertheless, had similar outcomes. The basic client subtypes of gender, age, and race did not yielded any significant correlations with outcome. Previous analyses have demonstrated that there are a few client variables associated with outcome, however, the magnitude of the relationships are small.

In terms of treatment differences, outpatient and residential treatment were compared.

First, the outcome of clients with children versus without children was compared across treatment modality. This comparison showed that the three-way interaction was non-significant, that is, there is no difference in outcome between clients with and without children in outpatient and residential treatment. Second, the outcome of clients who completed versus dropped out of treatment was compared across treatment modality. The three-way interaction for this comparison was not significant. Third, the outcome of clients at different stages of change were compared across treatment modality. The three-way interaction for this comparison was not significant. Fourth, the outcome of clients who attended varying numbers of sessions were compared across treatment modality. The three-way interaction was not significant. Therefore, there were no significant interactions between client subtypes, treatment modality and outcome.

(7) What are the most effective treatment services and the level of treatment intensity that can produce optimal outcomes of treatment and inpatient treatment?

This question was answered in three ways. First, we examined the clients' ratings of treatment component helpfulness. At discharge, clients were given a list of treatment services and asked how helpful each service was to their recovery. The majority of clients rated group counseling (64%), homework assignments (54%), peer support group (52%) as the most helpful components of treatment. It should be noted that the predominant form of treatment is group therapy, so many clients could not rate the helpfulness of individual therapy.

Second, we compared the hours of services received by clients with a good outcome versus those with a poor outcome at discharge, six months follow-up and twelve months follow-up. At discharge, we found that outpatient clients with good outcomes received significantly more hours of group and family counseling than clients who relapsed. At six months follow-up, clients with good outcomes received significantly more hours of individual, group, and family counseling than clients who relapsed. At twelve-months follow-up, there were no significant differences in terms of hours of services between clients who had good outcomes and those that relapsed.

Third, a regression analysis was computed to see if hours of different treatment services can explain outcome. We found that the number of hours of group counseling was again correlated with outcome at all three outcome assessments. Family counseling was correlated with outcome at discharge, but not at six or twelve months follow-up. It should be noted, however, that hours of treatment services explained a small amount of the variance in outcome, 13%, 8%, and 3%, at discharge, six months follow-up, and twelve-months follow-up, respectively. In summary, group therapy was the most commonly identified form of treatment that was correlated with outcome, followed by family counseling and individual counseling.

(8) What are the predictors of treatment attrition and relapse as shown by statistical analyses?

This question asks whether we can predict which clients will dropout of treatment based on their pretreatment data. Because residential and outpatient treatment had very different dropout rates, this analysis was computed separately for each treatment modality. For outpatient treatment, about half (48%) of the clients dropped out of treatment. A multiple regression indicated that 20% of the variance in attrition can be explained by four predictors: stage of

change, age, level of education, and GA participation. The best single predictor is stage of change, that is, the lower the stage of change, the more likely the client is to drop out of treatment and conversely, the higher the stage of change, the more likely the client is to complete treatment. The second best predictor of attrition is age, that is, the younger the client, the more likely they are to drop out and conversely, the older the client the more likely they will complete treatment. The third best predictor of attrition is level of education, that is, the less educated, the more likely the client is to drop out of treatment and conversely, the more educated, the more likely the client is to complete treatment. The fourth and final predictor is GA participation. Clients who had not participated in GA prior to admission were more likely to drop out of treatment, and conversely, clients who participated in GA were more likely to complete treatment.

For residential treatment, only 9% of clients dropped out of treatment. A multiple regression indicated that 15% of the variance in attrition can be explained by four predictors. The best predictor of attrition is ASI days of conflict with family prior to admission, that is, the more days of conflict with family, the more likely they are to drop out of treatment. The second best predictor of attrition is the number of days of gambling prior to admission, that is, the fewer the days of gambling the more likely the client was to drop out of treatment, which seems counterintuitive, but it may be that these clients had not "hit bottom" with their gambling. The third best predictor is number of children, that is, clients with fewer or no children were more likely to drop out of treatment. The fourth and final predictor was marital status, that is, married clients were more likely to drop out but this was a small correlation. It should be noted that these predictions are weak and no strong predictors of attrition were found. That is, it is not possible to accurately predict which clients will drop out of treatment. There may be other reasons why clients drop out of treatment and why they complete treatment not measured in this study and these need to be explored in future research.

In terms of predicting outcome, we first looked at outcome at discharge, as measured by gambling frequency during the course of treatment. This analysis is limited to outpatient clients only because residential clients did not have the opportunity to gamble during the course of treatment and therefore all residential clients report no gambling at discharge. A multiple regression indicated that 13% of the variance in gambling frequency at discharge from outpatient treatment can be explained by three predictors. The best predictors of gambling frequency at discharge among outpatient clients are length of abstinence prior to treatment, number of lifetime psychiatric disorders, and stage of change. The strongest predictor was the length of abstinence prior to treatment, that is, fewer days of abstinence predicted higher gambling frequency at discharge. The second best predictor was number of ASI lifetime psychiatric disorders, that is, more psychiatric disorders predicted more frequent gambling at discharge. The third and final predictor is stage of change, that is, a low stage of change predicted higher gambling frequency at discharge. These three predictors accounted for 13% of the variance in gambling frequency at discharge from outpatient treatment. It should be noted that it is not possible to accurately predict which outpatient clients will be gambling at discharge.

In terms of predicting gambling frequency at six-months follow-up, we looked at whether outcome at six months follow-up can be predicted from the client's pretreatment and treatment variables. The three predictors of gambling frequency at six-months follow-up for outpatient clients are the client's gambling frequency at discharge, ASI compulsive behavior assessed at

discharge, and client effort at recovery. Stated another way, the outcome at discharge was a good predictor of outcome at six-months follow-up. The second best predictor was ASI compulsive behavior assessed at discharge, that is, clients who had difficulty with other compulsive behaviors during the course of treatment were more likely to be gambling at six months follow-up. The third best predictor of gambling frequency is working the GA steps, that is, if the client indicated they were not working the GA steps the more likely they were to be gambling at six months follow-up. These three predictors account for 40% of the variance in relapse, which is a large proportion of the variance.

(9) What services are needed by the families of pathological gamblers in order to facilitate the recovery of the pathological gambler and the return to a pre-morbid level of family functioning?

A minority of clients had a significant other involved in treatment and fewer still completed the Significant Other Discharge Questionnaire (SODQ; n = 47). While it is common to include family members only at designated times during the course of treatment, it is interesting how many significant others reported that they did not receive different types of treatment services that may have been helpful, such as, financial counseling or orientation to Gam-Anon. The SODQ afforded significant others to hand write responses to open-ended inquiries about their experience, such as what they received and did not receive from treatment providers.

A number of themes were apparent. First, family members want to learn about the disorder. They want to know what causes Pathological Gambling and how it is treated. They want to have their questions answered. They want to know their role in the treatment process. Are they to be involved in treatment or not? They want to know what services the treatment provider can offer them, as well as what resources are available in the community. They state that they are left to deal with the financial problems and need assistance with these issues and/or referral to other services in the community. Some significant others wanted counseling for themselves and for how to deal with their loved one who suffers from Pathological Gambling. One telling question on the SODQ was “What would you change about treatment?” Significant other answers included a desire for more communication between the treatment provider and family; lengthening treatment; desire for individual treatment option; and need for specific types of help, such as financial counseling. In summary, family members indicate that they would like more attention from the treatment provider and more communication about the treatment process.

(10) How valid is the client self-report as determined by comparing client self-report to public records?

Validity of client self-report was examined by comparing client self-reported arrests to public criminal court record searches and by comparing client self-reported bankruptcies to Minnesota bankruptcy record searches. Clients were asked if they had been arrested for gambling-related illegal activities including theft by check, forgery/fraud, embezzlement, drug charges, assault/domestic violence, prostitution, and illegal gambling offenses. Public criminal court records were searched at Hennepin County Criminal Court, Ramsey County Criminal

Court and state public criminal records were searched at the Minnesota Bureau of Criminal Apprehension (BCA). The client's answer to the arrest question was compared to the results of the criminal record search. Court record searches should be interpreted with caution. Although efforts were made to obtain a complete search of public criminal records, gaps exist in the record-keeping system. If the client was arrested outside of Hennepin and Ramsey counties or outside of Minnesota, their arrest record may not be found in the search of Hennepin and Ramsey County and BCA records. If the county where the arrest occurred did not report the crime to the Minnesota BCA, it will not be in the BCA database. Therefore, these results should be interpreted cautiously. The rate of agreement between client self-report of arrest and public criminal records ranged from 91% to 100% for varying crimes. From a research perspective, we are primarily concerned about false-negatives, that is, clients not reporting an arrest and public records showing an arrest, which would raise questions about the veracity of the client self-report. This would indicate under-reporting or deception on the part of the client. It is reassuring to find that there were few instances of false negatives. Clients were much more likely to report arrests that were not corroborated by the criminal record search.

Second, Minnesota public bankruptcy records were searched and the results of this search were compared to the client's answer to a bankruptcy item. The bankruptcy item in the Gambling Treatment Admission Questionnaire asks if the client has filed bankruptcy in the past 12 months. The Minnesota bankruptcy records includes bankruptcies in the past year and prior. The level of agreement between client self-report and the public bankruptcy record was 92%. There were 9 clients who denied filing bankruptcy in the past 12 months but had a record of bankruptcy in the Minnesota bankruptcy records (false-negative). There were 24 clients who reported bankruptcy but no record of a bankruptcy was found in the record search (false-positive). Overall, there was a high degree of agreement (92%) between client self-report of bankruptcy and the public bankruptcy records and we can be confident that most clients are providing valid self-report.

Limitations and Future Research Directions

Sample Selection Bias

Pathological gamblers who seek treatment and give consent to participate in a research study may be different from those pathological gamblers in the community who do not seek treatment (Nathan, 2005). Therefore, a limitation of this study is that our sample may not be representative of the larger population of pathological gamblers and the results of this study may not be generalizable to the larger population.

Attrition and Follow-up Contact Bias

It should be noted that not all clients have complete data sets. Both six and twelve-months follow-up response rates (72% and 64%) exceeded the minimum rate required by the state (50%) and rate reported by most gambling treatment outcome studies (Blaszczynski, 2005). Although these data collection follow-up response rates are respectable, this still leaves about

one-third of the sample unaccounted for at 12-months follow-up. The outcome of these missing cases is unknown. The success rate of the located sample may not be generalizable to the unlocated sample. Without knowledge of the outcome of this unlocated sample and a reasonable probability that some of them may not be doing as well as the located sample, the success rates reported here may be attenuated.

Causal Inference

Although we may want to infer that treatment caused the changes in clients, the lack of a control group and random assignment of clients to treatment conditions, precludes making such an inference. For example, it is unknown what would have happened to the clients if they had not gone through treatment. However, the results of the study *suggest* that the treatment was influential in the improvement of clients.

Validity of Self-Report

The majority of data in this report comes from self-report. While there is no way of independently verifying the accuracy of this self-reported data, study procedures were implemented to facilitate the validity of self-report, e.g., client names were not used on questionnaires and clients were assured of the confidentiality of their responses.

Some of the self-report data (arrests and bankruptcies) were corroborated by public records and this corroboration showed high levels of agreement. Furthermore, previous research in this field has suggested that self-report data is, for the most part, accurate, particularly when efforts are implemented to facilitate the accuracy of self-report.

Implications for Improving Treatment Services

These eleven gambling treatment providers achieved respectable outcome results that are similar to those reported for substance abuse treatment. However, this evaluation also identified a number of areas which leave room for improvement. First, adult prevalence survey results suggest that there may be more pathological gamblers in the community than are coming to treatment (Emerson, Laundergan, & Schaefer, 1994; Laundergan, Schaefer, Eckhoff, & Pirie, 1990). Therefore, one area for improvement is the identification of those individuals who are pathological gamblers and the referral to treatment services. One way to achieve this goal is to train and encourage health care professionals, particularly mental health professionals, to screen for pathological gambling. Another method for addressing this disparity is to increase public awareness of the availability of screening and treatment services. This public awareness can be targeted at gambling venues where there is a greater likelihood of reaching problem gamblers as well as the general community.

Second, a significant number of clients did not complete treatment. Outpatient treatment had higher noncompletion rates than residential treatment. Therefore, treatment providers need to identify the causes of treatment noncompletion to determine if retention rates can be improved. Third, while there were not very many significant others that completed the SODQ, a number of themes were expressed by these significant others. First, family members

want to learn about the disorder. They want to know what causes Pathological Gambling and how it is treated. They want to have their questions answered. They want to know their role in the treatment process. They want to know what services the treatment provider can offer them as well as what resources are available in the community. They state that they are left to deal with the financial problems and need assistance with these issues and/or referral to other services in the community. Some significant others wanted counseling for themselves and for how to deal with their loved one who suffers from Pathological Gambling. In summary, family members indicate that they would like more attention from the treatment provider and more communication about the treatment process. Even if the gambler does not want to go into treatment, it would be helpful to provide information on how to protect themselves and to direct them how to get the gambler into treatment.

Fourth, in a recently published meta-analysis of psychological treatments of pathological gambling (Pallesen, Mitsem, Kvale, Johnson, & Molde, 2005), gambling treatment in Minnesota (Stinchfield & Winters, 1996; 2001) fared very well compared to other gambling treatment studies. Although these providers achieved substantial success rates, there is still room for improving these success rates. There were some clients who did not improve and it would be helpful to find out why these clients did not improve and what can be done to address those issues. For example, one of the findings from this study was that client stage of change was related to dropping out of treatment and outcome. Clients exhibited varying levels of motivation and those with low motivation were more likely to drop out of treatment and to relapse after treatment. There is research that shows that motivation can be improved with motivational interviewing. Therefore, it would be helpful to assess stage of change early and to enhance motivation prior to and during treatment.

Future Research Directions

Each of these treatment providers practiced various treatment methods. Future research should address what specific treatment methods are most helpful for what type of client in a rigorous design. This will require that treatment methods be standardized and "manualized" and treatment is monitored during the study to ensure fidelity to the treatment method. Clients will need to be randomly assigned to different treatment methods that include a comparison group such as control group (Nathan, 2005). It is only with this type of rigorous research that we can answer the question of what type of treatment is more effective than another.

Future research also needs to evaluate strategies to develop and improve screening, referral, client retention in treatment and participation in posttreatment services. As already noted, motivational interviewing strategies are likely to provide this boost in client willingness to engage in treatment. A formal study is warranted to document if such strategies will work with pathological gamblers. Also, more research is needed on developing and validating brief screening tools to detect problem gamblers in a wide range of health and criminal justice settings. This research could contribute to efforts to improve the identification and early intervention with problem gamblers. All of this research effort will lead to evidence-based treatment or "best practices" treatment, that is, treatment will be based upon empirical evidence of effectiveness.

Introduction

Pathological gambling is a serious addiction that can have devastating effects on both the person with the addiction and their family. It is estimated that approximately one percent of the Minnesota population are "probable pathological gamblers" (Laundergan, Schaeffer, Eckhoff, & Pirie, 1990). The two cardinal signs of pathological gambling are loss of control and continued gambling in spite of adverse consequences (American Psychiatric Association, 1994).

The purpose of this study is to evaluate the effectiveness of these eleven state-supported treatment providers. It should be noted that this study includes only those pathological gamblers who came to one of the eleven state-supported treatment providers and this study in no way presumes to represent all pathological gamblers seeking treatment in the State of Minnesota. There are other pathological gamblers seeking treatment from other mental health services, such as private mental health practitioners, community mental health centers, and mental health services of health maintenance organizations, to name a few.

The study of gambling treatment outcome is relatively new. A number of treatment approaches have been described in the literature, but most have not been evaluated. And most evaluations have not been rigorous studies. Walker (1993), after reviewing the gambling treatment outcome literature across a variety of treatment methods and a number of outcome studies, summarized outcomes as about 50% abstinent at six months follow-up, about 29% at one year, and about 15% at two years follow-up. For more information about gambling treatment outcomes see reviews by the National Research Council (1999), Viets and Miller (1997), Petry and Armentano (1999), Walker (1993), Murray (1993), and Knapp and Lech (1987). More recently a group of gambling treatment researchers developed a framework of guidelines or “best practices” for conducting problem gambling treatment research (Walker, et al, 2006). This framework was proposed in order to bring consensus to the field and allow comparisons to be made across studies. This is a very useful framework and was used extensively in the design of this study. Related, the *Journal of Gambling Studies* published a 2005 special issue on gambling treatment outcome methodology and articles from this special issue were also used in the design of this study, namely, Nathan (2005), Blaszczynski (2005) and Toneatto (2005), as well as the earlier article, “How to Design an Effective Treatment Outcome Study” by Najavits (2003).

A similar study of state-funded gambling treatment providers was conducted from January 1992 to January 1995 (Stinchfield & Winters, 1996; 2001). The sample included 348 men and 220 women treated at one of four gambling treatment programs. The results of this study found that at six-months after discharge from treatment, 28% of the sample was abstinent and an additional 20% had gambled less than once a month. Therefore, almost half (48%) showed clinically significant improvement in gambling frequency at six months post-treatment. At twelve months after discharge, 18% were abstinent and an additional 12% had gambled less than once a month. Therefore, slightly less than one-third (30%) showed clinically significant improvement in gambling frequency. A second study of gambling treatment outcome was conducted by Abt and Associates (1997). Abt used the data collected by Stinchfield and Winters (1996) and collected another year of outcome data and concluded that treatment “was effective at reducing compulsive gambling six and twelve months after treatment began.”

Research Questions

This study investigated the outcome of clients treated at eleven state-supported gambling treatment providers. One provider is a residential program and the remaining ten providers are outpatient. The study addresses the following ten research questions:

(1) What differences exist between participants and non-participants? Did differences between participants and non-participants affect the research findings?

(2) What co-morbid disorders are present among pathological gamblers that may affect the course and outcome of treatment as determined by a standardized and comprehensive diagnostic work up of a sample of clients?

(3) What are the outcomes of gambling treatment and what percent of problem gamblers improve after treatment?

(4) What is the association between treatment differences (e.g., modality of treatment, therapeutic orientation, services delivered) and treatment outcome variables?

(5) What is the association between client subtypes (demographic, gambling severity, psychosocial functioning and co-existing psychiatric problems) and treatment outcome?

(6) What is the inter-relationship of client subtype, treatment differences, and treatment outcome?

(7) What are the most effective treatment services and the level of treatment intensity that can produce optimal outcomes of treatment and inpatient treatment?

(8) What are the predictors of treatment attrition and relapse as shown by statistical analyses?

(9) What services are needed by the families of pathological gamblers in order to facilitate the recovery of the pathological gambler and the return to a pre-morbid level of family functioning?

(10) How valid is the client self-report as determined by comparing client self-report to public records?

Design

This study involves a pretest-posttest design. Assessments were conducted at admission, discharge, six-months post-discharge, and 12-months post-discharge. Table 1 presents the measurement points and content of questionnaires.

Description of Treatment Providers. Please see Appendix A for a report describing the eleven treatment providers.

Sample Recruitment. During the intake assessment, treatment staff informed clients about the treatment evaluation project and invited them to participate in the study. Clients who agreed to participate signed an informed consent form and were given a copy of the consent form. The gender, age and race of those clients who refused to participate were recorded to check for sample bias by comparing the recruited sample to the sample that refused to participate. This study was approved by the University of Minnesota Institutional Review Board (IRB) and received a study number: 0501S66408. Furthermore, a Certificate of Confidentiality was obtained from the National Institute of Health as an additional safeguard of confidentiality for research participants.

Instruments. The instruments used in this study are from the Gambling Treatment Outcome Monitoring System (GAMTOMS) and providers were offered either interview or paper-and-pencil questionnaire formats. Most treatment providers opted for the paper-and-pencil questionnaire format. In addition, a significant other was asked to provide information about their experience with the treatment provider by completing a questionnaire at discharge. This information from the significant other was obtained to determine the needs of family members as well as measure satisfaction with the treatment process. Treatment staff recorded clinical data on a discharge form. Please see Appendix B for copies of the GAMTOMS instruments.

Data collection. Admission and discharge data were collected by treatment provider staff and follow-up data was collected by University of Minnesota research staff. Treatment and research staff were trained in the recruitment of clients and the administration of admission and discharge GAMTOMS assessment instruments. Treatment provider staff administered admission and discharge questionnaires to clients and a significant other. At discharge, treatment provider staff complete the discharge form. Admission and discharge questionnaires were then mailed to the University of Minnesota research staff for data entry. Follow-up questionnaires (GTFQ) were mailed to clients at six and twelve months after discharge from treatment for those clients who provided addresses. A stamped, self-addressed return envelope was enclosed with the questionnaire. Those clients who do not respond to the mailing within two to three weeks, were then called on the telephone (if they provided a telephone number on the consent form) and administered the follow-up instrument over the telephone. Research staff use e-mail and cell phone numbers to contact participants at follow-up and participants are asked their preferred method of contact from University research staff. For some clients, the mailing address was no longer valid and the envelope was returned to the research office. For these

clients, the next step was to call the client if they provided a telephone number or send a message via e-mail if they provided an e-mail address. Some telephone numbers and e-mail addresses were no longer in service. The project manager would make up to ten telephone call attempts at different days of the week and different times of day including evenings and weekends. For those clients who provided an address and/or phone number that was no long valid, the project manager would contact the treatment provider to see if they had more recent contact information. If this did not yield contact information, the project manager would search on the internet for contact information on sites such as www.google.com, and www.superpages.com and also use the telephone directory assistance number (411). Upon completing each follow-up assessment, the participant was mailed a $10 Target gift card to remunerate them in a small way for their contribution to this research project. This modest gift card is considered a token of appreciation for their time and was thought to improve follow-up response rates and not likely to bias the results (Toneatto, 2005). Furthermore, not offering this small token may have attenuated follow-up response rates and this also can bias the results. Because this is a longitudinal study, at the time of this report, some clients are at different points along the follow-up continuum, that is, some have reached their six-month and twelve-month follow-up anniversary while others have not.

Table 1

Study Design
Measurement Points, Questionnaires Administered, and Content of Questionnaires

Admission	Discharge	Six-months and Twelve-months Follow-up
Questionnaires Administered		
Gambling Treatment Admission Questionnaire (GTAQ); MINI International Neuropsychiatric Interview (MINI)	Gambling Treatment Discharge Questionnaire (GTDQ); Gambling Treatment Services Questionnaire (GTSQ); Significant Other Discharge Questionnaire (SODQ)	Gambling Treatment Follow-up Questionnaire (GTFQ)
Content of Questionnaires		
Demographics		Demographics
Clinical and treatment history		
Stage of Change	Stage of Change	Stage of Change
Gambling Frequency and Timeline Followback	Gambling Frequency and Timeline Followback	Gambling Frequency and Timeline Followback
SOGS and DSM-IV		SOGS and DSM-IV
Financial problems		Financial problems
Legal problems		Legal problems
BASIS-32 and ASI mental health	BASIS-32 and ASI mental health	BASIS-32 and ASI mental health
Substance use frequency		Substance use frequency
	Recovery effort	
	Treatment component helpfulness	
	Client satisfaction	Client satisfaction

Admission	Discharge	Six-months and Twelve-months Follow-up
	Treatment services received, discharge status and referrals	
		Posttreatment service utilization
	significant other perspective on treatment experience	

Note: SOGS=South Oaks Gambling Screen (Lesieur & Blume, 1987). DSM-IV = Diagnostic and Statistical Manual, Fourth Edition, diagnostic criteria for Pathological Gambling; Timeline Followback = gambling activity in the past four weeks; BASIS-32 = Behavior and Symptom Identification Scale; ASI = Addiction Severity Index (mental health items).

Sample Size

This study involved recruiting clients from eleven gambling treatment providers described above between January 2006 and September 2007. As would be expected, not all of the clients who were asked to participate in the study agreed to participate, and not all of the clients recruited for the study were admitted to treatment, and not all of those admitted to treatment completed it. Table 2 shows a diagram of sample recruitment, consent, and discharge status. A total of 682 clients were asked to participate in the study and 124 refused to participate and 103 were not enrolled in the study for other reasons, leaving 455 who agreed to participate in the study. Of the 455 recruited clients, 8 were not admitted to treatment; and one was a second treatment episode, yielding a final client sample of 436. Of these 436 clients, 301 completed treatment, 134 dropped out of treatment, and 11 were still in treatment at the end of the study. Not completing treatment is fairly common among clients seeking treatment for an addiction, such as pathological gambling or substance dependence.

Table 2

Client Recruitment, Enrollment (consent), and Discharge Status

Recruited	Enrolled (consent)	Discharge Status
682 asked to participate---> 455 enrolled----------> 301 completed treatment \ \–> 134 dropped out of treatment \–> 124 refused \–> 11 currently in treatment \–> 103 not enrolled \–> 8 enrolled but not admitted to treatment \–> 1 treatment repeater		

Table 3 shows a breakdown of the recruitment status across the eleven providers and for the total. Some treatment providers had higher client volume than others and some treatment providers were more successful enrolling clients in the study than others. Vanguard had the highest client volume and Fairview had the highest enrollment rate. Overall, two-thirds of the clients asked to participate gave consent for enrollment in the study.

Table 3

Client Recruitment Across the Eleven Treatment Providers

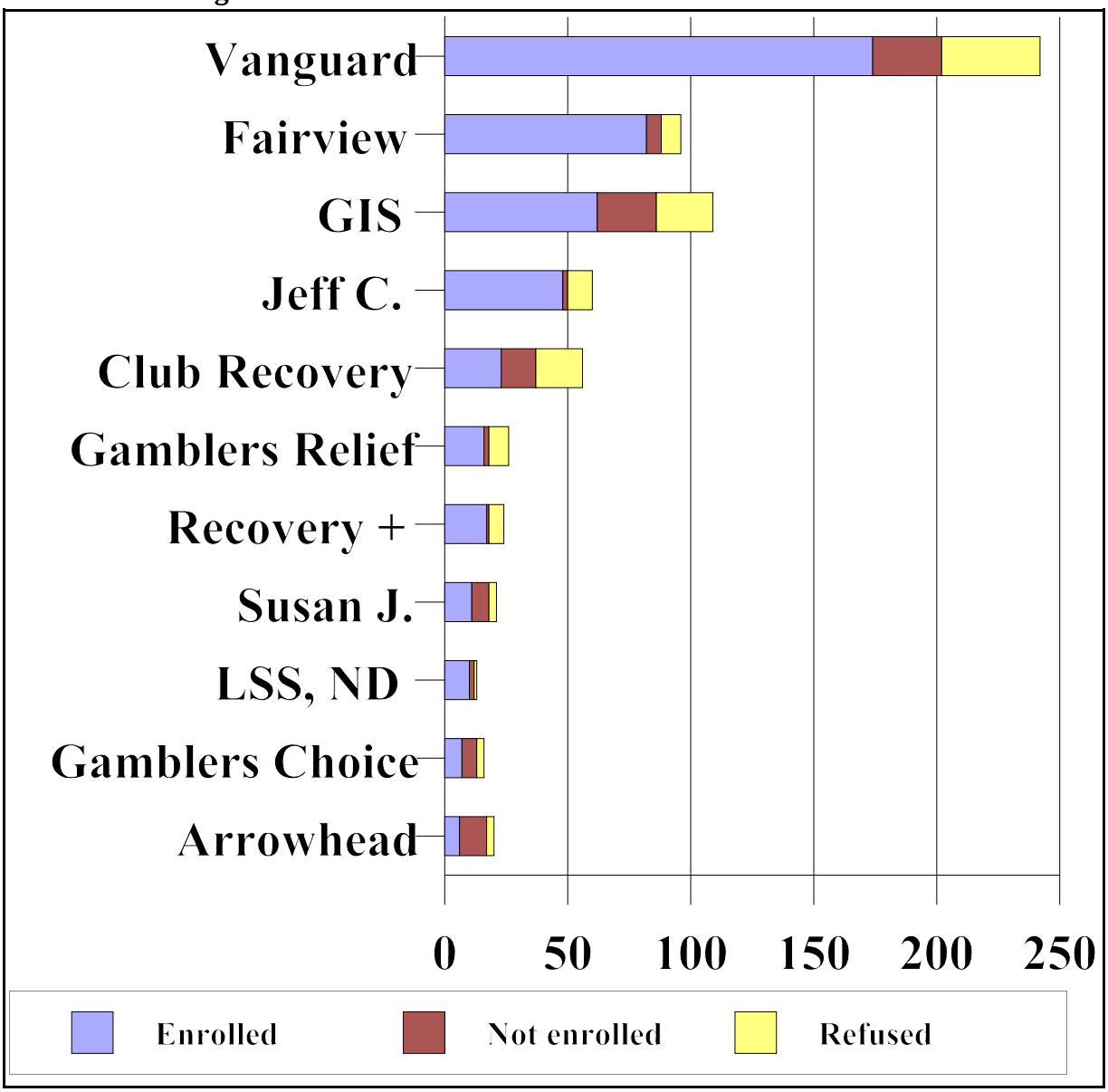
Treatment Provider	enrolled count (%)	not enrolled count (%)	refused count (%)	Row Total
Vanguard/Project Turnabout, Granite Falls	174 (72)	28 (12)	40 (16)	242
Fairview, Minneapolis	81 (85)	6 (7)	8 (8)	95
Gamblers Intervention Services, Duluth	62 (57)	24 (22)	23 (21)	109
Jeff Cottle, Minneapolis	48 (80)	2 (3)	10 (17)	60
Club Recovery, Edina	23 (41)	14 (25)	19 (34)	56
Gamblers Relief, Shakopee	16 (62)	2 (8)	8 (30)	26
Recovery Plus, Saint Cloud	17 (71)	1 (4)	6 (25)	24
Susan Johnson, Eagan	11 (53)	7 (33)	3 (14)	21
Lutheran Social Services, Fargo, ND	10 (77)	2 (15)	1 (8)	13
Gamblers Choice, Robbinsdale	7 (44)	6 (38)	3 (19)	16
Arrowhead Center, Virginia	6 (30)	11 (55)	3 (15)	20
Column Total	455 (67)	103 (15)	124 (18)	682

Note. Percentages are row percentages. Row percentages may not total to 100% due to rounding.

Number of Clients Enrolled at the Eleven Treatment Providers

Figure 1 presents the number of clients enrolled at each of the eleven providers for the period from January 2006 to September 2007. A total of 682 clients were asked to participate across all eleven treatment providers.

Figure 1. Client Enrollment at the Eleven Treatment Providers



Comparison of Enrolled Clients to Refused Clients on Client Characteristics
Test for Sample Bias

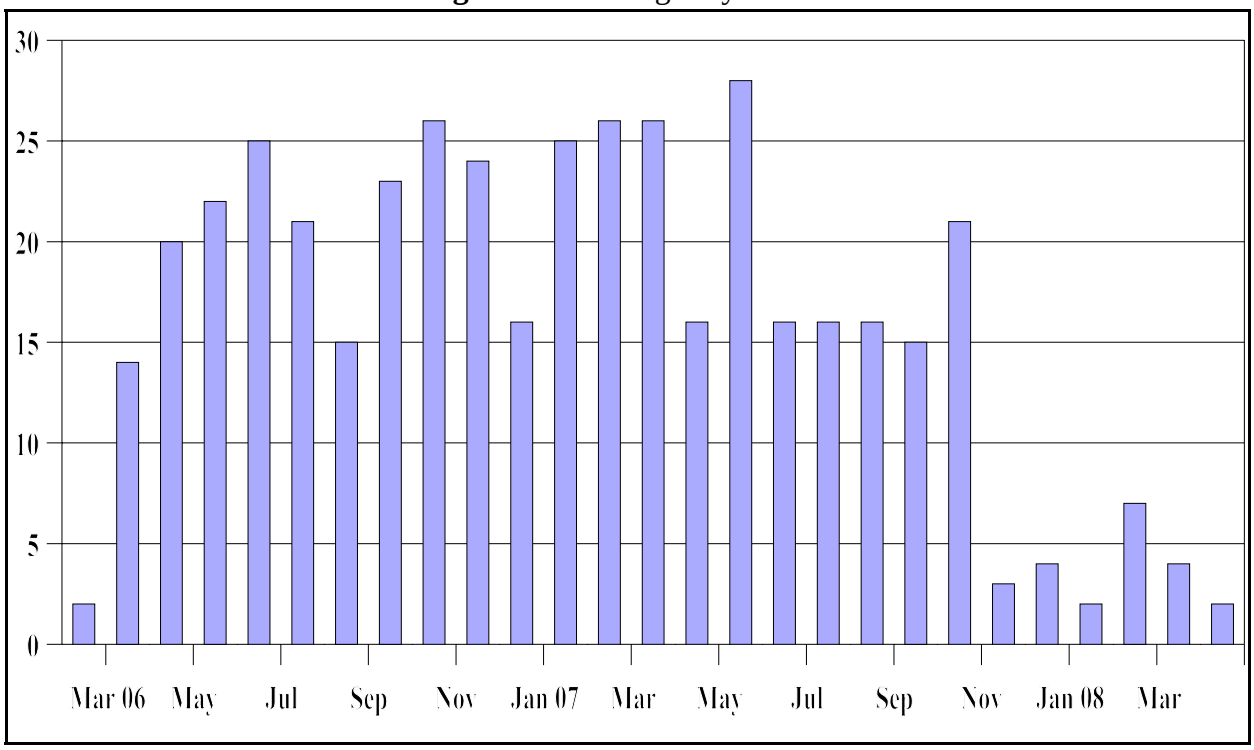
The first research questions is: What differences exist between participants and non-participants? Did differences between participants and non-participants affect the research findings? Treatment providers asked 682 clients to participate in the study and 455 agreed to participate, 124 refused and 103 were not enrolled for other reasons. In order to test whether or not the enrolled sample is a biased sample, a comparison was computed between the enrolled and refused samples. Treatment providers recorded the gender, race and age of those clients who refused to participate in the study. Gender and race were compared with a chi-square test, and age was compared with a t-test. For gender, the enrolled sample had 47% males and 53% females; the refused sample had 54.8% males and 45.2% females. The chi-square was 2.4, with 1 degree of freedom and a p value of .12, indicating that the two groups were not significantly different in terms of gender. For race, the enrolled sample was 85% white and the refused sample was 90% white. The chi-square was 2.1, with 1 degree of freedom and a p-value of .15, indicating that the two groups were not significantly different in terms of race. The average age in the enrolled sample is 43.5 and the average age in the refused sample is 45.5. The t-value is 1.6 with 566 degrees of freedom and a p-value of .11, indicating that the two groups were not significantly different in terms of age.

These results suggest that the enrolled sample is not significantly different from the refused sample on demographic variables and we can be confident that the enrolled sample is not a biased sample. That is, the enrolled sample is representative of the type of client who typically comes to treatment and will not introduce any bias into the results. Conversely, the refused sample is also not significantly different from the enrolled sample and we can assume that the refused sample is essentially random and there is no systematic reason these clients refused to participate.

Discharge Rates

Discharge rates by month for the 436 clients discharged from treatment through April 2008 are presented in Figure 2. The general trend is that discharge rates increased from the inception of the gambling treatment project and leveled off at about an average of 15-20 discharges per month. This leveling off is probably due to demand for treatment as well as the treatment system capacity. The last few months have low volume because client recruitment ended in September 2007.

Figure 2. Discharges by Month



Data Collection Rates

The remainder of the report includes those clients who were enrolled in the study, admitted to treatment and discharged from treatment by the time of this report (n=436). The primary purpose of this report is to describe the outcomes of all clients treated at the eleven State-supported gambling treatment providers and therefore data from the eleven treatment providers were aggregated for many of the analyses. Table 4 presents data collection rates for clients by treatment provider and total. All clients have a completed GTAQ and GTSQ, but slightly fewer clients completed GTDQs, namely because some clients dropped out of treatment prior to administration of the GTDQ at discharge. Only 47 clients have completed SODQs and this is because many clients did not have a significant other that accompanied them to treatment and second, even if they had a significant other accompany them to treatment, it was difficult for some treatment providers to administer the SODQ to the significant other. The follow-up questionnaire was administered at six and twelve months following discharge. Some treatment providers had few clients with follow-up data because some clients had not reached their follow-up anniversary by the end of the study. Furthermore, some of the treatment providers had low client volume. This low client volume is also reflected in a small number of clients with follow-up data. Six of the eleven treatment providers have less than ten clients with six month follow-up data.

Table 4

Data Collection Across the Eleven Treatment Providers
(N=436)

Treatment Provider	GTAQ	GTSQ	GTDQ	SODQ	GTFQ 6 mo	GTFQ 12 mo
Vanguard/Project Turnabout, Granite Falls	174	174	165	14	138	104
Fairview, Minneapolis	81	81	67	19	54	34
Gamblers Intervention Services, Duluth	58	58	39	6	30	17
Jeff Cottle, Minneapolis	45	44	34	3	33	24
Club Recovery, Edina	20	20	9	0	10	7
Gamblers Relief, Shakopee	7	7	6	0	5	4
Recovery Plus, Saint Cloud	17	16	10	2	7	5
Susan Johnson, Eagan	11	11	7	1	5	2
Lutheran Social Services, Fargo, ND	10	10	9	1	8	6
Gamblers Choice, Robbinsdale	7	7	6	1	6	3
Arrowhead Center, Virginia	6	6	4	0	4	3
Total	436	434	356	47	300	209

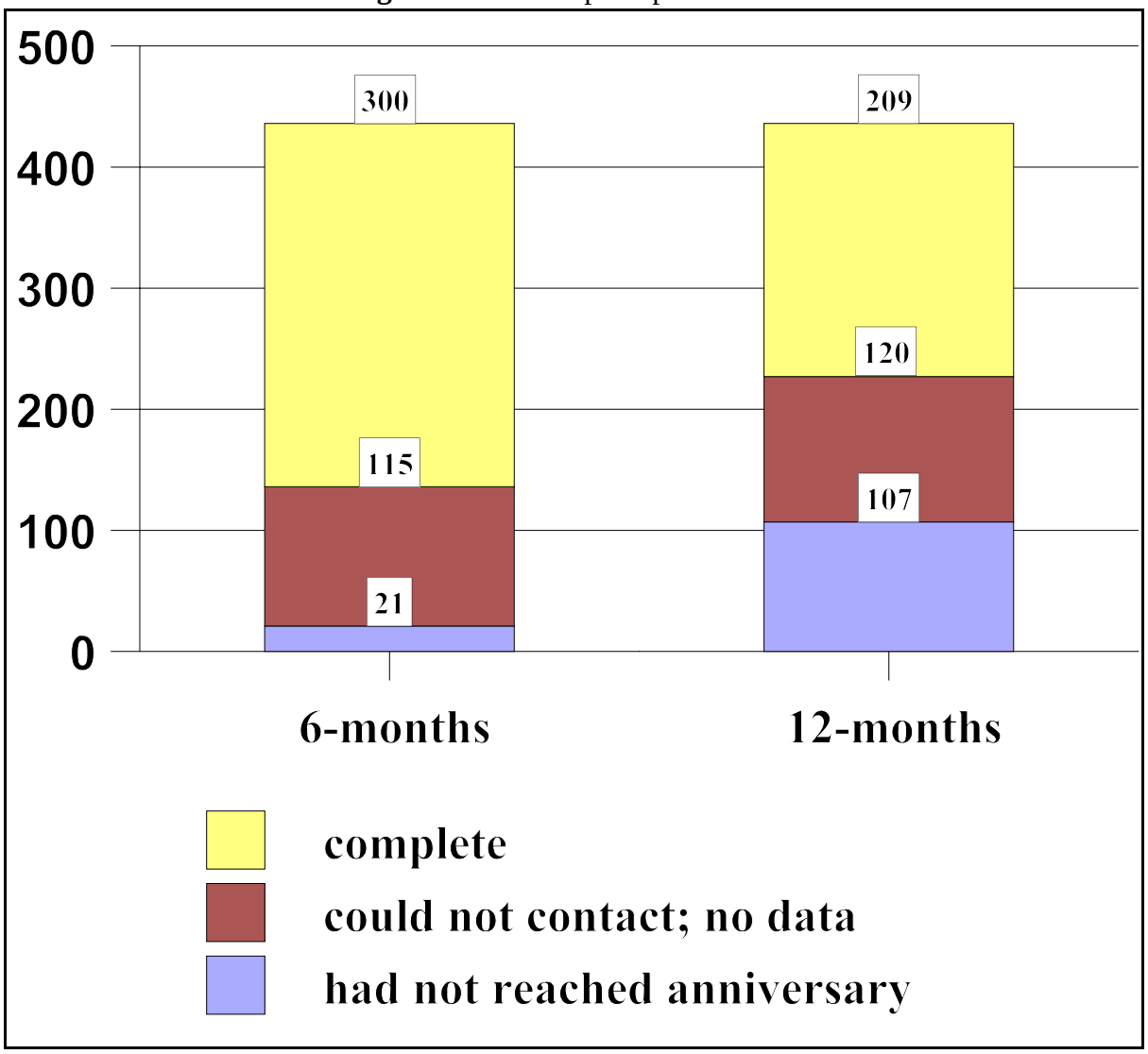
Note. GTAQ = Gambling Treatment Admission Questionnaire; GTSQ = Gambling Treatment Services Questionnaire; GTDQ = Gambling Treatment Discharge Questionnaire; SODQ = Significant Other Discharge Questionnaire; and GTFQ = Gambling Treatment Follow-up Questionnaire. Not all clients had reached their six and twelve month post-treatment anniversary by the end of the study. Specifically 21 clients had not reached their 6 months post-treatment anniversary and 107 had not reached their 12 months post-treatment anniversary.

Data Collection Rates at Six and Twelve Months Follow-up

The design of this study includes contacting clients at 6 and 12 months after discharge from treatment. Not all of the clients had reached their 6 and 12 months posttreatment anniversaries at the end of the study. Specifically 21 clients, of the 436 clients, had not reached their 6 months post-treatment anniversary and 107 had not reached their 12 months post-treatment anniversary. Figure 3 shows the follow-up response rates at 6 and 12 months follow-up. There were 415 clients who had reached their 6-months follow-up anniversary and 21 clients had not. Of these 415 clients, 300 completed a 6-months follow-up questionnaire, yielding a six-months follow-up response rate of 300/415 = 72%. Six-months follow-up data was not obtained from 115 clients for the following reasons: after mailings and multiple telephone calls 70 clients could not be located/contacted; 5 clients did not provide any contact information; 20 clients could not be contacted because the contact information they provided was not correct (e.g., they no longer reside at the address they provided or the phone number is no longer in service); 11 clients refused; 6 clients indicated that they wanted to drop out of the study; and 3 clients were incarcerated and could not be contacted.

There were 329 clients who reached their 12-months follow-up anniversary and 107 had not. Of these 329 clients, 209 completed a 12-months follow-up questionnaire, yielding a 12-months follow-up response rate of 209/329 = 64%. Twelve-months follow-up data were not collected from 120 clients for the following reasons: after mailings and multiple telephone calls 60 clients could not be located/contacted; 3 clients did not provide any contact information (the clients were homeless); 6 clients refused; 13 clients dropped out of the study; 36 clients could not be contacted because the contact information they provided was not correct (e.g., they no longer reside at the address they provided or the phone number is no longer in service); and 2 clients were incarcerated and could not be interviewed. These follow-up response rates exceeded the minimum response rate required by the State (50%) as well as those follow-up response rates reported in most gambling treatment outcome studies (Blaszczynski, 2005).

Figure 3. Follow-up Response Rates



Demographics of Enrolled Sample

The report focuses on those 436 clients who were enrolled in the study and admitted to treatment. To determine if the treatment sample is similar to or different from the general population of Minnesota and the seven county metropolitan area in terms of race, a comparison is shown in Table 5. Whites make up the majority of the treatment sample and this proportion is similar to that found in the larger metropolitan population. American Indians and mixed race clients are overrepresented in the treatment sample as compared to the metropolitan and statewide population. African American and Hispanic clients are underrepresented in the treatment sample as compared to the metropolitan and statewide population.

Table 5

Comparison of Treatment Sample, State and Metropolitan Population on Race

	Treatment Sample (n = 436)		Statewide population in 2000 (n=5,060,882)		Metropolitan seven county population (n = 2,005,061)	
Race	Count	%	Count	%	Count	%
White	369	84.6	4,400,282	86.9	1,701,462	84.9
American Indian	20	4.6	54,967	1.1	13,574	0.7
African American	12	2.8	171,731	3.4	97,426	4.9
Asian American	15	3.4	141,968	2.8	74,196	3.7
Hispanic	3	0.7	143,382	2.8	60,539	3.0
Other race	2	0.5	65,810	1.3	29,308	1.5
Two or more races	15	3.5	82,742	1.6	27,752	1.4

Demographics of Enrolled Sample by Treatment Modality

Table 6 provides a summary of the demographic characteristics of the total sample as well as broken down by outpatient and residential treatment. Gender is approximately equally represented and this is true for both treatment modalities, although women are coming to treatment in larger numbers as compared to our previous study (Stinchfield & Winters, 1996). Outpatient programs have a larger representation of racial/ethnic minorities than the residential program and this may be due to the geographic spread of these ten outpatient programs and their proximity to American Indian reservations, however, this difference is not statistically significant. The residential program had more young clients than outpatient programs, again it was not statistically significant. Approximately, half of the outpatient and residential samples were between 30 and 49 years of age. In both samples, married was the most common marital status. The most common living arrangement is with spouse/significant other, followed by living alone and there were no statistically significant differences between outpatient and residential samples. About two-thirds of clients are employed full-time. Residential treatment has a greater percentage of unemployed and student clients than outpatient treatment, however, it is not statistically significant. Almost all clients have graduated from high school (over 90%) and over half report some college education or graduation from college and there are no significant differences between outpatient and residential clients. About one-third of clients report an annual income less than $30,000 and residential clients report lower incomes than outpatient clients, however, it is not statistically significant. In summary, there are some minor differences in client demographics between outpatient and residential clients, but none reach statistical significance as tested by chi-square.

Table 6

Demographic Characteristics for Total Sample and by Treatment Modality (N=436)

	Total (n=436)		Outpatient (n=262)		Residential (n=174)		Test	
Demographic Variables	n	%	n	%	n	%	X^2	*p*
Gender								
Male	207	47.5	122	46.6	85	48.9	0.2	.64
Female	229	52.5	140	53.4	89	51.1		
Race								
White	369	85.2	217	83.1	152	88.4	6.1	.41
American Indian	20	4.6	12	4.6	8	4.7		
African American	12	2.8	10	3.8	2	1.2		
Asian American	15	3.5	11	4.2	4	2.3		
Hispanic	3	0.7	3	1.1	0	0		
Other race	2	0.5	1	0.4	1	0.6		
Two or more races	12	2.8	7	2.7	5	2.9		
Age								
<21	11	2.5	3	1.1	8	4.6	12.7	.03
21-29	60	13.8	34	13.0	26	14.9		
30-39	83	19.0	51	19.5	32	18.4		
40-49	134	30.7	72	27.5	62	35.6		
50-59	104	23.9	70	26.7	34	19.5		
>59	44	10.1	32	12.2	12	6.9		
Marital Status								
Married	158	36.3	102	38.9	56	32.4	5.4	.37
Single	108	24.8	64	24.4	44	25.4		
Divorced	120	27.6	69	26.3	51	29.5		
Separated	20	4.6	10	3.8	10	5.8		
Living with significant other	22	5.1	11	4.2	11	6.4		
Widowed	7	1.6	6	2.3	1	0.6		

	Total (n=436)		Outpatient (n=262)		Residential (n=174)		Test	
Demographic Variables	n	%	n	%	n	%	X^2	*p*
Living Arrangement								
Alone	107	24.5	68	26.0	39	22.4	7.1	.31
Spouse/significant other	112	25.7	70	26.7	42	24.1		
Children only	37	8.5	22	8.4	15	8.6		
Parents only	33	7.6	16	6.1	17	9.8		
Roommate only	23	5.3	9	3.4	14	8.0		
Spouse and children	71	16.3	44	16.8	27	15.5		
Other	53	12.2	33	12.6	20	11.5		
Employment Status								
Full-time	279	64.0	171	65.3	108	62.1	9.8	.28
Part-time	59	13.5	36	13.7	23	13.2		
Occasional/seasonal	12	2.8	7	2.7	5	2.9		
Student	12	2.8	4	1.5	8	4.6		
Unemployed	25	5.7	11	4.2	14	8.0		
Homemaker	6	1.4	3	1.1	3	1.7		
Disabled	28	6.4	19	7.3	9	5.2		
Retired	11	2.5	9	3.4	2	1.1		
Other	4	0.9	2	0.8	2	1.1		
Education								
Less than high school graduation	12	2.8	7	2.7	5	2.9	5.2	.52
High school graduate	102	23.4	62	23.8	40	23.0		
Vocational-technical	52	11.9	28	10.8	24	13.8		
Some college	119	27.3	65	25.0	54	31.0		
Community college/2 year graduate	48	11.0	29	11.2	19	10.9		
College Graduate	86	19.7	59	22.7	27	15.5		
Graduate/professional degree	15	3.4	10	3.8	5	2.9		
Annual Household Income								
< $10,000	51	11.7	26	10.0	25	14.5	10.4	.17
$10,000-$19,999	44	10.1	28	10.8	16	9.3		
$20,000-$29,999	43	9.9	19	7.3	24	14.0		
$30,000-$39,999	57	13.1	36	13.9	21	12.2		
$40,000-$50,000	62	14.2	35	13.5	27	15.7		
$50,000-$75,000	77	17.7	51	19.7	26	15.1		
$75,000-$100,000	56	12.8	35	13.5	21	12.2		
>$100,000	41	9.4	29	11.2	12	7.0		

Clinical Characteristics of Enrolled Sample

Table 7 shows the clinical characteristics of the enrolled sample. One of the most notable characteristics of this sample is that over half have previously received professional treatment for their gambling problem and one quarter have previously received treatment for alcohol/drug addiction. Over half of the sample has received mental health services in the past. Clients exhibited a wide range of financial problems associated with their gambling including borrowing money from banks and credit cards, missing or skipping payments of basic necessities, and filing bankruptcy due to gambling. Clients were in varying stages of change, but the majority were either planning to change or had already begun to make changes in their gambling. When asked about their main reason for coming to treatment at this time, the most common answer was "my own decision".

Table 7

Clinical Characteristics
(N=436)

Clinical Characteristics	Count	Percent
Previously received professional treatment for gambling problem (lifetime)	237	54
Attended GA in past 12 months	211	48
Previous professional treatment for tobacco addiction (lifetime)	26	6
Previous professional treatment for alcohol/drug addiction (lifetime)	105	24
Previous other professional addiction treatment (lifetime)	35	8
Previously used Mental Health Treatment Services (lifetime)	226	52
Missed work in order to gamble (past year)	293	67
Legal status of probation, parole or awaiting charges (past year)	67	15
Due to gambling, borrowed money from a bank	234	54
Due to gambling, borrowed money from credit card	294	67
Due to gambling, unable to pay taxes due to gambling	116	27
Due to gambling, filed for bankruptcy in past year	43	10
Due to gambling, missed or skipped payment of mortgage/rent in past year	165	38
Due to gambling, missed or skipped payment of utilities in past year	175	40

Clinical Characteristics	Count	Percent
Due to gambling, missed or skipped payment of bills for food or clothing in past year	193	44
Due to gambling, missed or skipped payment of medical expenses	142	33
Stage of Change at Admission		
No intentions of changing	6	1
Seriously considering changing	54	12
Plan to reduce or quit gambling	178	41
Already begun to reduce or quit gambling	186	43
I reduced or quit gambling and have maintained these changes	9	2
Main reason for coming to treatment at this time		
My own decision	152	35
Multiple reasons	101	25
Pressure from spouse, family or friends	80	18
Depression, suicidal thoughts or attempts	41	9
Financial difficulties	30	7
Legal difficulties, court-ordered treatment	23	5
Separation or divorce	2	1
Work difficulties	1	0

Preferred Game

Table 8 shows the clients' preferred game broken down by men and women. Because gambling frequency does not always indicate the client's preferred game, clients were asked specifically "which is your preferred game or type of gambling?" For example, some clients bought lottery tickets or scratch cards every day, but their preferred game was casino slot machines.

Men and women show significant differences in their game of choice. The overwhelming majority of women prefer slots/video poker. Men are more varied in their preferred game than women and have a split between slots/video poker and cards. Each of the other games were nominated by less than 10% of the sample. Gambling machines and card playing among gambling treatment clients occurred primarily in casinos. Figures 4 and 5 show the preferred games for men and women, respectively.

Table 8

Preferred Game by Gender

	Men (n = 207)		Women (n=229)	
Preferred Game	Count	%	Count	%
Gambling machines (Slots/video poker)	84	41	186	81
Cards	67	33	10	5
Other	19	9	17	8
Pull tabs	6	3	8	4
Sports betting	8	4	0	0
Horse/dog racing	7	3	0	0
Lottery	5	2	1	.5
Dice	4	2	0	0
Bingo	2	1	3	1
Keno	3	1	1	.5

Note. Column percentages may not sum to 100% due to rounding and missing data.

Figure 4. Preferred Game of Men.

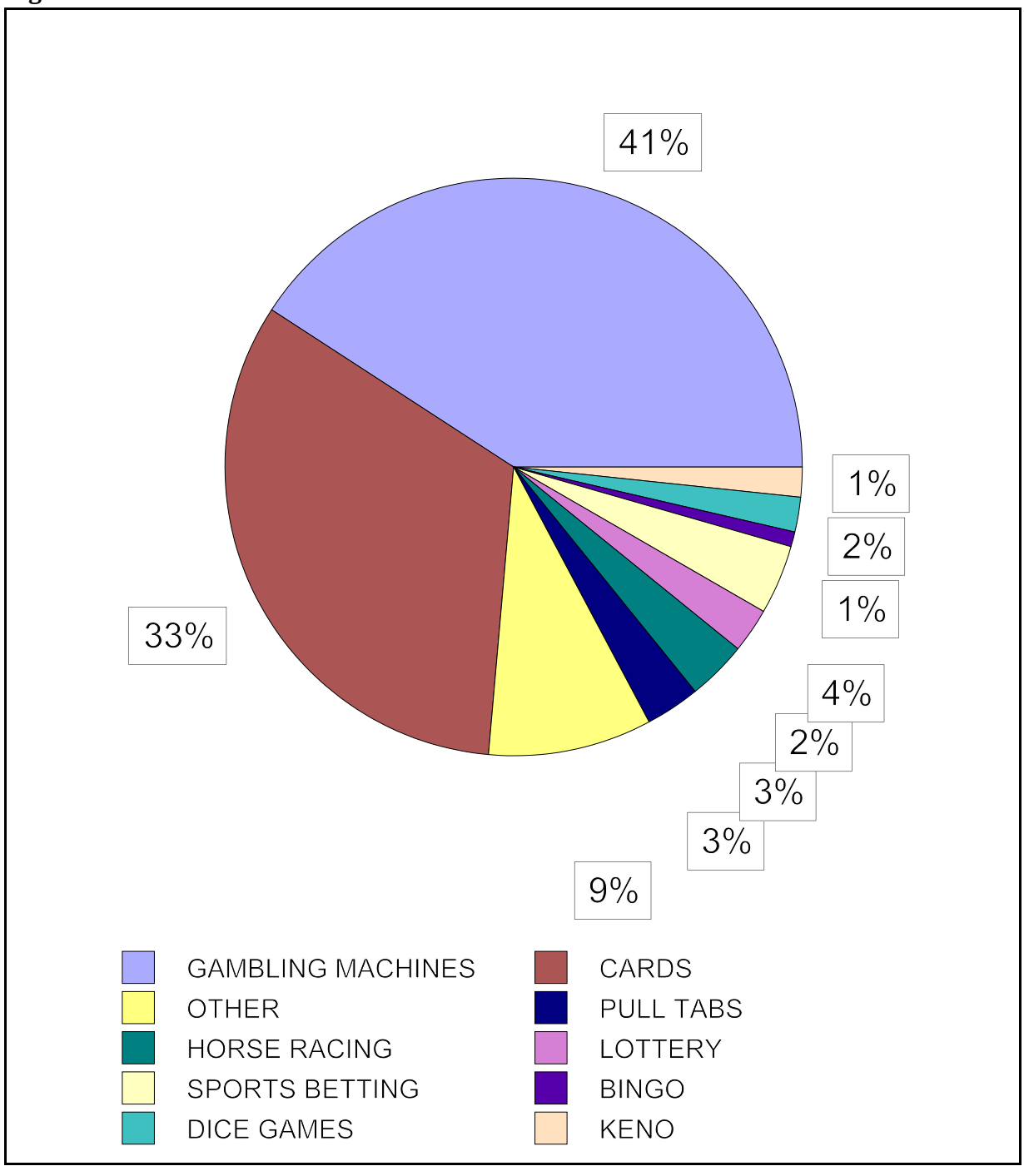
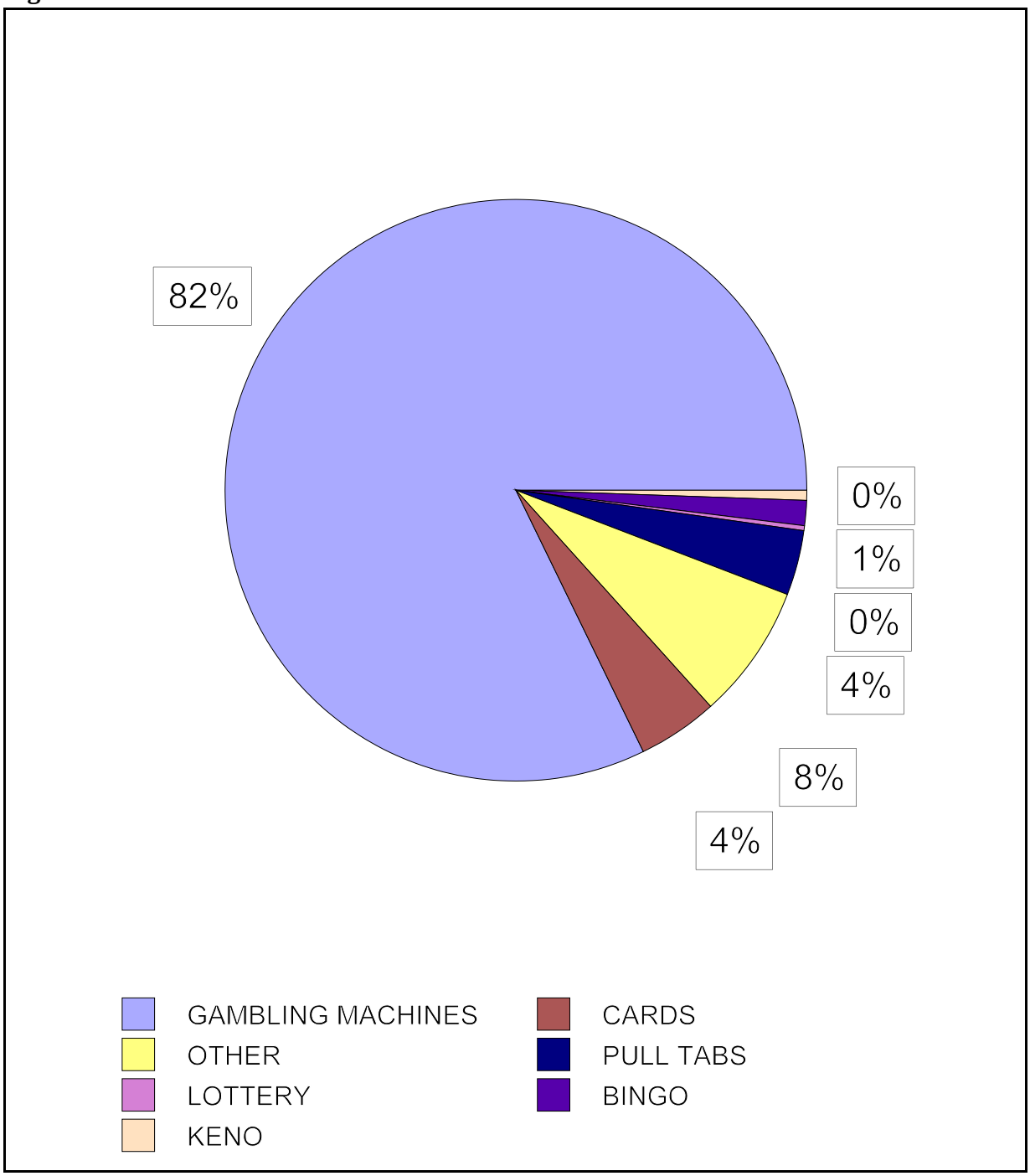


Figure 5. Preferred Game of Women.



Pretreatment Gambling Frequency

Table 9 presents gambling frequency for the twelve month period prior to admission to treatment. Gambling activities were rank ordered in the table based on the highest to lowest on the combination of "daily" and "3-6 days/week" gambling frequency percentage. Four types of gambling stand out as the most frequently played: gambling machines, cards, lottery, and pull tabs. The prevalence of gambling 3-6 days/week or daily with these games ranged from 28% for gambling machines to 5% for pull tabs. Sports betting, horse/dog track betting, bingo, keno, games of skill, dice, and high risk stocks were reported as relatively infrequent activities; all were played on a 3-6 days/week and daily basis by only about 2% or less of the sample.

Also reported in Table 9 are frequencies for the "highest level of gambling". This variable was created in order to have a single score that represents an individual's overall gambling frequency. It was computed by selecting the highest level of gambling for each individual client by looking across all of their gambling activities. For example, if an individual bought lottery tickets daily, played blackjack less than once a month, and played slot machines 1-2 days/week, their highest level of gambling frequency would be "daily". This "high-water" measure of gambling involvement indicates that high-frequency gambling is common among clients. The overwhelming majority of the sample (84%) gambled once a week or more often during the 12 months prior to admission to treatment.

Table 9

Gambling Frequency During the Twelve Months Prior to Admission
(N=436)

Game	Not in past 12 months %	< once a month %	1-3 days/ month %	1-2 days/ week %	3-6 days/ week %	Daily %
Gambling Machines (slots and video poker)	12	10	21	29	25	3
Cards	47	18	12	9	12	1
Lottery	24	35	13	18	6	2
Pull Tabs	48	29	10	5	4	1
Sports Betting	78	13	4	1	1	1
Horse or Dog Race	87	10	1	0	1	1
Bingo	68	22	3	3	2	0
Keno	85	7	2	3	2	0
Game of skill	84	10	3	1	1	0
Dice Game	87	9	1	1	0	0
High Risk Stock	96	2	0	0	0	0
Highest Level of Gambling	1	3	13	36	39	9

Note. Row percentages may not sum to 100% due to rounding and missing data.

Pretreatment Gambling Frequency by Gender

Men and women have different gambling preferences, as shown later, and therefore pretreatment gambling frequency is shown for each gender. Gambling frequency for men for different games is shown in Table 10. Gambling activities were rank ordered in the table based on the highest to lowest on the combination of "daily" and "3-6 days/week" gambling frequency percentage. The games played most frequently by men are cards, gambling machines, the lottery and pull tabs. The games played least frequently by men are sports betting, bingo, horse/dog racing, dice games, keno, and games of skill.

Table 10

Gambling Frequency During the Twelve Months Prior to Admission for Men (n=207)

Game	Not in past 12 months %	< once a month %	1-3 days/ month %	1-2 days/ week %	3-6 days/ week %	Daily %
Cards	27	21	14	16	21	2
Gambling Machines (slots and video poker)	22	14	23	22	17	2
Lottery	23	32	14	20	7	4
Pull Tabs	48	28	15	4	5	1
Sports Betting	68	19	7	2	2	2
Bingo	80	14	2	1	3	0
Horse or Dog Race	82	13	2	1	1	1
Dice Game	85	11	2	1	1	1
Keno	87	6	2	3	2	0
Game of skill	76	14	6	2	1	0
High Risk Stock	97	3	0	0	0	0
Highest Level of Gambling	0	3	12	32	40	13

Note. Row percentages may not sum to 100% due to rounding and missing data.

Gambling frequency for women for different games is shown in Table 11. Gambling activities were rank ordered in the table based on the highest to lowest on the combination of "daily" and “3-6 days/week" gambling frequency percentage. The game played most frequently by women is gambling machines. The remaining games are played much less frequently including the lottery, pull tabs and cards. The games played least frequently by women are bingo, keno, sports betting, horse/dog racing, games of skill, and dice games. So, men and women play different games at differing frequencies.

Table 11

Gambling Frequency During the Twelve Months Prior to Admission for Women (n=229)

Game	Not in past 12 months %	< once a month %	1-3 days/ month %	1-2 days/ week %	3-6 days/ week %	Daily %
Gambling Machines (slots and video poker)	3	6	19	36	33	3
Lottery	26	39	13	17	4	1
Pull Tabs	50	32	7	7	3	1
Cards	67	16	9	4	4	0
Bingo	59	29	5	5	2	0
Keno	85	8	2	2	2	0
Sports Betting	89	9	1	0	1	0
Horse or Dog Race	92	8	0	0	0	0
Game of skill	92	7	1	0	0	0
Dice Game	92	8	0	0	0	0
High Risk Stock	99	1	0	0	0	0
Highest Level of Gambling	1	2	14	40	38	6

Note. Row percentages may not sum to 100% due to rounding and missing data.

Comparison of Treatment Sample to Minnesota General Population Sample on Gambling Frequency

For comparison, gambling frequency from a Minnesota general population sample is shown in Table 12 (http://www.lottery.state.mn.us/gambling/stcloud.html). The Minnesota Lottery surveyed a sample of 2,010 Minnesota adults in 2007 and found that about 1% of Minnesota adults visited casinos on a weekly or more often frequency as compared to 71% of gambling treatment clients. About 2% of the Minnesota general population play pull tabs weekly compared to 10% of gambling treatment clients. And about 7% of the general population buy lottery tickets weekly as compared to 26% of gambling treatment clients. Because the Minnesota Lottery survey does not ask the same items as this study asked gambling treatment clients we can only compare the two samples on casinos, pull tabs and the lottery.

Table 12

Comparison of Treatment Sample and Minnesota General Population on Gambling Frequency of Select Games

	Treatment Sample (n = 436)	MN Adult Sample (n = 2,010)
Game	%	%
Casinos		
Not in past 12 months	3	77
Once/year or more	7	17
Once/month or more	19	5
Once/week or more	68	1
Daily	3	0
Pull tabs		
Not in past 12 months	48	82
Once/year or more	29	12
Once/month or more	10	4
Once/week or more	9	2
Daily	1	0
Lottery		
Not in past 12 months	24	64
Once/year or more	35	15
Once/month or more	13	14
Once/week or more	24	7
Daily	2	0

Pretreatment Substance Use

Substance use frequency for the 12 months prior to admission is presented in Table 13. Tobacco and alcohol were the most commonly used substances. More than half of the sample (57%) reported daily use of tobacco, and one in ten reported use of alcohol on a daily or nearly daily rate. Marijuana and other drug use was reported by about 10% of the sample, but at infrequent rates.

For comparison purposes, 2005 national substance use rates for persons aged 12 and older are presented: (a) 25% smoked cigarettes in the past month compared to 63% of the gambling treatment sample; (b) 51% use alcohol used in past month compared to 44% of the gambling treatment sample; and (c) 10% used marijuana in the past month compared to 7% of the gambling treatment sample. The gambling treatment sample has a much higher rate of cigarette smoking than the general population, but slightly lower rates of alcohol and marijuana use as compared to a national sample (Substance Abuse and Mental Health Services Administration, 2007).

Table 13

Substance Use During the Twelve Months Prior to Admission

Substance	Not in past 12 months %	< once a month %	1-3 days/ month %	1-2 days/ week %	3-6 days/ week %	Daily %
Tobacco	35	2	2	1	3	57
Alcohol	30	26	20	15	7	2
Marijuana or hash	85	8	2	2	1	1
Other Drugs	89	4	1	0	2	1

Note. Row percentages may not total to 100% due to rounding and missing data.

Participation in Treatment

Table 14 presents information regarding the amount of treatment services received by clients and their discharge status broken down by treatment modality. The standard duration of residential treatment is 30 days and therefore most residential clients stay in treatment for 30 days. There are significant differences between outpatient and residential clients on hours of treatment services. About half of outpatient clients attended 24 sessions or more whereas over 90% of residential clients completed 24 sessions or more. The majority (91%) of residential clients completed treatment versus 54% of outpatient clients. This is a large and statistically significant difference. Clients were considered to be treatment non-completers if they left treatment against staff advice, were asked to leave by staff, dropped out and did not return, or if they were transferred to another provider. In terms of the extent of treatment plan completion, again, residential treatment had high rates of completion compared to outpatient treatment. There is a fair amount of variance in the extent of treatment plan completion for outpatient treatment, whereas residential treatment showed very little variance in that 90% completed their treatment plan completely. This difference was statistically significant.

Table 14

Participation in Treatment for Outpatient and Residential Treatment

	Outpatient (n=260)		Residential (n=174)		Test	
Treatment Service	Count	%	Count	%	X^2	*p*
Number of treatment sessions for Outpatient/days in treatment for Residential						
1-5	42	16	0	0	183	<.001
6-23	85	33	15	9		
24-30	60	23	155	89		
31+	70	27	4	2		
Discharge Status						
Complete	140	54	159	91	68	<.001
Incomplete (dropped out)	119	46	15	9		
Extent to which treatment plan was completed						
Not at all	44	17	1	1	75	<.001
Less than half	36	14	2	1		
About half	15	6	3	2		
More than half, but not entirely	31	12	12	7		
Completed in entirely	134	52	156	90		

Note. Column percentages may not total 100% due to rounding and missing data.

Co-morbid Psychiatric Disorders

The second research question: What co-morbid disorders are present among pathological gamblers that may affect the course and outcome of treatment as determined by a standardized and comprehensive diagnostic work up of a sample of clients?

The research team encouraged all eleven treatment providers to use the MINI, a standardized and comprehensive diagnostic interview. Only one of the treatment providers agreed to administer the MINI, GIS in Duluth. The MINI Screen was administered to only 37 clients and the MINI interview was administered to only 21 clients. Therefore, the small amount of MINI data will not provide a good measure of co-morbid disorders among the current sample of 381 clients. However, this is not the death knoll for this research question. While the GAMTOMS does not have a complete psychiatric diagnostic interview, it does include questions and measures of psychiatric symptoms from the Addiction Severity Index (ASI), Behavior and Symptom Identification Scale (BASIS-32), and Gambling Treatment Services Questionnaire (GTSQ).

Table 15 shows that about one-third of the sample reports difficulty in relating to others, daily living and role functioning, and with depression and anxiety on the Behavior and Symptom Identification Scale (BASIS-32). The Addiction Severity Index (ASI) items indicate that over half of the sample had problems with depression and anxiety in the 30 days prior to admission. Treatment providers reported that over half of the sample had at least one other psychiatric diagnosis in addition to Pathological Gambling, and over one-third were taking psychoactive medications during the course of treatment. Over half of the sample indicated that they had been seen for mental health treatment in the past.

Table 15

Psychiatric Co-morbidity (n=436)

Psychiatric Variable	n (%)
BASIS-32 Relation to Self/Others	153 (35)
BASIS-32 Daily Living/Role Functioning	154 (35)
BASIS-32 Depression/Anxiety	151 (35)
BASIS-32 Impulsive/Addictive Behavior	10 (2)
BASIS-32 Psychosis	14 (3)
BASIS-32 Overall Mean	55 (13)
ASI Depression in past 30 days	279 (64)
ASI Anxiety or tension in past 30 days	324 (74)
ASI Hallucinations in past 30 days	15 (3)
ASI Trouble understanding, concentrating, or remembering in past 30 days	258 (59)
ASI Compulsive behavior in past 30 days	147 (34)
ASI Violent Behavior in past 30 days	37 (9)
ASI Thoughts of suicide in past 30 days	156 (36)
ASI Attempted suicide in past 30 days	19 (4)
ASI Prescribed medication for psychological/emotional problems in past 30 days	176 (40)
GTSQ Psychiatric diagnoses (other than PG)	224 (52)
GTSQ Psychoactive medications during treatment	165 (38)
GTAQ Previous mental health treatment (individual and group)	226 (52)

Note. BASIS-32 indicates number (%) of cases with "moderate" and "extreme" difficulty for this scale.

Treatment Outcome

The third research question is: What are the outcomes of gambling treatment and what percent of problem gamblers improve after treatment?

The following section addresses the question, "Does treatment work?", i.e., "Do clients get better?". This fundamental question seems simple at first glance. However, in order to answer this "simple" question, a number of more complex questions must be addressed including, "How is treatment success defined?" and "How do you measure change?". There are a variety of definitions of treatment success in the research literature (Strupp, 1993) and a variety of proposed methods for measuring change (Collins & Horn, 1991).

A common approach in addiction treatment outcome research is to use the traditional treatment goal of abstinence as the measure of success, i.e., the percent of the follow-up sample that reports abstinence. This data is presented first in Table 16. Using a dichotomous outcome criterion tied to an absolutistic treatment goal is less than optimal. This approach reports only posttreatment gambling rates and ignores pretreatment gambling levels and the value of comparing posttreatment to pretreatment measures to obtain an index of change. Furthermore, this dichotomous outcome variable is too simplistic in terms of the actual behavior of gambling following treatment. Some clients may significantly reduce their gambling compared to pretreatment levels; this reduction should not be ignored or interpreted as a treatment failure, even if it is short of complete abstinence. For example, clients may have one or more "slips", but they use these "slips" in a positive way to learn better ways of maintaining their recovery. Given that most human behavior is best represented by a continuum, we recommend that success be defined in terms of increments of improvement over time (Stinchfield, Owen, & Winters, 1994).

Historically, treatment outcome research has focused on demonstrating statistically significant differences between pretest and posttest assessments. This traditional approach, i.e., statistically significant change, is presented next, in Tables 17-18. However, this approach fails to indicate whether the observed change is clinically significant or practically meaningful. Some changes may be statistically significant, but may not be considered clinically significant (and vice versa). This approach also tends to ignore individual patient outcomes by reporting group statistics rather than individual outcomes (Stinchfield & Winters, 1996). Group statistics indicate whether the group as a whole showed a change from pretreatment to posttreatment assessments. But the individual scores are imbedded in the group average and thus are obscured by the group statistics. Clinicians want to know whether a particular individual client got better, did not change, or got worse.

A third approach proposed by Jacobson and Truax (1991) looks at clinically significant change and is presented in Figures 10-14. Clients must demonstrate a change in behavior (i.e., test scores) where the client moves from the clinical or dysfunctional range of behavior to the normative or functional range of behavior as measured on a standardized scale. This approach allows for the examination of change in individual clients, and allows the researcher to identify who got better, who did not change, and who got worse. This type of treatment outcome methodology has the following advantages: (a) it measures change from pretreatment to posttreatment, which is superior to reporting posttreatment abstinence rates alone (Stinchfield, Owen, & Winters, 1994); and (b) it provides outcome results for individual clients.

These three approaches of presenting treatment outcome results, that is, abstinence rates, tests of statistical significance, and clinical significance of change, will be reported in that order.

Comparison of Highest Level of Gambling Frequency at Admission, Discharge, Six-months, and Twelve-months Follow-up

Table 16 compares the frequency distribution of highest level of gambling frequency for admission, discharge, 6-months follow-up and 12-months follow-up. Although these numbers do not represent matched cases at each measurement point, the pattern of results indicates that clients reduced their level of gambling during and after treatment. The majority (84%) were gambling at a weekly or more frequent level before treatment and only 5% were gambling at this rate at discharge, 11% at six-months follow-up and only 8% at 12 months follow-up. In terms of abstinence, 62% were abstinent during the course of treatment and 41% were abstinent at six months after treatment and 37% at twelve months after treatment.

Table 16

Gambling Frequency at Admission, Discharge, Six-months and Twelve-months Follow-up

Outcome Variable	Admission (n=436) n (%)	Discharge (n=436) n (%)	6-months Follow-up (n=415) n (%)	12-months Follow-up (n=329) n (%)
Highest level of gambling frequency				
None	3 (1)	268 (62)	170 (41)	121 (37)
< once/month	11 (3)	43 (10)	48 (12)	40 (12)
1-3 days/month	55 (13)	18 (4)	36 (9)	19 (6)
1-2 days/week	156 (36)	12 (3)	32 (8)	19 (6)
3-6 days/week	169 (39)	5 (1)	9 (2)	8 (2)
Daily	40 (9)	2 (1)	3 (1)	1 (0)
Missing/non-contact	2 (0)	88 (20)	117 (28)	121 (37)

Note: This is a longitudinal study, and some clients had not their 6-months or 12-months follow-up at the time of this report. There were 415 clients who had reached their six-months follow-up anniversary and 329 who had reached their 12 months follow-up anniversary. Also recall that the follow-up response rates were 72% and 64% at 6 and 12 months follow-up, respectively.

Comparison of Outcome Variables at Admission, Discharge, Six-months and Twelve-months Follow-up

Table 17 shows the results of a multivariate analysis of variance (MANOVA) with repeated measures applied to the 195 clients who had data at all four assessments: admission, discharge, six-months and twelve-months follow-up. There were a number of outcome variables administered at admission, discharge, six-months and twelve-months follow-up, including Stage of Change, gambling frequency, BASIS-32, and ASI that are consistent with those outcome variables identified by the Banff Consensus (Walker, et al, 2006). Stage of Change measures the level of motivation to change one's behavior. Stage of Change categories include: 1 = I have no intentions of changing my gambling; 2 = I am seriously considering reducing or stopping my gambling in the next six months; 3 = I plan to reduce or quit my gambling in the next month; 4 = I have already begun to reduce or quit my gambling within the last six months; and 5 = I reduced or quit my gambling over six months ago and have been able to maintain these changes during this period of time. The higher the score, the greater the motivation to change. The average level of Stage of Change at admission was 3.3 (I plan to reduce or quit my gambling in the next month) and this increased at discharge (mean=4.7), six-months follow-up (mean=4.5) and twelve-months follow-up (mean=4.4) (I have already begun to reduce or quit my gambling within the last six months). The average highest level of gambling frequency was 4.4 (weekly gambling) at admission and gambling frequency dropped significantly at discharge and follow-up (mean=1.8) (less than once a month). Figure 6 shows changes in stage of change and gambling frequency scores over time in a line chart.

The Behavior and Symptom Identification Scale (BASIS-32) measures mental health with six scales. Five scales measure specific areas of psychiatric symptoms and one scale measures overall mental health distress. BASIS-32 scales range from 0-4, where 0 = "No difficulty"; 1 = "A little difficulty"; 2 = "Moderate difficulty"; 3 = "Quite a bit of difficulty"; and 4 = "Extreme difficulty". The higher the BASIS-32 score the greater the psychopathology. Figure 7 shows changes in BASIS-32 over time and all BASIS-32 scales showed improvement from pretreatment to post-treatment. Another measure of psychiatric symptoms used in this study is the Addiction Severity Index (ASI) Psychiatric Module. This module includes five scored items and two scales. The higher the ASI score, the greater the psychopathology. Figure 8 shows ASI items over time and all ASI variables showed significant improvement from pretreatment to posttreatment. Clients came to treatment, not only with pathological gambling, but serious psychiatric symptoms and these symptoms subsided after treatment. Clients not only reduced their gambling following treatment, they also showed significant improvement in their overall mental health functioning.

Table 17

Comparison of Outcome Variables at
Admission, Discharge, Six-months Follow-up and Twelve-months Follow-up (n=195)

Outcome variable	Intake	Discharge	6-months Follow-up	12-months Follow-up		
	M (SD)	*M (SD)*	*M (SD)*	*M (SD)*	*F*	*p*
Stage of Change	3.3 (0.7)	4.7 (0.7)	4.5 (0.9)	4.4 (1.0)	159	<.001
Highest level of gambling[1]	4.4 (0.9)	1.4 (0.9)	1.8 (1.2)	1.8 (1.2)	421	<.001
BASIS-32 Scales						
Relation to Self/Other	2.2 (1.0)	0.9 (0.8)	0.9 (0.8)	0.8 (0.9)	127	<.001
Depression/Anxiety	2.1 (1.1)	0.8 (0.8)	0.8 (0.8)	0.8 (0.9)	115	<.001
Daily Living Skills	2.2 (1.1)	0.8 (0.7)	0.8 (0.8)	0.8 (0.9)	131	<.001
Addictive Behavior	0.7 (0.7)	0.2 (0.4)	0.2 (0.4)	0.3 (0.5)	44	<.001
Psychosis	0.6 (0.8)	0.2 (0.4)	0.2 (0.3)	0.2 (0.4)	27	<.001
Average	1.6 (0.8)	0.6 (0.6)	0.6 (0.6)	0.6 (0.7)	123	<.001
Addiction Severity Index (Psychiatric Domain)						
Past 30 days symptoms	3.4 (2.0)	2.0 (1.8)	1.5 (1.7)	1.3 (1.8)	64	<.001
Composite scale score	0.4 (0.2)	0.3 (0.2)	0.2 (0.2)	0.2 (0.2)	52	<.001
Days of conflict with family	6.9 (9.0)	1.5 (4.0)	1.3 (4.2)	1.1 (3.3)	29	<.001
Days of conflict with others	2.8 (7.0)	0.7 (1.9)	0.4 (2.3)	0.5 (1.3)	7	<.001
Days of emotional/ behavioral problems	15.5 (13.1)	6.9 (9.7)	6.8 (10.2)	6.5 (10.2)	29	<.001
How troubled by these problems?	2.3 (1.4)	1.2 (1.1)	1.2 (1.3)	1.2 (1.3)	46	<.001

Note. *M* = mean or average. *SD* = standard deviation. *F* = F-test value. [1] 1 = none; 2 = < once/month; 3 = 1-3 days/month; 4 = 1-2 days/week; 5 = 3-6 days/week; 6 = daily.

Figure 6 shows the change in gambling frequency and stage of change over time. Both of these lines show improvement in stage of change and gambling frequency over time.

Figure 6. Gambling Frequency and Stage of Change Over Time

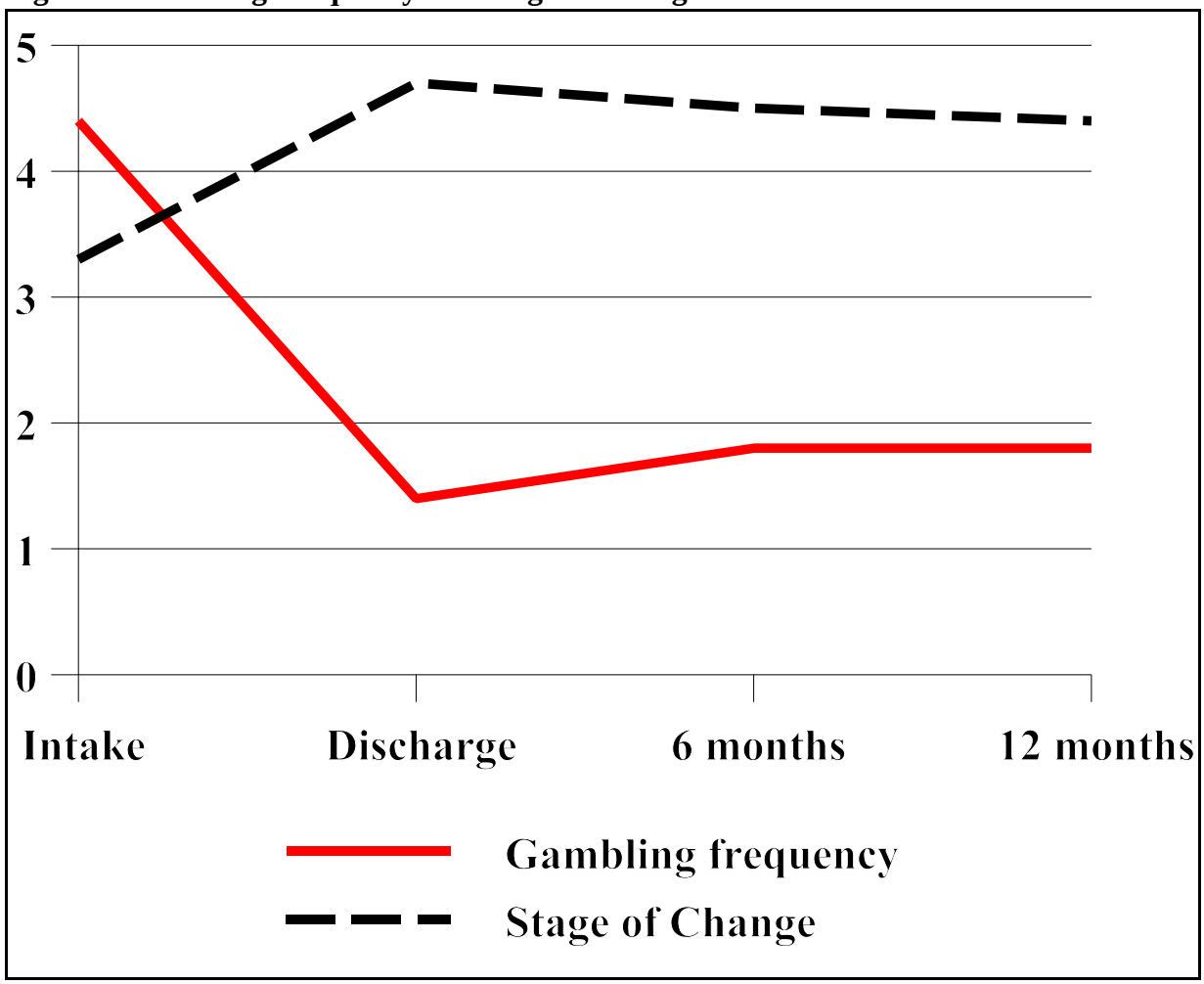


Figure 7 shows the change in BASIS-32 scale scores over time. All six of these lines show improvement in mental health functioning from intake to discharge and follow-up.

Figure 7. BASIS-32 Scales Over Time

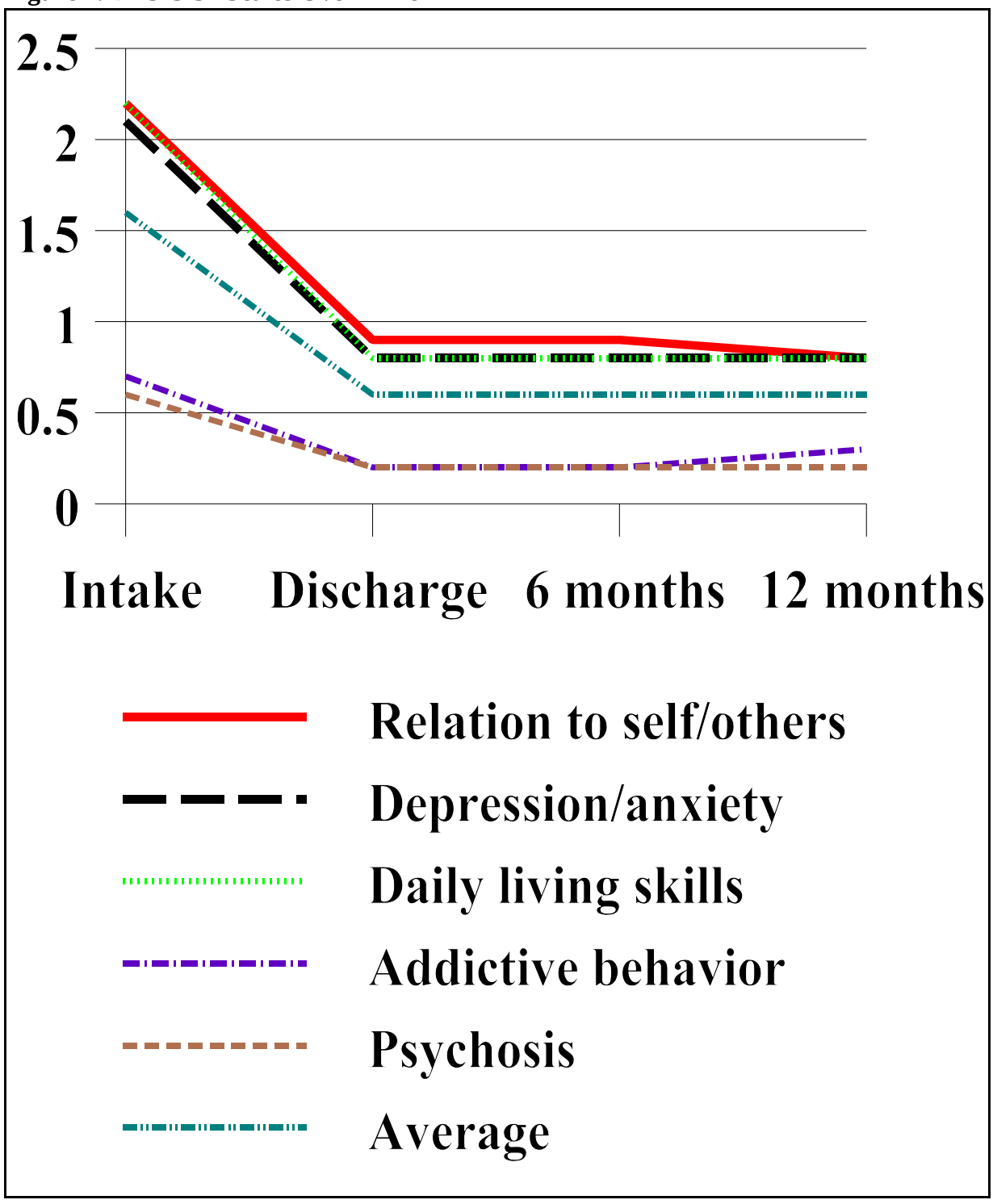
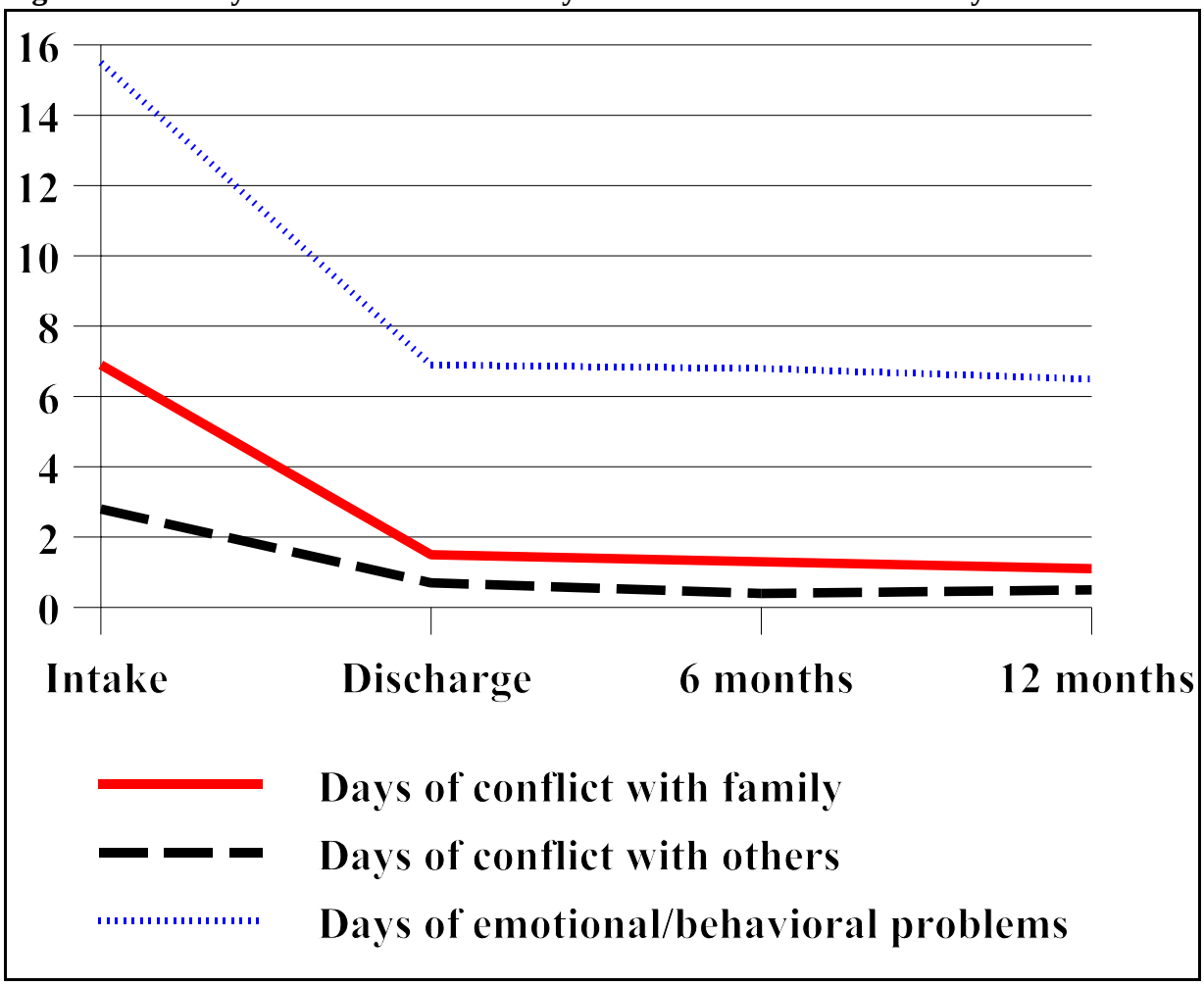


Figure 8 shows change in ASI measures of mental health over time. All three of these lines show improvement from intake to discharge and follow-up assessment.

Figure 8. ASI Days of Conflict with Family and Others in the Past 30 Days



Comparison of Outcome Variables at Admission, Six-months and Twelve-months Follow-up

Some outcome variables were administered at admission, six-months and twelve-months follow-up. Table 18 shows the results of a multivariate analysis of variance (MANOVA) with repeated measures. There were 203 clients who had data at all three assessments. These outcome variables assess the level or degree of gambling problem severity. That is, these outcome variables measure symptoms of pathological gambling, including SOGS and a count of DSM-IV diagnostic symptoms, as well as number of financial problems, and illegal activities. On all of these outcome measures, the higher the score, the greater the gambling problem severity. Figure 9 shows that all of these outcome variables showed significant change in the improved direction. That is, the six-months and twelve-months follow-up assessments were significantly lower than the pretreatment assessment. These results show improvement from pretreatment to posttreatment and the pattern of improvement is stable over the six-months and twelve-months follow-up assessments.

Table 18

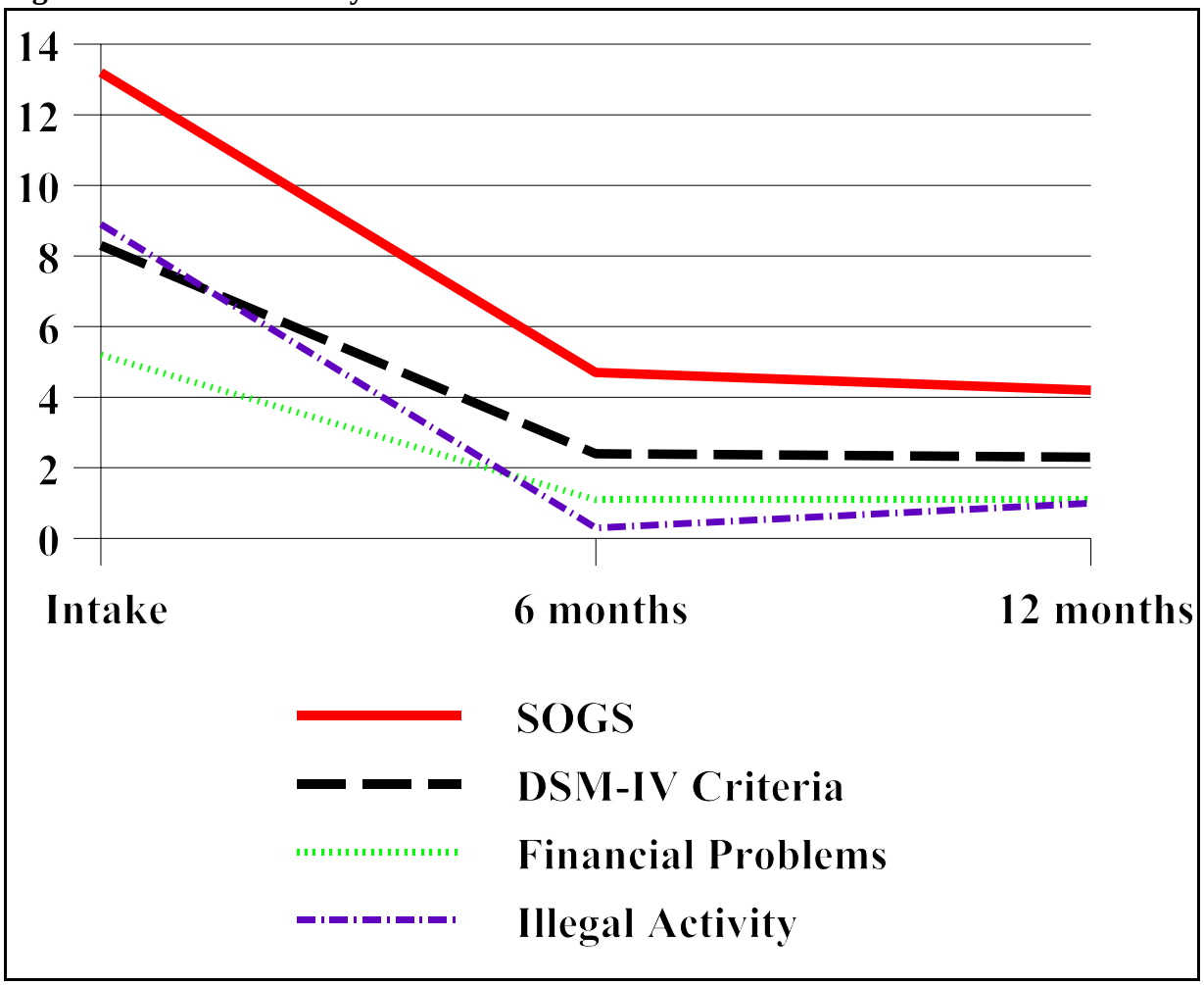
Comparison of Outcome Variables at Admission, Six-months Follow-up and Twelve-months Follow-up (n=203)

Outcome variable	Admission	6-months Follow-up	12-months Follow-up		
	M (SD)	*M (SD)*	*M (SD)*	*F*	*p*
SOGS (range 0-20)	13.2 (3.1)	4.7 (4.2)	4.2 (4.0)	405	<.001
DSM-IV Criteria Count (range 0-10)	8.3 (1.7)	2.4 (2.8)	2.3 (2.9)	448	<.001
Financial problems (range 0-21)	5.2 (3.3)	1.1 (2.1)	1.1 (2.3)	157	<.001
Illegal activity	8.9 (24.1)	0.3 (1.2)	1.0 (7.5)	14	<.001

Note. M = mean or average. SD = standard deviation. F = F-test value from repeated measures MANOVA. p = statistical significance. Illegal activity is the number of times the person engaged in an illegal activity, such as forgery, embezzlement, issuance of a worthless check, etc.

Figure 9 shows changes in gambling problem severity measures over time. These four scales are shown in the same figure for convenience. Keep in mind that these four measures do not use the same scale. For example, DSM-IV has 10 items while the SOGS has 20 items, so we are not comparing them to each other in this figure but rather looking at each scale over time. All four scales show improvement in gambling problem severity over time.

Figure 9. Problem Severity Measures over time.



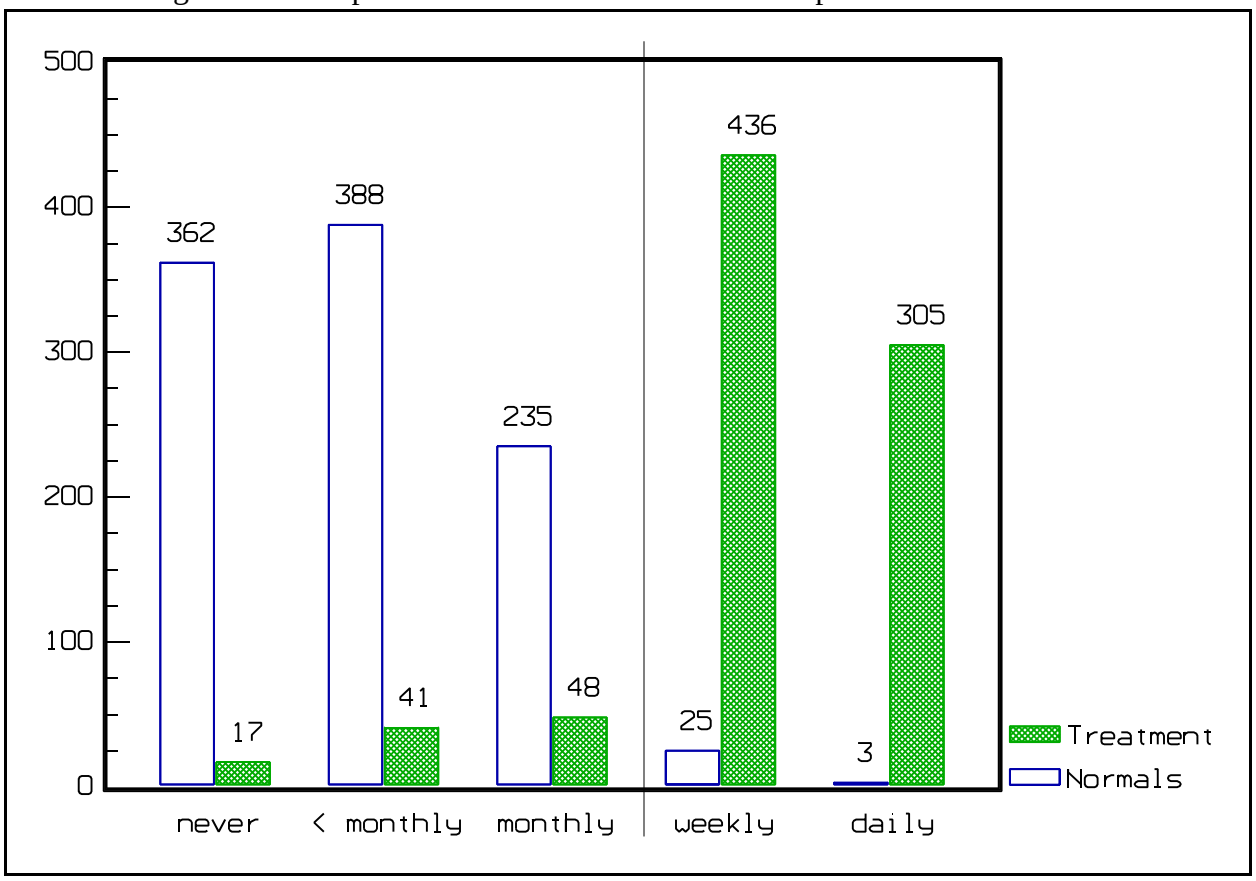
Clinically Significant Change on Gambling Frequency

The third approach to measuring treatment outcome is to examine clinically significant change. A change in a client's score is considered clinically significant if the change represents a movement out of the clinical or dysfunctional range of behavior into the normative or functional range of behavior. This approach answers the questions: who got better? who did not change? and who got worse?

Two critical variables for measuring pathological gambling treatment success are gambling frequency and gambling problem severity (i.e., negative consequences of gambling and signs and symptoms). Therefore, the approach of measuring clinically significant change was applied to the measures of gambling frequency and gambling problem severity (i.e., SOGS scores). First, difference scores were computed for each client by subtracting the pretreatment gambling frequency and SOGS scores from the six months follow-up scores. For assessing clinical significance of change, Jacobson and Truax (1991) recommend using a cut score that provides optimal discrimination between functional and dysfunctional groups. The SOGS has a standardized cut score of 5 or higher to identify probable pathological gamblers (Lesieur & Blume, 1987). To determine the best cut score for gambling frequency, data on gambling frequency in the past 12 months was obtained from the 1994 Minnesota general population adult survey (N=1,013) (Emerson, Laundergan, & Schaefer, 1994). Figure 10 shows a comparison of the normative adult gambling frequency data to the six months pretreatment gambling frequency data of the clinical sample (N=847) (Stinchfield & Winters, 1996). The gambling frequency cut score that best discriminates the normal sample from the clinical sample is monthly or less frequent gambling versus weekly or more frequent gambling.

It may not be appropriate for gambling treatment clients to gamble at all after treatment, because of their unique set of risk factors that prevent them from maintaining control over their gambling behavior. If the treatment goal for a particular client is abstinence and the discharge plan directs the client to avoid any gambling, then that is probably what is best for this client. However, some clients reduce their gambling behavior to a low frequency and these clients should not be considered treatment failures. Rather, these clients should be considered to have shown a clinically significant reduction in gambling frequency and problem severity.

Figure 10. Gambling frequency in past year for the Minnesota Normal Adult sample (N=1,013) in 1994 and gambling frequency in the six months prior to treatment for the Minnesota Gambling Clinical Adult sample (N=847) in 1996. The vertical line indicates the best cut score for discriminating the two samples into normative and clinical samples.



Comparison of Highest Level of Gambling Frequency Between Admission and Discharge

In order to compute clinically significant change, the pretreatment score is compared to the posttreatment score. This analysis is shown for only the outpatient sample because the residential sample was in a controlled environment and did not have the opportunity to gamble. Table 19 presents a contingency table comparing highest level of gambling frequency between admission and discharge (n=184). Most clients reported gambling at a weekly or daily frequency during the twelve months prior to treatment, and at discharge, the majority reported less than weekly gambling during the course of treatment. Gambling frequency is measured on a 6-point scale: 1 = none; 2 = < once/month; 3 = 1-3 days/month; 4 = 1-2 days/week; 5 = 3-6 days/week; and 6 = daily. In terms of clinically significant change, a client has to move from being a weekly or daily gambler to a monthly or less frequent gambler after treatment.

Figure 11 shows clinically significant change on gambling frequency from admission to discharge for outpatient clients. The majority of clients (53%) moved from the clinical to the normative range, 7% stayed in the clinical range at both assessments, 11% stayed in the normative range at both assessments, no one moved from the normative to the clinical range, and 30% are unknown due to missing data at discharge.

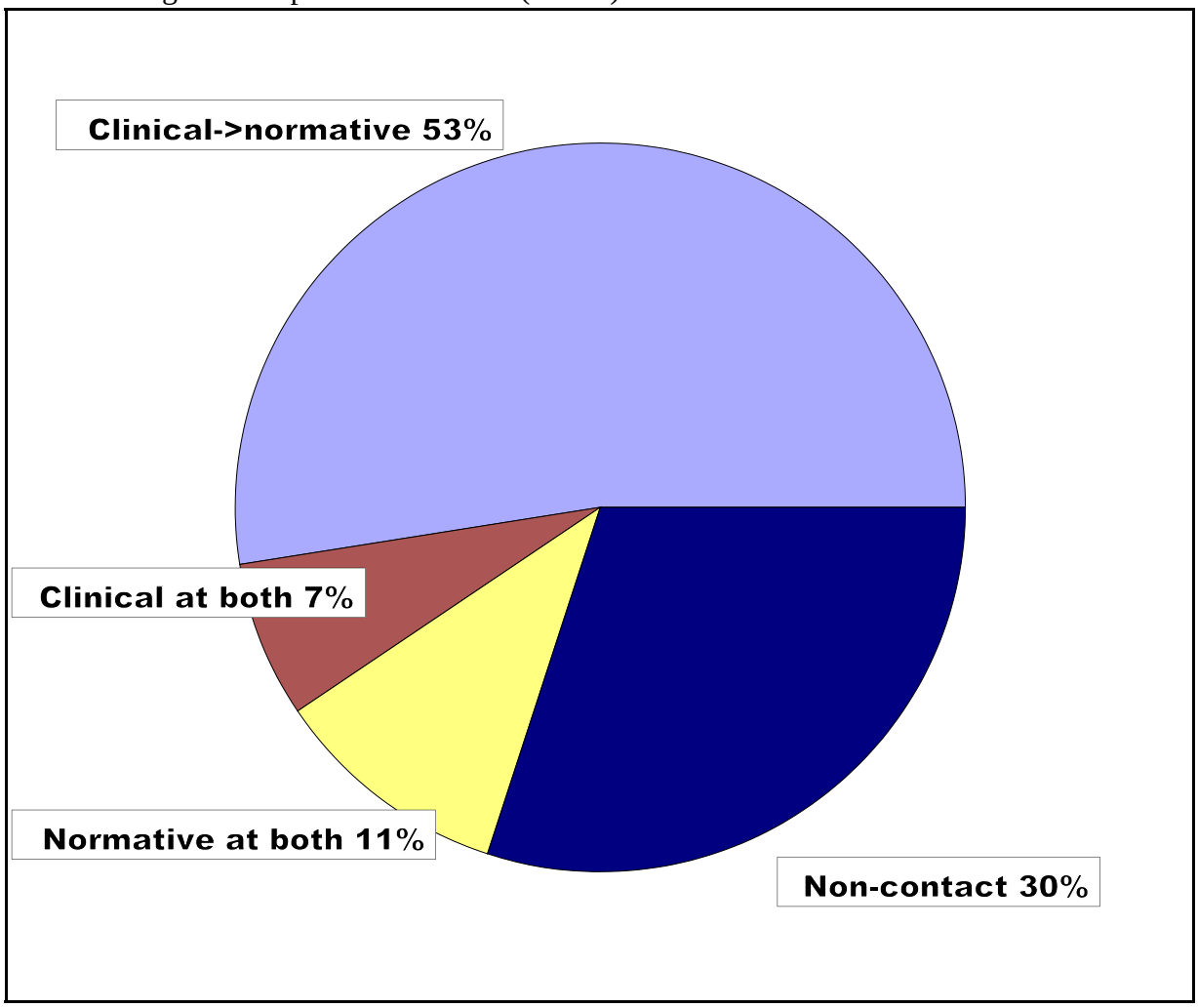
Table 19

Contingency Table Comparing Admission to Discharge
Highest Level of Gambling Frequency
(Outpatient Sample only n=184)

	Discharge						Row
Admission	None	< 1/month	1-3 days/ month	1-2 days /week	3-6 days /week	Daily	Totals
None	2						2
< 1/month	2	1					3
1-3 days /month	16	5	2				23
1-2 days /week	33	14	7	5		1	60
3-6 days /week	44	19	7	7	3		80
Daily	10	3	1		2		16
Column Totals	107	42	17	12	5	1	184

Note. There are 78 outpatient clients with missing discharge data and therefore are not included in this table.

Figure 11. Clinically Significant Change on Gambling Frequency from Admission to Discharge for Outpatient Treatment (n=262).



Comparison of Highest Level of Gambling Frequency Between Admission and Six-months Follow-up

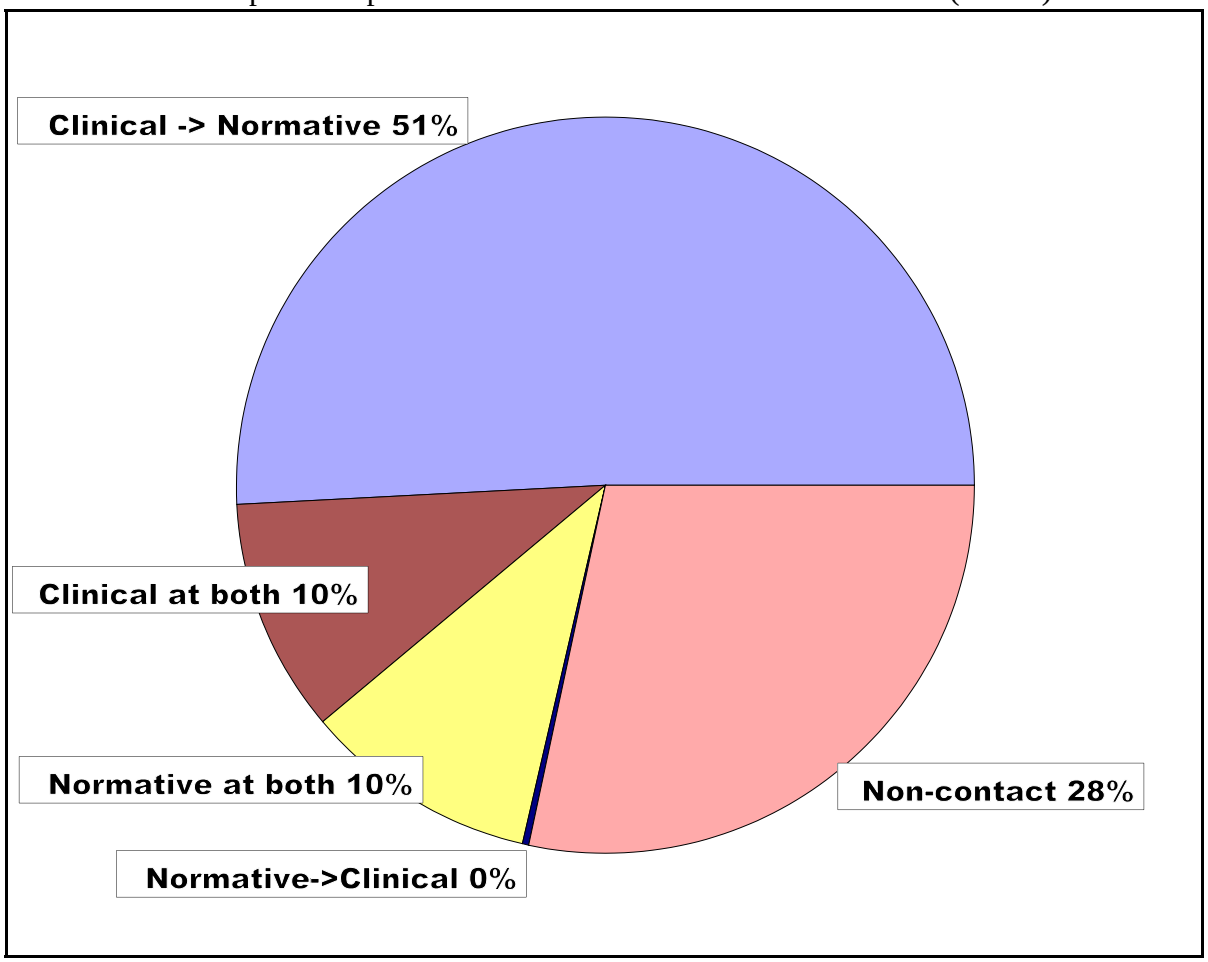
Table 20 presents a contingency table comparing highest level of gambling frequency between admission and six-months follow-up (n=298). Most clients reported gambling at a weekly or daily frequency during the twelve months prior to treatment, and at six-months follow-up, the majority reported less than weekly gambling during the course of treatment. In terms of clinically significant change, a client has to move from being a weekly or daily gambler before treatment to a monthly or less frequent gambler after treatment. Half of the sample (51%) moved from the clinical to the normative range, 10% stayed in the clinical range at both assessments, 10% stayed in the normative range at both assessments, one client moved from the normative to the clinical range, and 28% are unknown due to non-contact at six-months follow-up. Figure 12 shows clinically significant change on gambling frequency from admission to six months follow-up for both outpatient and residential treatment combined.

Table 20

Contingency Table Comparing Admission to Six-months Follow-up
Highest Level of Gambling Frequency for Outpatient and Residential Clients

	Six-months Follow-up						Row
Admission	None	< 1/month	1-3 days/ month	1-2 days /week	3-6 days /week	Daily	Totals
None	1	1					2
< 1/month	4	1	1				6
1-3 days /month	22	8	5			1	36
1-2 days /week	61	20	15	13	2		111
3-6 days /week	65	16	14	16	6	2	119
Daily	17	2	1	3	1		24
Column Totals	170	48	36	32	9	3	298

Figure 12. Clinically Significant Change on Gambling Frequency from Admission to Six-Months Follow-up for Outpatient and Residential Treatment Combined (n=415).



Clinically Significant Change of Gambling Problem Severity

In terms of clinically significant change of gambling problem severity, a client would have to move from a SOGS score of 5 or higher at admission to a SOGS score of less than 5 after treatment. A little less than half of the sample (44%) moved from the clinical to the normative range, about one-fourth of the sample (27%) stayed in the clinical range at both intake and follow-up, and 29% are unknown due to non-contact at six-months follow-up. Figure 13 shows clinically significant change on gambling SOGS scores from admission to six months follow-up for both outpatient and residential treatment combined. The large percent of clients in the clinical range at both assessments may be partially explained by the fact that it appears that some respondents did not understand the time frame of the SOGS questions. They may have assumed that these questions, like the GA 20 questions that are reviewed at GA meetings are meant to be endorsed if they ever were true for them, because many of these clients had not gambled during the six-month posttreatment period, but nevertheless still endorsed SOGS items. Therefore, we believe this may represent an over-reporting of SOGS symptoms at follow-up.

Figure 14 shows clinically significant change for DSM-IV diagnostic criteria from admission to six months follow-up. For DSM-IV diagnostic criteria, a client would have to move from a DSM-IV score of 5 or higher at admission to a DSM-IV score of less than 5 after treatment. Over half the sample (53%) moved from the clinical to the normative range, 16% stayed in the clinical range at both intake and follow-up, 3% stayed in the normative range at both assessments, and 28% are unknown due to non-contact at six-months follow-up.

Recall that the six months follow-up response rate was 72%, so this data represents those clients who were contacted at six months follow-up and excludes the remaining 28% of the sample who could not be contacted at six months follow-up. There is no consensus among researchers as to whether the non-contacted sample should be included or excluded from the statistical analysis of treatment outcome results (Beutler, 1990; Emrick & Hansen, 1983). Some investigators report all non-contacted participants as treatment failures (Nathan & Lansky, 1978; Sobell, 1978). That is, if a client cannot be contacted to provide information about their outcome status, this client is assumed to be a treatment failure. In contrast, other researchers exclude non-contacted participants from the analysis and acknowledge the potential effect of this exclusion on the outcome results (Harrison & Hoffmann, 1989; Keskinen, 1986). Blaszczynksi (2005) takes the middle ground and suggests that outcome rates be reported as a proportion of those clients assessed at follow-up as well as the combination of the followed-up and non-followed-up samples to give a lower and upper outcome estimate. A study conducted by the first author with adolescent drug abusers showed that the hard-to-contact sample, as a group, had poorer outcomes than the easy-to-contact sample, however, not all of the hard-to-contact clients were treatment failures, as is often presumed, and some had very good outcomes (Stinchfield, Niforopulos, & Feder, 1994). Therefore, it is probably safe to assume that those clients who could not be located at six-months follow-up, as a group, are likely to have poorer outcomes than the contacted group, however, it cannot be assumed that they are all treatment failures.

Figure 13. Clinically Significant Change on SOGS score between Admission and Six-Months Follow-up for Outpatient and Residential Treatment Combined (n=415).

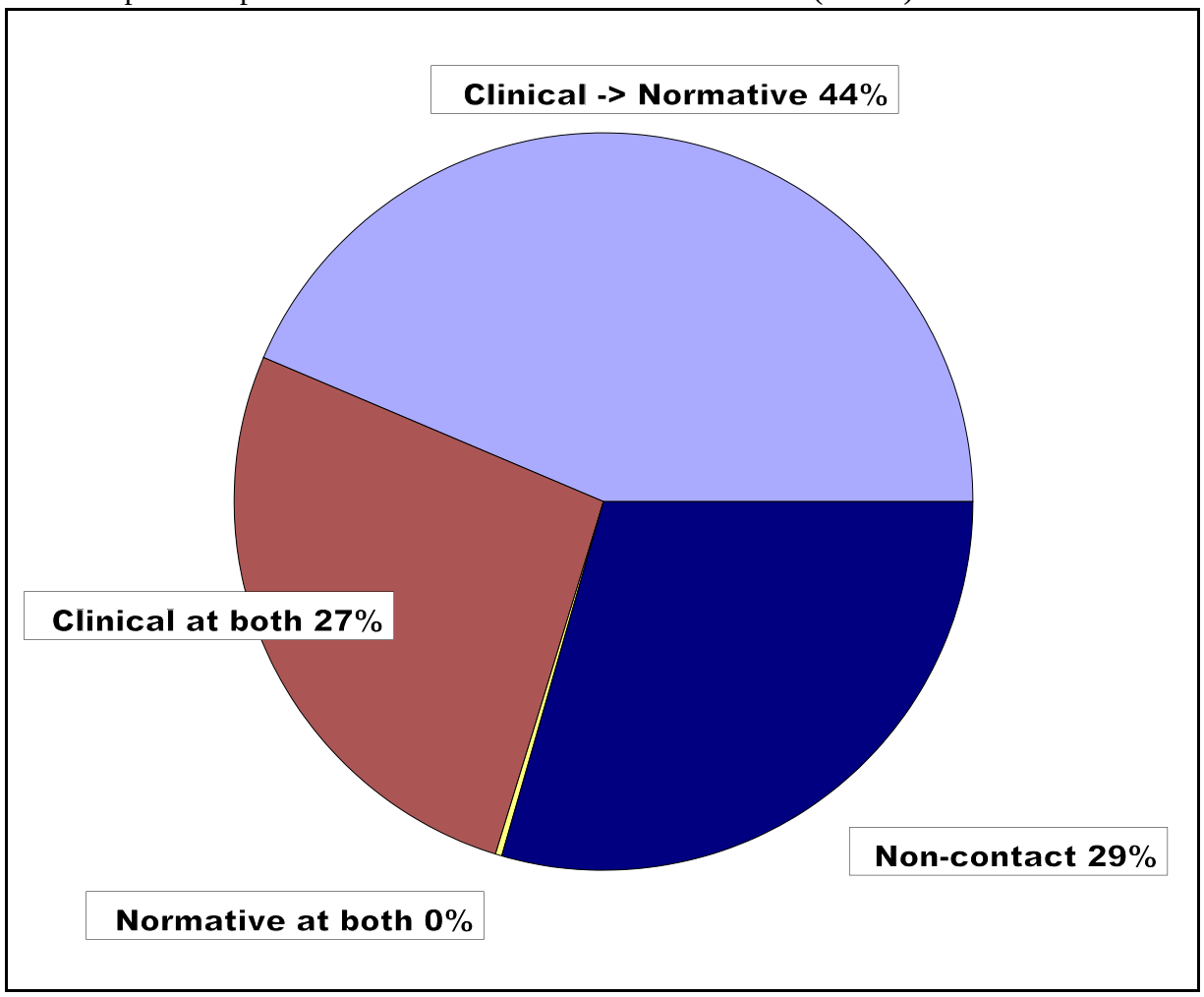
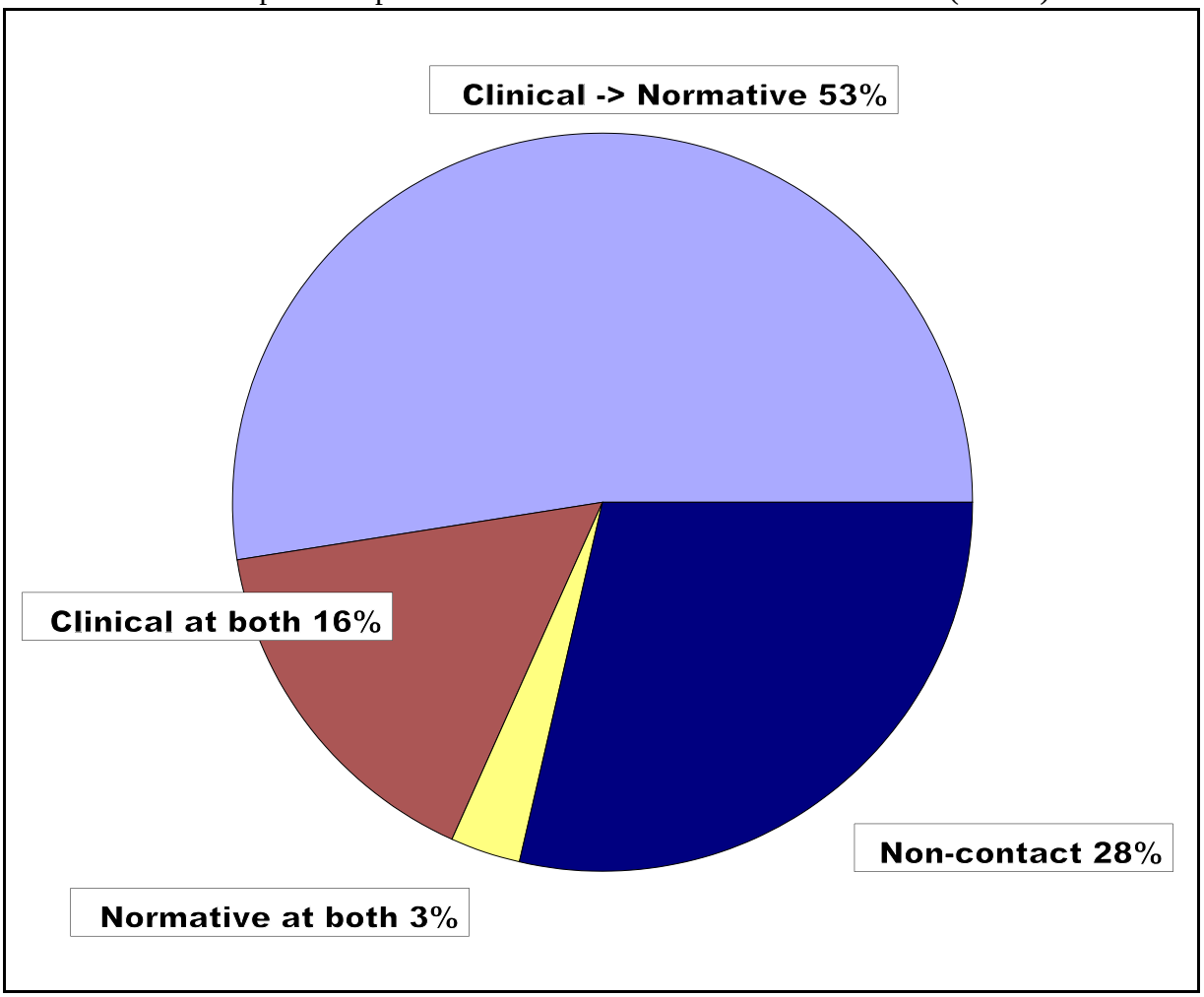


Figure 14. Clinically Significant Change on DSM-IV score between Admission and Six-Months Follow-up for Outpatient and Residential Treatment Combined (n=415).



Association between Treatment Differences and Treatment Outcome

The fourth research question is: What is the association between treatment differences and treatment outcome variables?

The first task in addressing this question is to identify salient treatment differences. Salient treatment differences include modality (residential versus outpatient) and types of services delivered (e.g., individual versus group therapy). One of the most obvious differences in treatment among the eleven treatment providers is residential and outpatient treatment modalities. There is one residential provider and ten outpatient treatment providers. Because some treatment providers have so few clients, it was not possible to compare each of the eleven treatment providers, however, it was possible to aggregate the outpatient treatment providers that allows for a comparison of outpatient to residential treatment modalities.

The second task is to define treatment outcome. As noted above, treatment outcome was defined in three ways: (a) abstinence; (b) statistically significant differences; and (c) clinically significant change. The third definition of treatment outcome, clinically significant change, will be used in this analysis.

A word of warning. This comparison of treatment differences and treatment outcome must not be confused with a clinical trial. This is not a controlled study, that is, clients were not randomly assigned to treatment and treatment was not controlled. This study occurred in the natural setting of treatment in the community. Because this is not a controlled study, this comparison is only done to answer the question of whether there is an *association* between treatment modality and outcome. Nevertheless, this analysis can begin to give us some insight into the differences between residential and outpatient treatment and can suggest whether more controlled studies are warranted. Therefore, these results can only be interpreted as correlations and not cause and effect. While one might be tempted to state that one treatment provider is more effective than another, this conclusion cannot be made from this study. For example, if residential clients have better outcomes than outpatient clients, this can only be interpreted as a correlation and not as residential treatment is superior to outpatient treatment. This study can only suggest possible causes but cannot support any causal conclusions or statements. Because this is not a controlled study, there are a number of alternative explanations for any observed differences in outcome between the two treatment modalities. It could be that the clients who chose residential treatment are more motivated to change. It could be that they are in a state of crisis and will likely return to a better level of functioning as a result of regression to the mean. Therefore, caution should be used when interpreting these results.

Furthermore, there is great disparity in the numbers of clients treated at the ten outpatient treatment providers. Given the small number of clients at some of the outpatient treatment providers, this sample was merged into one outpatient sample.

Another treatment difference is the therapeutic orientation of the treatment provider. A separate report on therapeutic orientation is attached in Appendix A. Most providers were found to be eclectic in their therapeutic orientation and no one provider identified their treatment with one therapeutic orientation.

Tables 21 and 22 present comparisons of client and treatment variables between residential and outpatient treatment providers. There were no significant differences between residential and outpatient providers on client gender, race, marital status, employment status,

preferred game, legal status, age, educational level, income, gambling frequency, gambling debt accrued during the twelve months prior to treatment, number of days absent from work due to gambling during the six months prior to treatment, and Stage of Change.

There were significant differences for previous gambling treatment (more residential clients than outpatient clients), Addiction Severity Index Psychiatric Scales (residential clients had greater psychiatric symptom severity than outpatient clients), treatment completion (91% of residential clients versus 54% of outpatient clients), SOGS and DSM-IV scores (residential clients had higher gambling problem severity scores on average, than outpatient clients), number of GA sessions attended prior to treatment (residential clients attended more GA meetings prior to admission on average than outpatient clients), and hours of treatment services (residential clients had more hours of treatment services on average than outpatient clients). In summary, residential clients appear to have greater gambling problem severity, greater comorbid psychiatric severity, are more likely to have had previous treatment, and are more likely to complete treatment and receive more hours of treatment services than outpatient clients.

Table 21

Comparison of Gambling Treatment Modality on Client Non-Clinical Variables (n=436)

Non-Clinical Client Variables	Outpatient (n = 262)	Residential (n = 174)	Test	
Nominal variables	n (%)	n (%)	X^2	*p*
Male Gender	122 (47)	85 (49)	0.2	.64
White Race	217 (83)	152 (88)	2.3	.13
Married	102 (39)	56 (32)	1.9	.16
Employed Full-Time	171 (65)	108 (62)	0.5	.50
Continuous variables	*Mean (SD)*	*Mean (SD)*	*t*	*p*
Age	44.7 (12.1)	41.8 (11.9)	2.4	.02
Education	4.0 (1.6)	3.8 (1.5)	1.2	.21
Income	4.8 (2.2)	4.3 (2.2)	2.1	.04

Note. M = *Mean or average*; SD = *standard deviation*; X^2 = *chi-square*; *t = t-test; and p = significance level;*

Education categories include: 1=less than high school graduate; 2=high school graduate; 3=vocational/technical training; 4=some college; 5 = community college or 2 year college graduate; 6=four year college graduate; and 7=graduate degree.

Income categories include: 1 = < $10,000; 2 = $10,000 to $20,000; 3 = $20,000 to $30,000; 4 = $30,000 to $40,000; 5 = $40,000 to $50,000; and 6 = $50,000 to $75,000; 7 = $75,000 to $100,000; and 8 = more than $100,000.

Table 22

Comparison of Gambling Treatment Modality on Client Clinical Variables (n=436)

Client Clinical Variables	Outpatient (n=262)	Residential (n=174)	test	
Nominal variables	n (%)	n (%)	X^2	*p*
Previous Gambling Treatment	113 (44)	127 (73)	37.7	<.001
Preferred Game = Gambling Machines	166 (64)	104 (60)	0.8	.37
Legal status of probation, parole or awaiting charges, trial or sentence	36 (14)	31 (18)	1.5	.22
Treatment completion	140 (54)	159 (91)	67.9	<.001
Continuous variables	M (SD)	M (SD)	*t*	*p*
Highest Gambling Frequency	4.4 (1.0)	4.4 (0.9)	0.2	.81
SOGS (range 0-20)	12.3 (3.2)	14.0 (2.9)	5.7	<.001
DSM-IV (range 0-10)	7.7 (2.0)	8.9 (1.4)	7.2	<.001
Gambling Debt in past 12 months	15,406 (21,067)	13,335 (18,707)	0.3	.30
Number of financial problems (range 0-21)	4.6 (3.3)	5.7 (3.3)	3.4	.001
Days absent from work in past 12 months	7.0 (20.7)	8.7 (18.8)	0.8	.41
Illegal activity	5.6 (13.8)	11.2 (25.9)	2.6	.01
BASIS-32 Relation to Self/Others	1.6 (1.0)	2.5 (0.9)	10.2	<.001
BASIS-32 Depression/Anxiety	1.5 (1.1)	2.4 (1.0)	7.8	<.001
BASIS-32 Daily Living/Role Functioning	1.6 (1.0)	2.5 (0.9)	9.8	<.001
BASIS-32 Impulsive/Addictive Behavior	0.5 (0.5)	0.9 (0.8)	7.2	<.001
BASIS-32 Psychosis	0.4 (0.6)	0.9 (0.8)	6.1	<.001
BASIS-32 Overall Mean	1.2 (0.8)	1.9 (0.8)	10.0	<.001

Client Clinical Variables	Outpatient (n=262)	Residential (n=174)	test	
ASI lifetime psychiatric	4.2 (2.3)	5.1 (2.1)	4.1	<.001
ASI past 30 days psychiatric	2.8 (1.9)	3.9 (1.9)	6.1	<.001
ASI composite psychiatric	0.4 (0.2)	0.5 (0.2)	5.0	<.001
ASI days of conflict with family	4.4 (7.4)	8.4 (9.5)	4.6	<.001
ASI days of conflict with others	1.5 (4.4)	4.2 (8.3)	4.0	<.001
ASI days of emotional/behavioral problems	12.8 (12.6)	16.0 (12.5)	2.5	.01
ASI How troubled by emotional/behavioral problems?	1.9 (1.4)	2.5 (1.3)	4.6	<.001
ASI How important is treatment	2.4 (1.6)	3.0 (1.4)	3.9	<.001
Stage of Change	3.4 (0.8)	3.2 (0.7)	2.3	.02
Number of GA meetings in past 12 months	3.7 (9.5)	8.7 (17.6)	3.5	.001
Number of hours of different types of services				
Assessment	2.0 (1.0)	6.0 (0.2)	62.6	<.001
Individual Counseling	8.6 (12.8)	14.9 (13.3)	4.9	<.001
Group Counseling	43.1 (48.5)	116.6 (20.3)	21.8	<.001
Family Counseling	3.8 (5.2)	17.5 (4.5)	29.4	<.001
Marital Counseling	0.2 (1.2)	0 (0)	2.7	.007

Note. M = *Mean or average*; SD = *standard deviation*; X^2 = *chi-square*; *t* = *t-test*. Gambling frequency categories include: 1 = None; 2 = < once/month; 3 = 1-3 days/month; 4 = 1-2 days/week; and 5 = 3-6 days/week; and 6 = Daily. Illegal Activity is defined as number of times in past 12 months, client has engaged in illegal activities, such as forgery, theft by check, embezzlement, etc.. BASIS-32 scales range from 0-4, where 0 = "No difficulty"; 1 = "A little difficulty"; 2 = "Moderate difficulty"; 3 = "Quite a bit of difficulty"; and 4 = "Extreme difficulty".

Relationship between Treatment Modality and Treatment Outcome

Tables 23 and 24 show cross-tabulations and chi-square tests of dependence between treatment modality and treatment outcome. There are no significant relationships between treatment modality and treatment outcome. That is, residential and outpatient treatment modalities yielded similar outcome rates on gambling frequency and SOGS scores.

Table 23

Crosstabulation of Treatment Modality and Clinically Significant Change on Gambling Frequency from Admission to Six Months Follow-up (n=298)

	Treatment Modality		
Clinically Significant Change	Outpatient n (%)	Residential n (%)	Row Total
clinical to normative	107 (67)	104 (75)	211
clinical at both	28 (17)	15 (11)	43
normative at both	25 (16)	18 (13)	43
normative to clinical	0 (0)	1 (1)	1
Column Total	160	138	298

Note. *Chi-square* = 4.5, *df* = 3, *p* = 0.21

Table 24

Crosstabulation of Treatment Modality and Clinically Significant Change on SOGS from Admission to Six Months Follow-up (n=293)

	Treatment Modality		
Clinically Significant Change	Outpatient n (%)	Residential n (%)	Row Total
clinical to normative	95 (60)	87 (64)	182
clinical at both	63 (40)	47 (35)	110
normative at both	0 (0)	1 (1)	1
Column Total	158	135	293

Note. *Chi-square* = 1.9, *df* = 2, *p* = 0.39

Client Subtypes and Treatment Outcome

The fifth research question is: What is the association between client subtypes and treatment outcome? Treatment outcome has been defined but client subtypes could be any type of characteristic such as demographics, gambling problem severity, game preference, or psychiatric co-morbidity, to name a few. To narrow this variable down to relevant characteristics that are related to outcome the first step is to look at bivariate correlations to identify any significant correlations between client variables and outcome.

Client Demographics. There was no relationship between gender and outcome. Men and women clients have similar rates of relapse at discharge (chi-square = 0.5, df = 1, p = .46), six-months follow-up (chi-square = 0.2, df = 1, p = .65), and twelve-months follow-up (chi-square = 0.6, df = 1, p = 0.44). There is also little to no relationship between client age and outcome. Age was unrelated to outcome at discharge (r = .08), six months follow-up (r = .06) and twelve months follow-up (r = .12). There is no relationship between race and outcome. Whites and non-whites have similar rates of relapse at discharge (chi-square = 0.7, df=1, p = .40), six-months follow-up (chi-square = 3.7, df=1, p = .05), and twelve-months follow-up (chi-square = 1.2, df=1, p = .28). There were slightly more non-whites who relapsed at six months follow-up, but they did not reach statistical significant ($p < .01$) and it was not a consistent difference across all assessments. Clients with children had lower rates of relapse than clients without children at discharge (chi-square = 4.5, df = 1, p = .03), six-months follow-up (chi-square = 10.1, df = 1, p = .001) and twelve months follow-up (chi-square = 8.8, df = 1, p = .003).

Marital Status. Marital status was recoded as married and living together into one category and single/never married, divorced, separated, and widowed into the other category. Marital status was found not to be related to outcome. Outpatient clients who had a partner had slightly better rates of outcome at discharge than clients who did not have a partner (chi-square = 3.4, df = 1, p = .07), but it did not reach statistical significance ($p < .01$) and it was not a consistent difference across all three assessments. Partnered clients had similar rates of relapse at six-months follow-up (chi-square = 0.2, df = 1, p = .64), and at twelve-months follow-up (chi-square = 0.6, df = 1, p = 0.43) as compared to clients without partners.

Living arrangement. Whether or not the client lived alone was not related to outcome. Outpatient clients who lived alone had similar rates of relapse at discharge to clients who lived with others (chi-square = 0.8, df = 1, p = .36). Clients living alone had similar rates of relapse at six-months follow-up (chi-square = 0.1, df = 1, p = .85), and at twelve-months follow-up (chi-square = 0.1, df = 1, p = 0.80) as compared to clients living with others.

Level of Education. There was no relationship between client level of education and outcome. For outpatient clients, the correlation between education level and outcome was r = .05 at discharge. For all clients at six months follow-up the correlation was r = .03 and at twelve-months follow-up the correlation was r = .06.

Income Level. There was no relationship between income level and outcome. For outpatient

clients, the correlation between income level and outcome was r = .12 at discharge. For all clients at six months follow-up the correlation was r = .00 and at twelve-months follow-up the correlation was r = .04.

Employment status. Full-time employment was not related to outcome. Outpatient clients who were employed full-time had slightly better rates of outcome at discharge as compared to clients who were not employed full-time (chi-square = 2.7, df = 1, p = .10), however, this difference did not reach statistical significance (p < .01) and it was not a consistent difference across all three assessments. Clients employed full-time had similar rates of relapse at six-months follow-up (chi-square = 1.6, df = 1, p = .21), and at twelve-months follow-up (chi-square = 1.0, df = 1, p = 0.32) as compared to clients not employed full-time.

Previous Gambling Treatment. Previous professional treatment for gambling was not related to outcome. Outpatient clients with a history of past gambling treatment had similar rates of relapse at discharge to clients who preferred other games (chi-square = 0.1, df = 1, p = .86). Clients with past gambling treatment had similar rates of relapse at six-months follow-up (chi-square = 1.4, df = 1, p = .23), and at twelve-months follow-up (chi-square = 2.6, df = 1, p = 0.11) as compared to clients with no history of gambling treatment.

GA participation. GA participation during the 12 months prior to treatment was not related to outcome. Outpatient clients who had participated in GA had similar rates of relapse at discharge to clients who did not participate in GA (chi-square = 0.7, df = 1, p = .40). Clients who had participated in GA had similar rates of relapse at six-months follow-up (chi-square = 1.4, df = 1, p = .23), and at twelve-months follow-up (chi-square = 0.7, df = 1, p = 0.39) as compared to clients who did not participate in GA prior to treatment.

Gambling Severity. There was no relationship between client gambling problem severity (as measured by the SOGS, DSM, financial problems scale) and gambling frequency at discharge, six months and twelve-months follow-up. There were small correlations between SOGS and gambling frequency at discharge (r = .08) and at six months (r = .02) and twelve-months follow-up (r = .04). There were small correlations between a count of DSM-IV diagnostic criteria and gambling frequency at discharge (r = .08) and at six months (r = .00) and twelve months follow-up (r = .08). There were small correlations between the financial problems scale and gambling frequency at discharge (r = .03) and at six-months (r = .02) and twelve-months follow-up (r = .01).

Psychosocial Functioning/Psychiatric symptoms. There were small correlations between client psychosocial functioning/psychiatric symptoms (as measured by the BASIS-32 scales, Addiction Severity Index (ASI) psychiatric domain, and number of psychiatric diagnoses) and outcome at discharge, six-months follow-up, and twelve-months follow-up. The correlations between the BASIS-32 scales and outcome at discharge ranged from r = .10 to r = .24, but most were less than r = .20; at six-months follow-up ranged from r = .01 to r = .09; and at twelve-months follow-up ranged from r = .01 to r = .10. The correlations between the ASI and outcome at discharge ranged from r = .01 to r = .20; at six-months follow-up ranged from r = .02 to r = .09

and at twelve-months follow-up ranged from r=.05 to r=.13. There were small correlations between number of psychiatric diagnoses and outcome at discharge (r = .09), six-months follow-up (r = .00) and at twelve months follow-up (r = 03).

Stage of Change. The client stage of change indicates the level of motivation to change and to engage in treatment. There was a moderate correlation between stage of change and gambling frequency at discharge among outpatient clients (r =.23), but this relationship was weaker at six months (r = .16) and twelve months follow-up (r = .15).

Preferred Game. Another way to examine client subtypes is to look at the preferred game. The most preferred game was gambling machines, namely slot machines in casinos. Outpatient clients who preferred slot machines had similar rates of relapse at discharge to clients who preferred other games (chi-square = 0.1, df = 1, p = .76). Clients who preferred slot machines had similar rates of relapse at six-months follow-up (chi-square = 0.1, df = 1, p = .90), and twelve-months follow-up (chi-square = 0.1, df = 1, p = 0.82) as compared to clients who preferred other games.

Client Effort at Recovery. Client effort at recovery is a set of items asked of the client at discharge and it was only completed by outpatient clients. There are thirteen items and one point is given for each item that the client states that he or she has been making efforts on. Outpatient client effort at recovery was correlated with gambling frequency at discharge (r = .31). Outpatient client effort at recovery showed a moderate correlation with outcome at six months follow-up (r = .38), but was attenuated at twelve months follow-up (r = .22).

Treatment completion. As noted above, some clients completed the treatment regimen while others dropped out of treatment. This is a dichotomous client variable. Outpatient clients who completed treatment had a lower rate of relapse at discharge than clients who dropped out of treatment (chi-square = 7.9, df = 1, p = .005). Clients who completed treatment had a lower rate of relapse at six-months follow-up (chi-square = 34.3, df = 1, p < .001), and twelve-months follow-up (chi-square = 4.1, df = 1, p = 0.04) as compared to clients who dropped out of treatment.

Number of treatment sessions attended. Clients participated in a wide range of number of sessions. This variable was coded into four categories: (a) 1-5 sessions; (b) 6-23 sessions; (c) 24-30 sessions; and (d) 31 or more sessions. Outpatient clients who attended more treatment sessions had a lower rate of relapse at discharge than clients who attended fewer treatment sessions (chi-square = 14.3, df = 3, p = .003). Clients who attended more treatment sessions had a lower rate of relapse at six-months follow-up (chi-square = 22.2, df = 3, p < .001), but this effect diminished by twelve-months follow-up (chi-square = 5.0, df = 3, p = 0.17) as compared to clients who attended fewer treatment sessions.

In summary, there were many client variables unrelated to outcome including gender, age, race, marital status, living arrangement, employment status, education, income, pretreatment gambling problem severity, prior GA participation, prior gambling treatment episodes, preferred game, and

psychiatric co-morbidity. There were a few client variables related to outcome including having children, stage of change, BASIS-32 scale scores (but only for discharge outcome among outpatients), treatment completion, and number of treatment sessions attended, and effort at recovery (but only for outpatient clients, since residential clients did not complete this scale).

The next step is to enter these client variables correlated with outcome in a multivariate analysis, that is, a multiple regression to see which variables still contribute to the relationship when all variables are considered in the same analysis. First, client variables of having children, stage of change, effort at recovery, BASIS-32 scales, treatment completion, and number of treatment sessions attended were entered in a multiple regression of gambling frequency at discharge for outpatient clients. The results are shown in Table 25. Four variables contributed to the overall regression and 21% of the variance in outcome at discharge is explained by these four variables: client effort at recovery, BASIS-32 Psychosis scale, stage of change and having children. Three of these client variables could be conceived to measure client motivation. Effort at recovery is a list of tasks the client can be doing to work toward recovery, so the more effort at these tasks the more motivated the client is to recover. If a client has children, they may be motivated to improve for the sake of their children. The stage of change item purports to measure a client's level of motivation to change. The BASIS-32 Psychosis scale may indicate the level to which a client can function and participate in a psychosocial form of treatment.

Table 25

Multiple Regression of Client Variables and Gambling Frequency at Discharge for Outpatient Clients (n=174)

Regression Step	Client Variables	*beta in*	*Multiple r*	r^2
1	Effort at recovery	-.28	.32	.10
2	BASIS-32 Psychosis Scale	.23	.41	.16
3	Stage of Change	-.18	.44	.19
4	Children	.14	.46	.21

Next, in Table 26 client variables were entered in a multiple regression of outcome at six months follow-up for outpatient clients. Client effort at recovery and treatment completion accounted for 17% of the variance in outcome at six months follow-up for outpatient clients.

Table 26

Multiple Regression of Client Variables and Gambling Frequency at Six Months Follow-up for Outpatient Clients (n=146)

Regression Step	Predictor Variables	*beta in*	*Multiple r*	r^2
1	Effort at recovery	-.27	.38	.14
2	Treatment Completion	.21	.42	.17

Next, in Table 27 the same client variables (except client effort) were entered in a multiple regression of outcome at six-months follow-up for all clients. This time, two variables were selected: treatment completion and children accounted for 16% of the variance in outcome.

Table 27

Multiple Regression of Client Variables and Gambling Frequency at Six Months follow-up (n = 292)

Regression Step	Client Variables	*beta in*	*Multiple r*	r^2
1	Treatment completion	.37	.38	.14
2	Children	.12	.39	.16

Next, in Table 28 the same client variables (except client effort) were entered in a multiple regression of outcome at twelve-months follow-up. This time, two variables were selected: children and treatment completion accounted for 8% of the variance in outcome.

Table 28

Multiple Regression of Client Variables and Gambling Frequency at Twelve Months follow-up (n = 203)

Regression Step	Client Variables	*beta in*	*Multiple r*	r^2
1	Children	.22	.24	.06
2	Number of treatment sessions attended	-.17	.29	.08

In summary, there were a few client variables that were associated with outcome, including client effort at recovery, BASIS-32 Psychosis scale, stage of change, children, treatment completion, and number of treatment sessions. However, these client variables were weak predictors of outcome and accounted for very little of the variance in outcome.

Client Subtype, Treatment Differences and Treatment Outcome

The sixth research question is: What is the inter-relationship of client subtype, treatment differences, and treatment outcome?

This question moves from two-way comparisons completed above to three-way comparisons, that is, client subtype by treatment differences by treatment outcome. This introduces a new level of complexity as is shown in the table below. We have already shown that there is little, if any, relationship between client subtypes and treatment outcome. The only exception was that having children, stage of change, treatment completion, number of treatment sessions attended, and client effort at recovery and BASIS-32 Psychosis scale (for outpatient clients) were correlated with outcome but they were relatively small correlations. Furthermore, there was no relationship between treatment difference (residential versus outpatient) and outcome. Although residential clients had greater levels of gambling problem severity and psychiatric comorbidity than outpatient clients, they nevertheless, had similar outcomes. Therefore, it is unlikely that when we look at all three domains, client subtype, treatment differences, and treatment outcome, that we will find anything different than what has already been described above.

The basic client subtypes of gender, age, race, marital status, have not yielded any significant correlations with outcome. Previous analyses have demonstrated that there are few client variables associated with outcome, however, the magnitude of the relationships are small. We will start with these variables: having children, effort at recovery, stage of change, treatment completion and number of sessions attended. We cannot use the client variable, effort at recovery, because the residential clients were not administered this scale.

In terms of treatment differences, outpatient and residential treatment are compared. Therefore, we will look at client variables in the context of residential and outpatient treatment. Treatment outcome was defined previously and will include gambling frequency at discharge and six month follow-up assessments. Client variables included children, stage of change, treatment completion, and number of treatment sessions attended. Table 29 shows the comparison of four client variables (children, treatment completion, stage of change, and treatment sessions attended), treatment modality (outpatient versus residential) and outcome in terms of gambling frequency over time. In these analyses, we are only interested in the three-way interactions.

First, the outcome of clients with children versus without children is compared across treatment modality. This comparison showed that the three-way interaction was non-significant, that is, there is no difference in outcome between clients with and without children in outpatient and residential treatment. Second, the outcome of clients who completed versus dropped out of treatment was compared across treatment modality. The three-way interaction for this comparison was not significant. Third, the outcome of clients at different stages of change were compared across treatment modality. The three-way interaction for this comparison was not significant. Fourth, the outcome of clients who attended varying numbers of sessions were compared across treatment modality. The three-way interaction was not significant. Therefore, there were no significant interactions between client subtypes, treatment modality and outcome.

Table 29

Comparison of Client Variables, Treatment Modality and Outcome

		Time		Main Effects			Interaction Effects			
Client Variable Group A	Treatment Modality Group B	Pretx *M (SD)*	6 mo *M (SD)*	A *F (p)*	B *F (p)*	Time *F (p)*	A x B *F (p)*	A x Time *F (p)*	B x Time *F (p)*	A x B x Time *F (p)*
Children	Outpt	4.4 (0.9)	2.0 (1.2)	2.5 (.12)	3.1 (.08)	559.8 (<.001)	.01 (.92)	8.3 (.004)	4.2 (.04)	.04 (.83)
	Res	4.4 (0.9)	1.6 (1.1)							
No Children	Outpt	4.3 (1.1)	2.4 (1.6)							
	Res	4.3 (0.8)	2.0 (1.4)							
Treatment Completer	Outpt	4.4 (.09)	1.7 (1.0)	19.4 (<.001)	0.2 (.69)	222.6 (<.001)	.30 (.58)	10.1 (.002)	.14 (.71)	.08 (.78)
	Res	4.4 (.09)	1.6 (1.1)							
Treatment Dropout	Outpt	4.5 (1.0)	2.8 (1.4)							
	Res	4.7 (0.5)	2.9 (1.8)							
Stage of change 2	Outpt	4.4 (0.8)	2.6 (1.3)	1.3 (.28)	6.8 (.01)	608 (<.001)	1.1 (.33)	2.3 (.10)	8.2 (.004)	2.0 (.14)
	Res	4.5 (1.0)	1.5 (0.9)							
Stage of change 3	Outpt	4.5 (0.9)	2.1 (1.4)							
	Res	4.3 (0.8)	1.9 (1.3)							
stage of change 4	Outpt	4.3 (1.0)	1.9 (1.1)							
	Res	4.5 (0.9)	1.5 (1.0)							
1-23 sessions	Outpt	4.4 (1.0)	2.5 (1.4)	4.8 (.009)	0.1 (.79)	229 (<.001)	0.3 (.75)	4.3 (.02)	1.2 (.27)	.3 (.73)
	Res	4.6 (0.7)	2.6 (1.9)							
24-30 sessions	Outpt	4.4 (0.9)	1.8 (1.1)							
	Res	4.3 (0.9)	1.6 (1.1)							
31 or more sessions	Outpt	4.4 (0.9)	1.6 (0.9)							
	Res	5.0 (1.0)	1.3 (0.6)							

Note. Outpt = Outpatient treatment; Res = Residential treatment.

Treatment Services, Treatment Intensity and Outcome

The seventh research question is: What are the most effective treatment services and the level of treatment intensity that can produce optimal outcomes of treatment and inpatient treatment?

This question can be answered in three ways. First, we can examine the clients' ratings of treatment component helpfulness. Client ratings of treatment component helpfulness are shown in Table 30. At discharge, clients were given a list of treatment services and asked how helpful each service was to their recovery. The majority of clients rated group counseling (64%), homework assignments (54%), peer support group (52%) as the most helpful components of treatment.

Table 30

Treatment Component Helpfulness Ratings by Clients

Service	No Help %	Little Help %	Some Help %	Much Help %	No Rating %
Assessment	4	9	20	46	20
Individual Counseling	1	7	12	41	39
Group Counseling	2	4	6	64	25
Family Counseling	2	6	12	33	48
Peer Support Group	1	4	12	52	32
Financial Counseling	6	12	22	22	38
Lectures	2	7	19	40	32
Homework Assignments	2	5	13	54	26
Films/videos	3	9	24	34	30
Orientation to GA	3	6	20	40	30
Legal Assistance	3	4	3	8	82
Assessment/counseling for other mental health problems	4	6	12	13	65

Note. Row percentages may not total to 100% due to rounding. No rating indicates that the client did not receive the service.

Not all clients received all services, so a second table, Table 31, shows helpfulness ratings for only clients who received the service. Note the number of clients who received the service. Among the clients who received the service, the services that received the most helpful ratings were group counseling (85%), peer support group (76%), homework assignments (73%), individual counseling (68%), and family counseling (63%).

Table 31

Treatment Component Helpfulness Ratings by Clients who Received the Service

Service	No Help %	Little Help %	Some Help %	Much Help %
Assessment (n= 349)	5	12	25	58
Individual Counseling (n=265)	2	11	19	68
Group Counseling (n=326)	2	5	8	85
Family Counseling (n=229)	4	11	22	63
Peer Support Group (n=298)	1	6	17	76
Financial Counseling (n=271)	10	20	35	35
Lectures (n=294)	2	11	28	59
Homework Assignments (n=321)	3	7	17	73
Films/videos (n=304)	4	12	34	49
Orientation to GA (n=304)	5	9	29	57
Legal Assistance (n=77)	14	23	20	43
Assessment/counseling for other mental health problems (n=154)	12	17	33	38

Note. Row percentages may not total to 100% due to rounding.

A second way to answer this question is to compare the hours of services received by clients with a good outcome versus those with a poor outcome. These comparisons are shown for discharge, six months follow-up and twelve months follow-up in Table 32. At discharge, we find that outpatient clients with good outcomes received significantly more hours of group and family counseling than clients who relapsed. At six months follow-up, clients with good outcomes received significantly more hours of individual, group, and family counseling than clients that relapsed. At twelve-months follow-up, there were no significant differences in terms of hours of services between clients who had good outcomes and those that relapsed.

Table 32

Comparison of Gambling Treatment Service Hours and Relapse

Treatment Service Hours	No Relapse *Mean (SD)*	Relapse *Mean (SD)*	*t*	*p*
Discharge for Outpatient Clients (n=186)				
Assessment	2.1 (1.0)	1.7 (0.7)	1.8	.08
Individual Counseling	10.0 (14.4)	6.0 (8.2)	1.2	.24
Group Counseling	53.3 (53.9)	21.8 (24.8)	2.5	.01
Family Counseling	5.0 (5.6)	1.2 (3.3)	4.3	<.001
Six Months Follow-up (n=298)				
Assessment	3.9 (2.1)	3.3 (2.2)	2.0	.05
Individual Counseling	11.4 (10.5)	7.0 (6.6)	2.7	.007
Group Counseling	83.4 (52.0)	49.7 (50.1)	4.0	<.001
Family Counseling	11.1 (8.4)	7.0 (8.2)	3.0	.003
Twelve Months Follow-up (n=208)				
Assessment	4.0 (2.1)	3.7 (2.3)	0.7	.49
Individual Counseling	10.7 (9.3)	8.4 (5.7)	1.3	.20
Group Counseling	82.5 (54.0)	63.1 (55.4)	1.8	.08
Family Counseling	11.0 (8.5)	9.9 (8.9)	0.7	.51

Note. M = *Mean or average*; SD = *standard deviation*; *t = t-test; and p = significance level.*

A third way to answer this question is to compute a regression analysis to see if hours of different treatment services can explain outcome. These results are shown in Table 33. We find that the relationships between hours of different services and outcome are similar to the analyses above. That is, the number of hours of group counseling was again correlated with outcome at all three outcome assessments. Family counseling was correlated with outcome at discharge, but not at six or twelve months follow-up. It should noted, however, that hours of treatment services explained a small amount of the variance in outcome, 13%, 8%, and 3%, at discharge, six months follow-up, and twelve-months follow-up, respectively.

Table 33

Multiple Regression of Treatment Service Hours and Outcome (Gambling Frequency)

Regression Step	Treatment Service	*beta in*	*Multiple r*	r^2
Gambling Frequency at Discharge for Outpatient Clients (n=186)				
1	Family Counseling	-.27	.25	.06
2	Group Counseling	-.26	.36	.13
Gambling Frequency at Six Months Follow-up (n=298)				
1	Group Counseling	-.28	.28	.08
Gambling Frequency at Twelve Months Follow-up (n=208)				
1	Group Counseling	-.17	.17	.03

Predictors of Treatment Attrition and Relapse

The eighth research question is: What are the predictors of treatment attrition and relapse as shown by statistical analyses? First we define attrition as the treatment providers report that the client did not complete treatment. The predictors were drawn from the pool of items from the Gambling Treatment Admission Questionnaire (GTAQ) that assesses the client's pretreatment functioning.

Predictors of Treatment Attrition

This analysis addresses who dropped out of treatment and whether we can predict who the dropouts are going to be from their pretreatment data. Because residential and outpatient treatment have very different dropout rates, this analysis will be computed separately for each treatment modality. Table 34 shows the predictors of attrition for outpatient treatment and Table 35 shows the predictors for residential treatment.

For outpatient treatment, about half (48%) of the clients dropped out of treatment. A multiple regression indicated that 20% of the variance in attrition can be explained by four predictors. The best predictors of attrition are stage of change, age, level of education, and GA participation. The best single predictor is stage of change, that is, the lower the stage of change, the more likely the client is to drop out of treatment and conversely, the higher the stage of change, the more likely the client is to complete treatment. The second best predictor of attrition is age, that is, the younger the client, the more likely they are to drop out and conversely, the older the client the more likely they will complete treatment. The third best predictor of attrition is level of education, that is, the lower the level of education, the more likely the client is to drop out of treatment and conversely, the higher the level of education, the more likely the client is to complete treatment. The fourth and final predictor is GA participation. Clients who had not participated in GA prior to admission were more likely to drop out of treatment, and conversely, clients who participated in GA were more likely to complete treatment.

For residential treatment, only 9% of clients dropped out of treatment. A multiple regression indicated that 15% of the variance in attrition can be explained by four predictors. The best predictor of attrition is ASI days of conflict with family prior to admission, that is, the more days of conflict with family, the more likely they are to drop out of treatment. The second best predictor of attrition is TLFB days of gambling prior to admission, that is, fewer days of gambling the more likely the client was to drop out of treatment. The third best predictor is number of children, that is, clients without children were more likely to drop out of treatment. The fourth and final predictor is marital status, that is, married clients were more likely to drop out but this was a small correlation.

It should be noted that these predictions are weak and no strong predictors of attrition were found in both residential and outpatient settings. It is not possible to accurately predict which clients will drop out of treatment. There are other reasons why clients drop out of treatment and why they complete treatment and these need to be explored in future research. Some other possible reasons why clients drop out of treatment include impulsivity, child care, work schedules, and biological and environmental causes, to name a few.

TABLE 34

Multiple Regression to Predict Treatment Attrition in Outpatient Treatment (n=257)

Regression Step	Predictor Variables	*beta in*	*Multiple r*	r^2
1	Stage of Change at admission (low stage of change)	-.21	.28	.08
2	Age (younger)	-.24	.36	.13
3	Level of Education (less education)	-.21	.43	.18
4	GA participation prior to admission (no participation)	.13	.45	.20

TABLE 35

Multiple Regression to Predict Treatment Attrition in Residential Treatment (n=173)

Regression Step	Predictor Variables	*beta in*	*Multiple r*	r^2
1	ASI days of conflict with family prior to admission (more days of conflict)	.22	.21	.05
2	TLFB Days of gambling prior to admission (fewer days of gambling)	-.21	.30	.09
3	Number of children (fewer children)	-.24	.35	.13
4	Marital Status (married)	-.17	.39	.15

Predictors of Gambling Frequency at Discharge from Outpatient Treatment

This analysis is limited to only outpatient clients because residential clients did not have the opportunity to gamble during the course of treatment and therefore all residential clients report no gambling at discharge. The predictor variables were drawn from the pool of items from the Gambling Treatment Admission Questionnaire that assesses the client's pretreatment functioning.

A multiple regression indicated that 13% of the variance in gambling frequency at discharge can be explained by three predictors. Table 36 shows the predictors of gambling frequency at discharge. The best predictors of gambling frequency at discharge among outpatient clients are longest period of abstinence prior to treatment, number of lifetime psychiatric disorders and stage of change. The strongest predictor was the longest period of abstinence prior to treatment, that is, fewer days of abstinence predicted higher gambling frequency at discharge. The second best predictor was number of ASI lifetime psychiatric disorders, that is, more psychiatric disorders predicted more frequent gambling at discharge. The third and final predictor is stage of change, that is, a low stage of change predicted higher gambling frequency at discharge. These three predictors accounted for only 13% of the variance in gambling frequency at discharge. It should be noted that it is not possible to accurately predict which clients will be gambling at discharge.

Table 36

Multiple Regression to Predict Gambling at Discharge for Outpatient Clients (n=181)

Regression Step	Predictor Variables	*beta in*	*Multiple r*	r^2
1	Longest period of abstinence in six months prior to treatment (fewer days of abstinence)	-.22	.27	.07
2	Number of lifetime psychiatric disorders (more disorders)	.19	.33	.11
3	Stage of Change (low stage)	-.16	.37	.13

Predictors of Gambling Frequency at Six-Months Follow-up

This analysis identifies predictors of gambling frequency at six months following treatment. This analysis looks at whether outcome at six months follow-up can be predicted from the client's pretreatment and treatment data. The predictor variables were drawn from the pool of items from the Gambling Treatment Admission Questionnaire that assesses the client's pretreatment functioning as well as the Gambling Treatment Discharge Questionnaire and Gambling Treatment Services Questionnaire.

Table 37 shows the predictors of gambling frequency at six months follow-up for outpatient clients. The three predictors of gambling frequency at six-months follow-up for outpatient clients are the client's gambling frequency at discharge, ASI compulsive behavior assessed at discharge, and client effort at recovery. Stated another way, the outcome at discharge was a good predictor of outcome at six-months follow-up. The second best predictor was ASI compulsive behavior assessed at discharge, that is, clients who experienced compulsive behaviors during the course of treatment were more likely to be gambling at six months follow-up. The third best predictor of gambling frequency is the working GA steps, that is, if the client indicated they were not working the GA steps the more likely they were to be gambling at six months follow-up. These three predictors account for 40% of the variance in relapse. The best single predictor of gambling frequency at six months follow-up is client report of gambling outcome at discharge from treatment, that is, clients who were gambling at discharge were more likely to be gambling at six months follow-up.

Table 37

Multiple Regression to Predict Gambling at Six-Months Follow-up in Outpatient Clients (n=144)

Regression Step	Predictor Variables	*beta in*	*Multiple r*	r^2
1	Gambling outcome at discharge (gambling during treatment)	.47	.58	.34
2	ASI Compulsive behavior in past 30 days assessed at discharge (did experience compulsive behaviors in past 30 days)	.22	.61	.38
3	Effort at recovery assessed at discharge: have you worked on GA steps? (Not working on GA steps during treatment)	.17	.63	.40

Table 38 shows the predictors of gambling frequency at 6-months follow-up for residential clients. The three predictors of gambling frequency at six-months follow-up are the level of satisfaction with the services they received; marital status; and days gambling in the four weeks prior to admission. The best single predictor of gambling frequency at six months follow-up is client satisfaction with treatment, that is, dissatisfaction with treatment predicted gambling frequency at six months follow-up. The second best predictor was marital status, that is, unmarried clients were more likely to be gambling at six months follow-up. The third best predictor was days of gambling prior to treatment, that is, more days of gambling prior to treatment predicted more frequent gambling at six months follow-up. These three predictors account for 20% of the variance in gambling frequency at six months follow-up for residential clients.

Table 38

Multiple Regression to Predict Gambling at Six-Months Follow-up for Residential Clients (n=127)

Regression Step	Predictor Variables	*beta in*	*Multiple r*	r^2
1	How satisfied were you with the overall service you received (dissatisfied)	.33	.33	.11
2	Married (unmarried)	.22	.40	.16
3	Days of gambling prior to admission (more days of gambling)	.19	.45	.20

Services Requested by Family Members to Facilitate Recovery

The ninth research question: What services are needed by the families of pathological gamblers in order to facilitate the recovery of the pathological gambler and the return to a pre-morbid level of family functioning? As noted above, there were 47 significant others who completed the Significant Other Discharge Questionnaire (SODQ) and most are from only two treatment providers. This low number of completed SODQs is unfortunate, because it is an important part of the study. Treatment providers explained that it was difficult to administer SODQs to Significant Others for a number of reasons. First, some clients do not have a Significant Other. Second, some clients do not invite their Significant Other to be involved in treatment and some Significant Others do not want to be involved in treatment. Third, because Significant Other involvement in treatment is oftentimes limited, for example, one evening a week, treatment providers report that they do not have time to administer the SODQ during the brief time the Significant Other is at treatment. Fourth, the residential program often times has clients from great distances away and therefore family members may be less likely to come to treatment for the designated times that family members are to participate in treatment. Nevertheless, there are 47 completed SODQs and the results from these 47 SODQs will be reported.

Of the 47 completed SODQs, 19 are from Fairview, 14 are from Vanguard, 6 are from GIS in Duluth, 3 are from Jeff Cottle, 2 are from Recovery Plus in St. Cloud, and Lutheran Social Services, Recovery Plus, and Gamblers Choice each have one SODQ. The SODQ includes both quantitative as well as qualitative items. The qualitative items are those that allow the respondent to hand write their answers to a question.

Of the 47 significant others who completed the SODQ, most are spouses (n=34) or a family relative such as parent or sibling (n=11); and one is a fiancé; and one is a friend. Most significant others have known the client for many years and most have had daily contact with the client prior to treatment. Most significant others (n=42) participated in treatment.

Table 39 shows the ratings of how helpful specific treatment components were to the significant other. While family participation in treatment is a part of most treatment, it is fairly limited and Table 39 shows that Significant Others primarily participate in group counseling; family counseling; lectures; films/videos; and do not participate or are not offered participation in assessment or counseling for other mental health problems; individual counseling; homework assignments; legal assistance; financial counseling; or orientation to GA/Gam Anon, which is unfortunate since these services are needed by family members, particularly financial counseling and orientation to Gam Anon. While it is common to include family members only at designated times during the course of treatment, it is disconcerting how many significant others reported that they did not receive treatment services that may have been helpful, such as financial counseling or orientation to Gam-Anon.

Table 39

Treatment Service Helpfulness as Rated by Significant Other (n=43)

Treatment Service	Much help %	Some help %	Little help %	No help %	Did not receive %
Individual Counseling	20	8	0	0	72
Group Counseling	49	21	0	0	30
Family Counseling	48	14	0	0	38
Peer Support Group	33	5	0	0	62
Financial Counseling	12	7	5	2	73
Lectures	31	21	2	0	45
Homework Assignments	17	7	2	0	73
Films/Videos	19	33	2	0	45
Orientation to GA/Gam-Anon	12	17	2	0	68
Legal Assistance	2	0	0	0	98
Assessment or counseling for other mental health problems	5	3	0	0	92

Note. Row Percentages may not total to 100% due to rounding.

The SODQ includes qualitative items that specifically address the research question. SODQ item #37 asks the Significant Other what services they needed from the treatment providers. Table 40 shows the responses from the significant others. These responses should not be presumed to be directed at any one treatment provider, nor are the representative of all significant others. These response are from 47 significant others who were seen by a number of treatment providers.

Upon reading the responses in Table 40, a number of themes are apparent. First, family members want to learn about the disorder. They want to know what causes Pathological Gambling and how it is treated. They want to have their questions answered. They want to know their role in the treatment process. Are they to be involved in treatment or not? They want to know what services the treatment provider can offer them as well as what resources are available in the community. Some Significant Others have their own addiction they are concerned about and may need treatment. They state that they are left to deal with the financial problems and need assistance with these issues and/or referral to other services in the community. Some Significant Others wanted counseling for themselves and for how to deal with their loved one who suffers from Pathological Gambling. In summary, family members indicate that they would like more attention from the treatment provider and more communication about the treatment process.

Table 40

Significant Other Discharge Questionnaire responses to Items #37 and #38

Qualitative responses to SODQ #37: Looking back on when you were about to start participating in the client's treatment, what types of services did you need from the treatment provider? A follow-up question, SODQ #38 asked if they received these services and if not, why not?
1. counseling, ideas, direction. Could have used more time, but that was our fault as we are leaving for the winter. The counselor worked with us as much as he could with our time frame.
2. provided me with one on one counseling
3. Honest, open feedback from the counseling staff as to how treatment was going and expectations after discharge. What they felt was expected from the family participation and what type of information other than the family interview did they need. Who they wanted to be involved in the processes. SODQ38: Not enough staff!! It appears there is some communication difficulty. Family members have asked why the treatment center doesn't get back to them, including myself. This needs some improvement. Otherwise, this is an excellent facility.
4. I didn't know the treatment program, only what I had read on the internet. Met with a counselor upon admissions and my questions were answered.

5. more orientation as to what the program had to provide and potential treatment options
6. more specifics. I feel lonely leaving here today. I don't know if I can be as much help as I must be, but I pray.
7. Gamanon services; expectations?
8. understanding about gambling and it's progression. Understanding about financial management
9. GA, AA, Alanon, treatment support groups, and financial info
10. family group, small group
11. better understanding in how to be supportive of the addict without making it easy for the addict to continue in her addiction
12. we would have appreciated more information on all aspects. We very much would have liked to visit with the counselor(s) w/out the client present.
13. the ability to understand the addiction, the ability for myself to be open with my thoughts towards the gambler.
14. I would have liked to have been better informed of the process, the treatment methods. I felt as if I needed to figure this out on my own. Maybe this is a part of my own personl growth.
15. reassurance for her care and the positive feelings for success in the program, strong willed counselor feedback that was positive and informational, good staff and facility.
16. We needed to talk about the financial piece and a plan. We ended up refinancing our home, which I now believe was a mistake. I also know my husband was not honest with everything and maybe with individual therapy he would have been! SODQ38: I have no idea--maybe not offered in this program
17. The understanding of what the addict is going through and what they are trying to hide from or the anger they have and how or why they numb their feelings and what I can do to help them with the healing process. SODQ38: I tried to get more info and ask questions. I need to let them know what I need.
18. Direct contact from group leader at the beginning of program to be made aware of my participation options. Spouse had a lot to deal with and didn't mention as she was not aware.
19. Interaction with other spouse/partners who had similar concerns, a chance to see the program in operation, relating to spouse in a face to face conversation.
20. someone to voice my fears and explain the process and reasoning of this addiction

21. Need help to understand causes of my wife's addiction, and what to do to restore the trust in our relationship.
22. answer questions; family counseling
23. I had to attend to my own gambling addiction
24. I needed to understand what a gambling addiction is and what treatment the patient was going to receive. SODQ 38: I only went to 1 session
25. Explanation of the disease and how to handle feelings and reason why or how this can happen.
26. Financial, family support, counseling for the non-gambling members of the family. SODQ38: never offered or provided
27. I trusted the treatment provider to be professional and deal with her as necessary; making proper evaluations/assessments, implementing an appropriate treatment plan, assessing her progress and adjusting as needed.
28. Wasn't sure- just interested in doing more recovery work on myself
29. Needed them to provide services to help client to not gamble and services that allowed me to participate at my request
30. I realize that the focus needs to be on helping the gambler get well but the entire family needs assistance in getting well and having new strategies in dealing with life and what's happened. The financial responsibilities often fall on one person. Families should be much more involved, often families are left at the mercy of what their gambler tells them- family nights or couples counseling. Families need resources and people who are just there for them especially when they are in crisis. SODQ38: While I received support from some of the counselors, there is still a huge gap when it comes to families. A more formalized plan for family might be helpful as well as some type of outreach worker just for families.
31. explanation about the gambling addiction and the thought process behind it, what to expect during and after treatment, and knowing how many people this problem affects.

The follow-up question asked, Did you receive the services you needed? 22 (58%) replied “Yes, all the services”; 10 (26%) replied, “some, but not all”; and 6 (16%) replied “No, I did not receive any of these services”.

Table 41 shows Significant Other responses to the question “If you received treatment services, what service was most helpful to you as a significant other? Themes included the treatment provider, family group, and information/knowledge.

Table 41

Significant Other Discharge Questionnaire Item #39

Item #39: “If you received treatment services, what service was most helpful to you as a significant other?”
1. The counselor was very understanding and able to give good insight and direction.
2. one on one counseling, being able to talk about what's going on
3. family group
4. the lecture/video was informative and the group sessions were beneficial. It helped to talk to other families and the group was a safe place to confront client by all family members.
5. family group on Mondays
6. just being involved with the group process
7. learning and understanding that gambling is truly an addiction and not just irresponsible behavior.
8. meeting with the families, counselors and clients together
9. Listening to others who have been further along in treatment
10. family group sessions
11. group sessions which helped us understand we were not alone
12. The support and the understanding of the addiction. Some of which I learned through Gam-anon and friends.
13. lectures, videos, financial advisement, spiritual comfort and understanding, family groups
14. I did attend family nights and the Tuesday night family support groups. I really benefitted from the lectures and group sharing
15. The counseling we received in group and family counseling.
16. the family counselor lecture and group
17. meeting with the client group and hearing about problems. Talking face to face with spouse during this group. Spouse/partner/SO group sessions

18. family night with his group
19. The family program group sessions were most helpful.
20. I attend family night which helped me understand the struggle.
21. The knowledge I received
22. explanation of how the disease works and brain functions.
23. Personal counseling and consulting with my SO
24. talking with counselor along with client in private
25. Having contact with my gambler's counselor helped, also my gambler allowing his counselor to give me information was helpful. It helped to start to rebuilding trust.
26. the counseling with both therapists and my fiance as one on one sessions- this really helped us learn how to better communicate with one another.

Table 42 shows Significant Other responses to the question: What would you change about treatment? Themes included desire for more communication between the treatment provider and family; lengthening treatment; desire for individual treatment option; and need for specific types of help, such as financial counseling.

Table 42 Significant Other Discharge Questionnaire #41: "What would you change about treatment?"
1. the spouse that was affected by all the gambling really needs a support group that deals with gambling. I'm not aware of any group just for that. I have been to alanon- didn't feel like it fit or the group of people weren't in the same situation.
2. Communication with the family members; Family groups on the weekends for more families to participate.
3. Maybe a longer program
4. I would include individual therapy or counseling for clients; It would have been beneficial to have individual family based counseling, individual one on one time with counselors and aftercare plan to include family
5. longer period
6. more communication and/or accessability to counselor
7. More information for family/friends.; Continue to encourage treatment for families/friends through programs such as Gam-anon or literature.
8. to use and re-use the word and definition of honesty with family and within; increase family days for strengthening of the family unit, for the family to understand where the client went wrong and identify how not to do it in the future.
9. I would like to have been offered help on how to deal with the debt. I would like to have seen him get individual meetings with counselors (he had two, 15 minutes each). He also complained about Jim talking too much and not letting the group share. Give the families an overview of the program. Let them know that their participation will make a greater impact on the gambler's recovery.
10. More family counseling classes; To continue the service if possible for families for at least once a month for a couple of years. I learned so much in a little time and sometimes it's easy to forget to practice what I've learned.
11. is there any way possible to provide the family (without the client) therapy at a different time period?

12. more contact in beginning of program
13. Try to have client group sessions and spouse sessions on same time schedule. Client often had to wait 45 minutes for me to finish my session. I was happy to be so actively involved. During Phase 1 it was helpful to the client to have me come 2 of 4 days. It made the week feel shorter for him. More effort should be used in strongly encouraging family members to participate on Wed. nights. It was informative to me and I feel it is crucial to the client's progress.
14. Start the program with the lecture on the brain. It puts everything else into proper perspective and helps you understand that addiction is an illness.
15. It could use more organization. Also, sometimes one family was too vocal in group and that needs to be monitored.
16. make sure, if a family member comes on a Wed that you always give them time rather than all lecture or movie. They may not be able to come back.
17. Have more knowledgeable and caring counselors. I think family sessions in evening could be extended.
18. More help for affected non-gamblers; They need one on one counseling sessions to deal with issues brought on by the gambler. They need help on how to pay bills that the gambler caused.
19. Family members should be specifically contacted and notified of the services available to them
20. Treatment needs to be about the gambler but it also needs to involve families- it would be good to have family support and involvement. It's good to have treatment separate but to bring family in at some point. I would like to see some legislation to help families and gamblers, educators, financial relief, treatment monies, advertisements, etc.
21. I would have liked to meet the other members and attend a group session to see what the support and challenges were like- although I understand the need for confidentiality.

Validity of Client Self-Report

The tenth research question is: How valid is the client self-report as determined by comparing client self-report to public records? Clinicians and researchers alike rely on the validity of self-report to make a diagnosis of Pathological Gambling in clinical settings and to measure the effectiveness of gambling treatment. Therefore, it is critical that we use valid and accurate information and that we understand the conditions under which we are most likely to obtain valid self-reports (Babor, Stephens, & Marlatt, 1987). The validity of self-report has received extensive research attention in the field of alcohol and drug abuse (Hesselbrock, Babor, Hesselbrock, Meyer, & Workman, 1983; Hubbard, Eckerman, & Rachal, 1976; Sobell, 1978; Sobell & Sobell, 1990) and it is no less important in this field. However, because there are no biological markers for gambling behaviors, it is more difficult to establish the validity of the self-report of a pathological gambler. Also, deception is a cardinal sign of pathological gambling and is included as one of the ten diagnostic criteria for PG in DSM-IV (APA, 1994). There is a concern that if one of the cardinal signs of pathological gambling is dishonesty, particularly lying to family and concealing signs of gambling, this raises the question of the validity of clients' self-report on questionnaires. That is, Can we trust what clients tell us about their gambling? This study examined the validity of client self-report by comparing client self-report to four separate public records. The four public records included searches of three criminal court record sources (Hennepin County; Ramsey County and Minnesota Bureau of Criminal Apprehension) and a search of federal bankruptcy records.

First, a comparison of client self-reported arrests and public criminal court record searches were compared. Clients were asked if they had been arrested for gambling-related illegal activities including theft by check, forgery/fraud, embezzlement, drug charges, assault/domestic violence, prostitution, and illegal gambling offenses. Public criminal court records were searched at Hennepin County Criminal Court, Ramsey County Criminal Court and state public criminal records were searched at the Minnesota Bureau of Criminal Apprehension (BCA). The client's answer to the arrest question was compared to the results of the criminal record search. Court records searches should be interpreted with caution. Although efforts were made to obtain a complete search of public criminal records, gaps exist in the record-keeping system. If the client was arrested outside of Hennepin and Ramsey counties or outside of Minnesota, their arrest record may not be found in the search of Hennepin and Ramsey County and state records. If the county where the arrest occurred did not report the crime to the Minnesota BCA, it will not be in the BCA database. Therefore, these results should be interpreted cautiously. Table 43 shows the results of this comparison and the rate of agreement ranged from 91% to 100%. The public criminal records are used as the gold standard for computing false-negative and false positive rates. The false-negative column shows the number of clients who denied arrest in the past year but the criminal court record showed an arrest. The false-positive column shows the number of clients who reported an arrest in the past year but the criminal court record does not show an arrest. These are likely arrests in other counties that were not reported to the BCA or were so recent that they had not been reported to the BCA at the time of the search. From a research perspective, we are primarily concerned about false-negatives, that is, clients not reporting an arrest and public records showing an arrest, which would raise questions about the veracity of the client self-report. This would show under-

reporting or deception. It is reassuring to find that there were few instances of false negatives. Clients were much more likely to report arrests that were not corroborated by the criminal record search.

Table 43

Validity of Client Self-Report:
Comparison of client self-report of arrests to
Minnesota Bureau of Criminal Apprehension Criminal Records

	Agreement %	*False-Negative n*	*False-Positive n*	*True-Negative n*	*True-Positive n*
Forgery/counterfeiting	95	12	6	367	8
Theft by check	91	21	13	335	9
Embezzlement	98	0	8	369	3
Robbery or burglary	97	3	7	374	4
Drug charges	99	0	4	379	4
Assault or domestic violence	97	9	1	373	4
Prostitution	100	1	0	383	0
Gambling offenses	99	1	1	382	0
Violation of probation/parole	98	0	6	374	1
Current legal status	92	8	26	351	41

Note. Counts do not total to 436 due to missing data.

Second, Minnesota public bankruptcy records were searched and the results of this search were compared to the client's answer to a bankruptcy item in the GAMTOMS and this comparison is shown in Table 44. The bankruptcy item in the Gambling Treatment Admission Questionnaire asks if the client has filed bankruptcy in the past 12 months in order to gamble, due to gambling problems, or to pay a gambling debt. The Minnesota bankruptcy records includes bankruptcies in the past year and prior. The level of agreement between client self-report and the public bankruptcy record was 92%. There were 9 clients who denied filing bankruptcy in the past 12 months but had a record of bankruptcy in the Minnesota bankruptcy records (false-negative). There were 24 clients who reported bankruptcy on the GAMTOMS but no record of a bankruptcy was found in the record search (false-positive). Overall, there was a high degree of agreement between client self-report of bankruptcy and the public bankruptcy records.

Table 44

Validity of Client Self-Report:
Comparison of Client Self-report of Bankruptcy to Minnesota Bankruptcy Records

	Agreement %	*False-Negative n*	*False-Positive n*	*True-Negative n*	*True-Positive n*
Bankruptcy in past year	92	9	24	360	17

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Appendices

Appendix A
Descriptions of Treatment Providers

Appendix B
Copies of GAMTOMS Instruments

Gambling Treatment Admission Questionnaire (GTAQ)
Gambling Treatment Discharge Questionnaire (GTDQ)
Gambling Services Treatment Questionnaire (GTSQ)
Significant Other Discharge Questionnaire (SODQ)
Gambling Treatment Follow-up Questionnaire (GTFQ)

Appendix A

Gambling Treatment Provider Therapeutic Profile

This report describes the therapeutic orientation(s) employed at each of the eleven gambling treatment providers. The purpose of this report is to better understand the treatment process that occurs at each of the eleven providers. While therapists need to meet a minimal level criteria set by the state for qualification and reimbursement, there is little information about the actual treatment itself. The specific research questions are: What is/are the therapeutic orientation(s) employed? What is the process of therapy? What are the goals of treatment and how are those goals achieved? What therapeutic activities occur in treatment to reach those goals? To answer these questions, two instruments were administered to treatment providers: The Gambling Treatment Provider Questionnaire (GTPQ); and the Counselor Treatment Approaches Questionnaire (CTAQ; Kasarabada et al., 2001). Copies of both instruments are available upon request.

The Gambling Treatment Provider Questionnaire (GTPQ) was adapted for this project from the Drug Abuse Treatment Outcome System-Unit Director's Questionnaire (DATOS-UDQ) and Counselor's Questionnaire (DATOS-CQ), which were instruments used in a national study of the effectiveness of drug abuse treatment (DATOS). The DATOS project developed two instruments to measure a number of the treatment variables that appear to be adaptable for use in a gambling treatment outcome assessment battery, such as treatment components and treatment costs. The GTPQ is a paper and pencil questionnaire that takes about 30 minutes to complete and was administered at the beginning of the project to gambling treatment providers. The questionnaire is multidimensional and measures the following domains: counselor characteristics; program/clinic characteristics; treatment information and planning; counseling, therapy approach, and assessment; client participation and responsibility; services offered; referral process; and discharge procedures.

The GTPQ permits us to evaluate the following variables related to treatment components: (a) types and amounts of treatment components; (b) counselor characteristics; (c) program/clinic characteristics; (d) treatment information and planning; (e) counseling, therapy approach, and assessment; (f) client participation and responsibility; (g) referral process; and (h) discharge procedures.

The Counselor Treatment Approaches Questionnaire (CTAQ) is a 48-item measure that assesses five treatment approaches: cognitive-behavioral; family systems; 12-step; case management; and practical counseling. While the Cognitive-Behavioral Therapy (CBT), family systems, 12-step, and case management are well known therapeutic approaches, the authors of the CTAQ also included "practical counseling" which refers to a traditional approach involving showing empathy and concern for the client, developing rapport and trust, problem-solving techniques, working on other problems besides addiction, and encouraging clients to reconnect with their communities. The CTAQ assesses the therapeutic orientation of the treatment provider, in terms of their therapeutic beliefs, individual treatment practices, and group practices. Response options include 1=Strongly Disagree; 4=Neither Agree Nor Disagree; and 7=Strongly Agree. The scores are averages across items that make up each scale. Therefore, the scale scores can be interpreted using the same response options as the items. The higher the score, the

more the therapist adheres to that approach. A score greater than 4 indicates that the therapist values this therapeutic approach and a score below 4 indicates the therapist does not value this approach.

Each provider will be described in terms of their primary therapeutic orientation(s) based on their GTPQ responses and CTAQ scores. GTPQ responses are shown in Table 1 and CTAQ scores are shown in Table 2.

-Arrowhead describes their therapeutic orientation as eclectic, and in fact, they had high CTAQ scores on most treatment approaches. Their highest CTAQ scores were on CBT, practical counseling, and 12-steps.

-Club Recovery reported their therapeutic orientation as social work and CBT. On the CTAQ, their highest scores were in CBT, case management (a typical social work activity), family systems, and practical counseling. They did not value or endorse a 12-step approach.

-Fairview Recovery Services reported an eclectic therapeutic orientation including 12-step, CBT, Gestalt, Rational-Emotive Therapy, Reality Therapy, Existential, Adlerian, and Rogerian. On the CTAQ, they endorsed a primarily CBT and case management orientation in terms of beliefs and practical counseling, with a CBT and family systems in terms of their group work. Given Fairview's tradition of 12-step approach, it was somewhat surprising to see that they did not endorse 12-steps in their beliefs and group work on the CTAQ. Fairview does not do individual treatment and therefore did not answer the CTAQ questions regarding individual practice.

-Gamblers Relief described their approach as a combination of 12-step, CBT, and psychodrama. This was born out on the CTAQ. Two CTAQs were completed by two staff members and there was some agreement and some disagreement about therapeutic approach. There was agreement that CBT and case management were valuable, but the two staff disagreed about the value of family systems and 12-steps. In terms of group practice, both staff agreed on the value of CBT and practical counseling but there was disagreement about group techniques. In terms of individual practice, there was agreement about the value of CBT and practical counseling, but there was disagreement about case management and family systems. 12-step had moderate value for individual practice for both staff.

-Susan Johnson described her approach as a combination of 12-step, CBT, and humanistic. On the CTAQ, she exhibited high scores for CBT, 12-step and moderate scores for case management and family systems. In terms of group practice, she valued CBT, practical counseling, and family systems. In her individual work, she valued CBT, practical counseling, family systems, and 12-steps and did not value case management.

-Gamblers Intervention Services described their approach as 12 step and CBT. Four staff members each completed a CTAQ. In terms of beliefs, they all valued CBT, case management, and family systems. There was less agreement about 12-steps, one staff valued 12 step, while the other two were neutral and one did not value 12-step. In terms

of group practices, both counselors who conduct group therapy valued all five approaches, CBT, practical counseling, group techniques, family systems, and 12-steps. In terms of individual practices, all four staff valued practical counseling, but there was less agreement about CBT, family systems, 12-steps, and case management. Specifically, three staff valued CBT and one was neutral. Two staff valued family systems and two were less favorable. Three staff valued 12-steps and one was neutral. Three staff valued case management and one was neutral.

-Lutheran Social Services described their approach as 12-step and eclectic. Two staff completed one CTAQ together. Their CTAQ reflected a true eclectic therapeutic approach. In terms of beliefs, they valued all four approaches. In terms of group practice, they again valued all five therapeutic approaches and for individual practice, they again valued all five therapeutic approaches.

-Recovery Plus described their therapeutic approach as a combination of 12-step, CBT, and eclectic (Rogerian, group process, client-centered, systemic, and dialectical behavioral therapy). The CTAQ also reflected this eclectic approach and they valued all four therapeutic approaches in terms of beliefs. Again, on group and individual practices, they valued all five therapeutic approaches.

-Jeff Cottle, Psychological Services, Inc., describes his therapeutic approach as CBT. His responses on the CTAQ reflect this as well. He values CBT and case management somewhat, but does not value family systems or 12 steps. He does not conduct group therapy and did not answer these CTAQ questions on group practices. In terms of individual treatment practices, he values CBT and practical counseling and is neutral regarding family systems and is negative in his view of the value of 12-steps and case management for individual treatment.

-Gamblers Choice described their therapeutic approach as 12-step, client-centered and Adlerian. Two counselors completed the CTAQ separately. Both counselors valued CBT, case management, and family systems, and both counselors did not value 12-steps in their beliefs about treatment. In terms of group practices, both counselors valued CBT, practical counseling, group techniques, and family systems. The counselors were in disagreement about the value of 12-steps for group practice. In terms of individual practices, only one counselor conducted individual treatment and they valued CBT, practical counseling, family systems, and case management and were neutral as to the value of 12-steps for individual treatment.

-Vanguard described their therapeutic approach as residential 12-steps. In terms of therapeutic beliefs, they were eclectic and valued CBT, case management and family systems. They did not answer enough 12-step items to score this scale. In terms of group practices, they value all five therapeutic approaches and for individual practices, they also value all five approaches, although case management was valued less than the other four approaches.

Table 1

Compulsive Gambling Treatment Program Profile

	Treatment Programs		
	Arrowhead (Virginia)	*Club Recovery (Edina)*	*Fairview Recovery Services (Minneapolis)*
Model/Therapeutic Orientation	Eclectic	Social work and cognitive-behavioral therapy	Combination of 12-step, cognitive-behavioral and eclectic (Gestalt, Rational-Emotive Therapy, Reality Therapy, Existential, Adlerian & Rogerian)
Staff	2 full time counselor and supervisor	1 full time clinical director/therapist	4 part time for assessment, referral, therapy, aftercare, on call and administration
Primary Treatment	3 hrs/2 evenings a week for 12 weeks	2 hrs/2 days week for a length of time that depends on the client	2 hrs/4 evenings a week for 6 weeks
Aftercare	3 hrs/1 evening a week for 6 weeks	Not listed	1.5 hrs/2 evenings a week for 10 weeks
Treatment Components	Intake, orientation, group and individual counseling, relapse prevention	Stages are not imposed upon clients	Assessment, orientation, group therapy, videos, guest speakers, lectures, discharge planning and aftercare
Discharge Procedures	Successful completion of treatment plan and stable life areas	When changes in clients thinking and behavior have given them self confidence that he/she can maintain abstinence	Completion of required Phase I & II sessions and assignments and abstinence
Treatment Goal	Abstinence	Abstinence	Abstinence and balance of life

Compulsive Gambling Treatment Programs			
Treatment Programs			
	Gamblers Relief (Savage)	*Susan Johson (Apple Valley)*	*Gamblers Intervention Services (Duluth)*
Model/Therapeutic Orientation	12-step, Cognitive-behavioral and psychodrama	12-step, Cognitive-behavioral and humanistic	12-step and Cognitive-behavioral
Staff	1 full time, 1 part time, 1 one hour/week	1 part time	8 employees: 3 full time, 5 part time
Primary Treatment	3 hrs/3 days a week for 12 weeks then 2 hrs/2 days a week for 7 weeks	3 hrs/1 evening a week for 20 weeks	3 hrs/3 evenings a week for 5 months (steps 1-5), 3 hrs/1 day a week for 6 weeks (steps 6-12)
Aftercare	2 hrs/1 day a week for 12 weeks	2 hrs/1 evening a week for 4 weeks	Depends on situation. Referral as aftercare from another resource, etc.
Treatment Components	Primary treatment, Relapse prevention and aftercare	Intake, assessment, orientation, treatment plan (if group appropriate enters group, if not more individual sessions, GA sessions, Family sessions are adjunct.	Assessment, orientation/intake, treatment steps 1-5, steps 6-12, discharge
Discharge Procedures	Abstinence from gambling, increase in social support and activities, resolution of family conflicts and decrease in employment and financial issues	Completion of 76 hours of group and assignments, attended individual sessions.	Completion of steps 1-12 and all assignments re: treatment goals, counselor and client together complete summary of their behavior changes in treatment and evaluation of treatment experience
Treatment Goal	Abstinence	Abstinence	Abstinence and/or improvement in variety of areas

Compulsive Gambling Treatment Programs			
Treatment Programs			
	Lutheran Social Services (North Dakota)	*Recovery Plus (St. Cloud)*	*Psychological Services, Inc (Mahtomedi)*
Model/Therapeutic Orientation	12-step and Eclectic	Combination of 12-step, cognitive-behavioral and eclectic (Rogerian, Group process, Client centered, Systemic, Dialectical Behavioral Therapy)	Cognitive-behavioral
Staff	2 full time; 2 part time evaluation, individual and group counseling, GA liaisons	1 full time; 5 part time for assessment, consults, individual and group counseling and education/lectures	1 part time
Primary Treatment	3 hrs/3 days/evenings a week for 16 weeks	6 hrs/2 days a week for 20-25 weeks	1 hour/1 day a week for 26
Aftercare	3 hrs/1 day/evening a week for 8 weeks	3hrs/1 day a week for 12 weeks	None
Treatment Components	Primary treatment and aftercare	Intake, treatment (including relapse prevention) and aftercare, 1-to-1 session are adjunct for 1 hour every or every other week	Assessment and treatment
Discharge Procedures	Completion and sharing of 5 assignments in primary treatment. Completion of steps 4-12 and relapse prevention in aftercare. Client embraces GA.	Completion of identified goals, decrease in or abstinence from gambling, decrease in mental health issues, restoration of supportive relationships, willingness to follow recommendations and treatment plan goals/problem areas	Refrain from problematic gambling for at least 4 months (one slip allowed) and express sense of control over their gambling

Treatment Goal	Abstinence	Abstinence and improvement in quality of life and decrease in mental health issues	Abstinence from all gambling or forms of gambling that were problematic

Compulsive Gambling Treatment Programs		
Treatment Programs		
	Gamblers Choice (Robbinsdale)	*Project Turnabout/Vanguard (Granite Falls)*
Model/Therapeutic Orientation	12-step, Client centered and Adlerian	Residential 12-step
Staff	2 part time for assessment, group and 1-to-1 sessions	2 FT Counselors, 3 FT/PT program aides, 13 FT/PT human service techs, 6 FT/PT nurses, 1 FT nursing supervisor, 1 FT unit coordinator, 1 FT chaplain, 1 FT fitness trainer, 1 PT activity consultant
Primary Treatment	3 hrs/3 evenings a week for 16 weeks	24 hr inpatient for 30 days
Aftercare	3 hrs/2 evening a week for 8 weeks	52 plus weeks
Treatment Components	Assessment, primary and aftercare	Assessment, intake, treatment and aftercare
Discharge Procedures	Completion of all treatment assignments and group participation	Successful completion of goals set by treatment team
Treatment Goal	Abstinence	Abstinence

Table 2

Counselor Treatment Approaches Questionnaire (CTAQ): Therapeutic Beliefs Scale Scores

	Therapeutic Beliefs Scales			
Treatment program	Cognitive Behavioral Therapy	Family Systems	12 steps	Case management
Arrowhead	7	5	4.67	6.67
Club Recovery	7	5	3	6
Fairview	6.25	4.33	4	4.33
Gamblers Relief John Nancy	 6 6.75	 3.67 6.33	 3.67 7	 5.67 6
Susan Johnson	7	5.33	6.33	6
Gamblers Intervention Services Steve Greg Dawn Pauline	 6 6.5 6.75 6.75	 6 5.33 5 6.67	 3.33 4 4.33 6.33	 6.67 5.67 6.67 6.67
Lutheran Social Services	6.5	5.67	6.33	6
Recovery Plus	6.5	5.67	5.33	6.33
Jeff Cottle	7	4.33	3.67	5.67
Gamblers Choice Roger Joyce	 6.5 6.5	 5.33 6.67	 2 3.67	 5.67 7
Vanguard	6.75	6	NA	6.5

Note. NA means Not Available (i.e., missing data).

Table 2 continued

Counselor Treatment Approaches Questionnaire (CTAQ): Individual Practices Scale Scores

	Individual Practices Scales				
Treatment program	Cognitive Behavioral Therapy	Family Systems	12 steps	Case management	Practical Counseling
Arrowhead	6.67	5.25	6.5	3.67	6.67
Club Recovery	7	5	3.5	4	7
Fairview	NA	NA	NA	NA	NA
Gamblers Relief John Nancy	 5.83 6	 4 6.75	 4.75 5.50	 2.33 5.67	 6.67 7
Susan Johnson	7	6.5	6.25	2.33	7
Gamblers Intervention Services Steve Greg Dawn Pauline	 6 4.17 6.83 7	 5 4 6.50 6.75	 4.25 5.50 6.50 7	 5.67 3.67 4.67 6.33	 7 6.33 7 7
Lutheran Social Services	5.83	5.75	6.75	5.33	5.67
Recovery Plus	7	7	6.75	6.33	7
Jeff Cottle	6.67	3.75	1.25	2	7
Gamblers Choice	7	6.25	4	4.67	7
Vanguard	7	7	7	5	7

Note. NA means Not Applicable (i.e., the Fairview Gambling Program does not provide individual therapy).

Table 2 continued

Counselor Treatment Approaches Questionnaire (CTAQ): Group Practices Scale Scores

	Group Practices Scales				
Treatment program	Cognitive Behavioral Therapy	Family Systems	12 steps	Group techniques	Practical Counseling
Arrowhead	7	4.67	6	5.33	7
Club Recovery	7	7	2.67	5	7
Fairview	5.67	5.67	3.33	5.33	6.33
Gamblers Relief John Nancy	 6.33 6.33	 4.67 6	 4.67 5.67	 3 6.67	 6.33 7
Susan Johnson	7	6.33	5	4	7
Gamblers Intervention Services Dawn Pauline	 7 7	 6.33 7	 7 6	 7 6.67	 7 7
Lutheran Social Services	5.67	6	6	6.33	6.33
Recovery Plus	7	6.33	6	7	7
Jeff Cottle	NA	NA	NA	NA	NA
Gamblers Choice Roger Joyce	 7 7	 6.33 7	 3 5.67	 7 6.67	 6.33 7
Vanguard	7	7	6	7	6.67

Note. NA means Not Applicable. Jeff Cottle does not use group counseling in his practice.

GAMBLING TREATMENT *ADMISSION* QUESTIONNAIRE

This questionnaire asks about you and your experiences, including those with gambling. Please read each question carefully. If you have any questions about an item, please ask your therapist/treatment provider. Your answers will be kept confidential, so please respond openly and honestly.

ID# _____ Today's Date (mm/dd/yr): ___ / ___ / ___

DEMOGRAPHICS:

1. What is your date of birth? (mm/dd/yr)

___ / ___ / ___

1a. What is your gender?

1 Male
2 Female

2. With what racial or ethnic groups do you identify? *(circle all that apply)*

1 White
2 Asian/Pacific Islander
3 African American
4 Hispanic
5 American Indian
6 Other _____

3. What is your current marital status?

1 Single / never married
2 Married / partnered
3 Widowed
4 Separated
5 Divorced
6 Living together

4. Do you have children?

1 Yes
2 No

4a. (if yes to Q4) How many children do you have? _____

4b. (If yes to Q4), what are the ages of your children?_____, _____, _____, _____, _____, _____

5. With whom do you live? (circle all that apply)

1 Alone
2 Spouse/significant other
3 Children/step-children
4 Parents
5 Roommate
6 Other (Specify)_____

6. What has been your employment status for most of the past year?

1 Full-time
2 Part-time
3 Occasional/season work
4 Student
5 Unemployed
6 Homemaker
7 Disabled
8 Retired

7. What is your occupation?
(*if retired, what was your occupation?)*

_____

8. What is the highest level of education that you have achieved?

1 Less than high school graduate
2 High school graduate (or GED)
3 Vocational/technical training
4 Some college
5 Community or 2-year college graduate (associate degree)
6 Four-year college graduate (bachelor degree)
7 Graduate degree (masters or doctorate degree)

9. What is your annual household income?

1 Less than $10,000
2 More than $10,000 up to $20,000
3 More than $20,000 up to $30,000
4 More than $30,000 up to $40,000
5 More than $40,000 up to $50,000
6 More than $50,000 up to $75,000
7 More than $75,000 up to $100,000
8 More than $100,000

10. Please read each of the following income sources and indicate which ones you receive:

	Yes	No
a. Wage or Salary	1	2
b. Alimony	1	2
c. Child support	1	2
d. Retirement/Pension	1	2
e. Disability	1	2
f. Public Assistance	1	2
g. Social Security Income	1	2
h. Inheritance/Trust fund	1	2
i. Gambling	1	2
j. Other (Specify)_____	1	2

CLINICAL HISTORY:

11. What was the *main* reason you came to treatment at this time?

1 legal difficulties or court-ordered treatment
2 encouraged/pressured into treatment by spouse, family, or friends
3 work difficulties or treatment suggested by employer
4 my own decision
5 financial difficulties
6 depression, suicidal thoughts or attempts
7 separation or divorce
8 other (specify)_____

12. How many times in your life, before now, have you seen a professional (i.e. counselor, psychologist, psychiatrist) for *gambling problems* in an individual setting (*one-on-one treatment*)?

1 Never
2 One time
3 Twice
4 Three times
5 Four times
6 Five or more times

13. How many times in your life, before now, have you participated in a treatment program for *gambling problems?*

1 Never
2 One time
3 Twice
4 Three times
5 Four times
6 Five or more times

14. Have you ever seen a professional (such as a counselor, psychologist, psychiatrist) for *individual treatment* of?

	Yes	No
a. tobacco	1	2
b. alcohol/drugs	1	2
c. other addictions (such as compulsive shopping, sexual addiction. etc.)	1	2
d. mental health problems	1	2

15. Have you ever seen a professional (such as a counselor, psychologist, psychiatrist) for *group treatment* of?

	Yes	No
a. tobacco	1	2
b. alcohol/drugs	1	2
c. other addictions (such as compulsive shopping, sexual addiction. etc.)	1	2
d. mental health problems	1	2

16. Have you attended any Gamblers Anonymous (GA) meetings in the *past 12 months*?

1 Yes
2 No

16a. (*If yes to Q16*) Approximately how many meetings have you attended in the past year?

_____

STAGE OF CHANGE:

17. Which of the following statements best applies to you right now?

1 I have no intentions of changing my gambling.
2 I am seriously considering reducing or stopping my gambling in the next six months.
3 I plan to reduce or quit my gambling in the next month.
4 I have already begun to reduce or quit my gambling within the last six months.
5 I reduced or quit my gambling over six months ago and have been able to maintain these changes during this period of time.

GAMBLING FREQUENCY:

Below is a list of various types of gambling. Please indicate how often (if at all) you have played the following types of gambling activities within the *last 12 months*.

18. During the past *12 months* how often have you:

	Not in Past 12 months	Less than Once A Month	1-3 Days Month	1-2 Days A Week	3-6 days Per Week	Daily	If you gambled, *where did you **most frequently** play?*
a. Played cards (e.g. blackjack, 21, poker, etc)?	1	2	3	4	5	6	___Casino ___Away from casino ___internet ___ Other
b. Played the Lottery (including Powerball, scratch offs, lotto, daily numbers)?	1	2	3	4	5	6	
c. Played pull tabs?	1	2	3	4	5	6	
d. Bet on the outcome of a sporting event (such as the Super Bowl or Final Four)?	1	2	3	4	5	6	__Internet __Office/workplace __ Casino __ Bookie __ Other
e. Bowled, shot pool, played golf, or played some other game of skill for money?	1	2	3	4	5	6	
f. Played slot machines, poker machines, video lottery terminals (VLTs) or other gambling machines?	1	2	3	4	5	6	__ Casino __ Internet __ Other
g. Played bingo for money?	1	2	3	4	5	6	__ Casino __ Internet __ Charitable Event __ Other
h. Bet on horses, dogs, or other animal racing?	1	2	3	4	5	6	__ Track __ Off-Track __ Bookie __ Internet __ Other
i. Played dice games for money (i.e. craps, over and under)?	1	2	3	4	5	6	__ Casino __ Internet __ Other
j. Played Keno (at a bar, restaurant, casino, or other public place)?	1	2	3	4	5	6	__ Bar/ restaurant/etc. __ Casino __ Internet __ Other
k. Wagered or gambled on high risk stocks, commodities or real estate?	1	2	3	4	5	6	
l. Played other forms of gambling? (Please specify)_____	1	2	3	4	5	6	

Timeline Follow Back

The following questions take a detailed look at your gambling over the past 4 weeks (or BEFORE YOU ENTERED TREATMENT). Please think of which **days** you gambled over this time period, which **games** you gambled on those days, how much time in **hours and minutes** you spent gambling each day, and how much **money** you lost (or won) at the end of each day. Your win or loss refers to the net amount – that is, the amount you walked out with minus the amount you walked in with. If you did not gamble on a given day, place a "0" in the "type" box.

EXAMPLE: I did not gamble yesterday, but I did play the slot machines on the day before. I spent about 4 hours playing that day, and when I left, I had lost about $250. The day prior to that, I bought scratch-offs, and spent about 5 minutes playing, and I won $2. On Wednesday, I played the Powerball, and I bought $20 worth of tickets and spent about 10 minutes of time, but didn't win, so I was down $20 for the day. Last Monday, I went to the casino and played both cards and slots – I spent about 8 hours there, and lost approximately $500.

If you gambled at all within the past 4 weeks, please circle the timeframe of "past 4 weeks". If you did not gamble in the past 4 weeks, please circle "typical month" and complete the calendar as a typical month would appear.

PLEASE CIRCLE ONE: **1. Past 4 weeks** **or** **2. Typical month**

	↓ Yesterday						
Day	Sun	Sat	Fri	Thurs	Wed	Tues	Mon
Type	*0*	*slots*	*scratch-offs*	*0*	*lottery*	*0*	*slots & cards*
Time (hrs **OR** min)	___ hrs ___ min	*4* hrs ___ min	___ hrs *5* min	___ hrs ___ min	___ hrs *10* min	___ hrs ___ min	*8* hrs ___ min
$ Lost		*250*			*20*		*500*
Only if you were up at the end of the day, enter the $ amount here			*2*				

Using the previous example as a guide, please fill in the following calendar to represent your gambling behaviors during the past 4 weeks (or a typical month):

PLEASE CIRCLE ONE: **1. Past 4 weeks** **or** **2. Typical month**

↓Yesterday

Day							
Type							
Time (hrs **OR** min)	___ hrs ___ min	___hrs ___ min	___ hrs ___ min	___ hrs ___ min	___ hrs ___min	___ hrs ___ min	___ hrs ___ min
$ Lost							
Only if you were up at the end of the day, enter the $ amount here							

Day							
Type							
Time (hrs **OR** min)	___ hrs ___ min	___hrs ___ min	___ hrs ___ min	___ hrs ___ min	___ hrs ___min	___ hrs ___ min	___ hrs ___ min
$ Lost							
Only if you were up at the end of the day, enter the $ amount here							

Day							
Type							
Time (hrs **OR** min)	___ hrs ___ min	___hrs ___ min	___ hrs ___ min	___ hrs ___ min	___ hrs ___min	___ hrs ___ min	___ hrs ___ min
$ Lost							
Only if you were up at the end of the day, enter the $ amount here							

Day							
Type							
Time (hrs **OR** min)	___ hrs ___ min	___hrs ___ min	___ hrs ___ min	___ hrs ___ min	___ hrs ___min	___ hrs ___ min	___ hrs ___ min
$ Lost							
Only if you were up at the end of the day, enter the $ amount here							

GAMBLING BEHAVIOR:

19. Of the games listed below, which ONE is your *preferred* game or type of gambling?

1 Cards (at a table, with friends or at a casino)
2 Lottery
3 Pull tabs
4 Sporting events
5 Games of skill (pool, bowling, etc.)
6 Slot machines, poker machines, video lottery terminals (VLTs) or other gambling machines
If "yes" specify type of machine_____
7 Bingo
8 Horse/dog races, other animals
9 Dice games
10 Keno (using a card, at a restaurant, bar, etc.)
11 Stocks, commodities, etc.
12 Other _____

20. Of the games listed below, on which ONE have you lost most of your money, in the past 12 months?

1 Cards (at a table, with friends or at a casino)
2 Lottery
3 Pull tabs
4 Sporting events
5 Games of skill (pool, bowling, etc.)
6 Slot machines, poker machines, video lottery terminals (VLTs), or other gambling machines **(Type?**_____**)**
7 Bingo
8 Horse/dog races, other animals
9 Dice games
10 Keno (using a card, at a restaurant, bar, etc.)
11 Stocks, commodities, etc.
12 Other _____

21. Do you currently have a gambling debt?

1 Yes
2 No

22. (If yes to Q21) What is your current gambling debt? (how much do you currently owe family, friends, creditors, casinos, etc..)

$ _____

23. How much of this debt have you accumulated in the past 12 months?

$ _____

23a. To whom do you owe money from gambling, and how much do you owe?

Lender	*amount*
a1._____	a2. $_____
b1._____	b2. $_____
c1._____	c2. $_____
d1._____	d2. $_____
e1._____	e2. $_____

24. How much of your gambling debt is from _____ (the game you listed on Q20)?

$ _____

25. At what age did you first gamble or place your first bet?

_____ years old

26. At what age did you start gambling regularly? (i.e. weekly or more often?)

_____ years old

27. In the past 4 weeks, how many days have you gambled, including lottery, pull tabs, etc.?

_____ days

28. In the past 4 weeks, how many hours say you've spent gambling?

_____ hours

29. The LAST time you gambled, how much would you money did you lose, if any?

$_____

30. What is the largest amount of money you have ever *lost* gambling on any one day?

$ _____

31. What is the largest amount of money you have ever *won* gambling on any one day?

$ _____

32. Do you usually gamble alone? 1 Yes 2 No

33. Have you ever considered yourself to be a professional gambler? 1 Yes 2 No

33a. What is the longest period of time you have gone without gambling in the past 6 months?
_____ days

34. Of the friends with whom you have spent time in the past 12 months, how many friends gamble?
1 None
2 Less than half
3 About half
4 Over half
5 All

35. Among the people with whom you live, which ones currently gamble?
(mark all that apply)
1 I live alone
2 Spouse/significant other
3 Children/step-children
4 Parents
5 Roommate
6 Other (Specify)_____
7 None of the people with whom I live

36. Which, if any, family members have had or currently have a gambling problem? *(mark all that apply)*
1 My father
2 My mother
3 A sibling
4 My son/daughter
5 Grandparent
6 No one in my family has or has had a gambling problem

DSM-IV DIAGNOSTIC CRITERIA:

For the next set of questions, please rate your experiences during the *past 12 months*, by circling 1 for "yes" or a 2 for "no"

	Yes	***No***
37. Have there been periods when you spent a lot of time thinking about gambling, such as past gambling experiences, future gambling ventures, or ways of getting money with which to gamble?	1	2
38. Have you needed to gamble with larger amounts of money or with larger bets in order to feel the same feeling of excitement?	1	2
39. Have you tried to cut down or stop your gambling several times and been unsuccessful?	1	2
40. Did you feel quite restless or irritable after you tried to cut down or stop gambling?	1	2
41. Do you feel that you gamble as a way to run away from personal problems or to relieve uncomfortable emotions, such as nervousness or sadness?	1	2
42. After you lose money gambling, do you often return another day to try to win back your losses?	1	2
43. Have you lied to family members, friends, or others in order to hide your gambling from them?	1	2
44. Have you committed any illegal acts (such as writing bad checks, theft, forgery, embezzlement, or fraud) to finance your gambling?	1	2

	Yes	No
45. Have you almost lost or actually lost someone or something important to you because of gambling?	1	2
46. Have you relied on others to bail you out and pay your gambling debts or to pay your bills when you have financial problems caused by gambling?	1	2

SOUTH OAKS GAMBLING SCREEN (SOGS):

47. When you gamble, *how often* do you go back another day to win back the money you lost?
1 Never
2 Some of the time (but less than half the time) I lost
3 Most of the time I lost
4 Every time I lost

48. Have you ever claimed to be winning money gambling but weren't really?
1 Never
2 Yes, less than half the time I lost
3 Yes, most of the time

	Yes	No
49. Do you feel you have a problem with gambling?	1	2
50. Did you ever gamble more than you intended?	1	2
51. Have people criticized your gambling or told you that you had a gambling problem?	1	2
52. Have you felt guilty about the way you gamble or what happens when you gamble?	1	2
53. Have you felt like you would like to stop gambling but you didn't think you could?	1	2
54. Have you hidden betting slips, lottery tickets, I.O.U.'s, gambling money, or other signs of gambling from your spouse, children, or other important people in your life?	1	2
55. Have you argued with people you live with over how you handle money?	1	2
55a. *(If yes to Q55),* Have money arguments ever centered on your gambling?	1	2
56. Have you borrowed money from someone and not paid them back as a result of your gambling?	1	2
57. Have you lost time from work, school, or other responsibilities due to gambling?	1	2

57a. (*If yes to Q57)* How many days have you lost from work (or school) during the past 12 months? _____ **days**

58. If you ®⅓ve borrowed money to gamble or to pay gambling debts, who or where did you borrow from in the *past 12 months*?

	Yes	***No***
a. Household money (mortgage/rent, groceries, etc)	1	2
b. Spouse (if applicable)	1	2
c. Other relatives or in-laws	1	2
d. Banks, loan companies, or credit unions	1	2
e. Credit cards	1	2
f. Loan sharks	1	2
g. Cashed in stocks, bonds, or other securities	1	2
h. Sold personal or family property	1	2
i. Borrowed on your checking account (or wrote bad checks)	1	2
j. Have (had) a credit line with a bookie	1	2
k. Have (had) a credit line with a casino	1	2

GAMBLING- RELATED FINANCIAL PROBLEMS:

59. In the past 12 months, have you done any of the following activities, in order to gamble, due to gambling problems, or to pay a gambling debt:

	Yes	***No***
a) spent money saved for such things as retirement, children's college fund or other future needs?	1	2
b) taken an item to a pawn shop?	1	2
c) obtained money from cash advance agencies?	1	2
d) canceled or cashed in life insurance?	1	2
e) canceled or stopped paying for health insurance?	1	2
f) canceled or stopped paying for automobile insurance?	1	2
g) canceled or stopped paying for home insurance?	1	2
h) taken out a second mortgage on your home?	1	2
i) taken out a home improvement loan?	1	2
j) taken out a car loan?	1	2
k) taken out a business loan?	1	2
l) incurred business debt?	1	2
m) been unable to pay taxes?	1	2
n) taken out other kinds of loans or debts?	1	2
o) filed bankruptcy?	1	2

If yes, how much money did you file for? $ _____

60. Due to gambling, have you missed, skipped, or avoided payment of the following bills *in the past 12 months?*

	Yes	***No***	**(If yes) how many times did this occur?** 0	1	2	3	4	5	6	7	8	9	10	11	12	13+
a) mortgage/rent	1	2	O	O	O	O	O	O	O	O	O	O	O	O	O	O
b) utilities	1	2	O	O	O	O	O	O	O	O	O	O	O	O	O	O
c) car payment	1	2	O	O	O	O	O	O	O	O	O	O	O	O	O	O
d) credit cards	1	2	O	O	O	O	O	O	O	O	O	O	O	O	O	O
e) food/groceries or clothing	1	2	O	O	O	O	O	O	O	O	O	O	O	O	O	O
f) medical expenses (i.e. prescription drugs, doctor bills, etc)	1	2	O	O	O	O	O	O	O	O	O	O	O	O	O	O

GAMBLING- RELATED LEGAL PROBLEMS:

61. Please indicate if you have ever engaged in any of the following in order to gamble, due to gambling problems, or to pay a gambling debt. If you have, please specify the number of times. (Remember your answers are confidential; please respond honestly).

	Have you ever done it?		*If Yes,* # of times in past 12 months	Were you arrested… Ever?		In the past 12 months?	
	Yes	***No***		*Yes*	*No*	*Yes*	*No*
a. Forgery/Counterfeiting *(e.g. check forgery)*	1	2	_____	1	2	1	2
b. Theft by check *(e.g. writing bad checks; issuance of a worthless check; dishonored check)*	1	2	_____	1	2	1	2
c. Embezzlement *(from employer, clients, or other source)*	1	2	_____	1	2	1	2
d. Robbery or Burglary *(e.g. convenience store, private home, purse snatching, etc.)*	1	2	_____	1	2	1	2
e. Drug charges *(e.g. drug use, possession, selling, or intent to sell)*	1	2	_____	1	2	1	2
f. Assault or Domestic Violence	1	2	_____	1	2	1	2
g. Prostitution	1	2	_____	1	2	1	2
h. Gambling offenses *(e.g. alter tickets, counterfeit ticket, cheating, book-making)*	1	2	_____	1	2	1	2
i. Violation of probation/parole	1	2	_____	1	2	1	2

62. What is your current legal status?

1 none
2 parole
3 probation
4 awaiting charges, trial, or sentence

ALCOHOL AND DRUG USE:

During the past 12 months, how frequently have you used:

	Not in Past 12 months	**Less than once a Month**	**1-3 days a Month**	**1-2 days a Week**	**3-6 days a Week**	**Daily**
63. Tobacco (cigarettes, chew)	1	2	3	4	5	6
64. Alcohol (beer, wine, liquor)	1	2	3	4	5	6
65. Marijuana or hash	1	2	3	4	5	6
66. Other drugs **(not for medical purposes)** please specify:_____	1	2	3	4	5	6

	Never/ seldom	Sometimes	Often	Always
67. In the past 12 months, how often did you drink alcohol or use drugs while gambling?	1	2	3	4

MENTAL HEALTH:

68. How many days in the past 30 have you had serious conflicts with your family?
_____ days

69. How many days in the past 30 have you had serious conflicts with other people?
_____ days

Have you had a significant period, (that was not a direct result of drug/alcohol use), in which you have:

	Yes	No
70. Experienced serious depression in your life?	**1**	**2**
71. Past 30 days?	**1**	**2**
72. Experienced serious anxiety or tension in your life?	**1**	**2**
73. Past 30 days?	**1**	**2**
74. Experienced hallucinations in you life?	**1**	**2**
75. Past 30 days?	**1**	**2**
76. Experienced trouble understanding, concentrating or remembering in your life?	**1**	**2**
77. Past 30 days?	**1**	**2**
78. Experienced compulsive behavior (other than gambling) such as binge-eating, fasting or sexual activity in your life?	**1**	**2**
79. Past 30 days?	**1**	**2**
80. Experienced trouble controlling violent behavior in your life?	**1**	**2**
81. Past 30 days?	**1**	**2**
82. Experienced serious thoughts of suicide in your life?	**1**	**2**
83. Past 30 days?	**1**	**2**
84. Attempted suicide in your life?	**1**	**2**
85. Past 30 days?	**1**	**2**
86. Been prescribed medication for any psychological or emotional problems in your life?	**1**	**2**
87. Past 30 days?	**1**	**2**

88. How many days in the past 30 days have you experienced these psychological or emotional problems? _____ days

89. How much have you been troubled or bothered by these psychological or emotional problems in the past 30 days?

1 not at all
2 slightly
3 moderately
4 considerably
5 extremely

90. How important to you now is treatment for these psychological or emotional problems?

1 not at all
2 slightly
3 moderately
4 considerably
5 extremely

Items 47 to 58k are derived from the South Oaks Gambling Screen with permission.
Items 68 to 90 are derived from the Addiction Severity Index with permission

Thank you for filling out this questionnaire.
Please return this completed questionnaire to your therapist/treatment provider.
For more information, please contact Dr. Randy Stinchfield at stinc001@umn.edu

GAMBLING TREATMENT DISCHARGE QUESTIONNAIRE

This questionnaire asks about you and your experiences *since entering treatment for gambling problems*. Please answer every question that applies to you to the best of your abilities. Circle the response that best applies to your situation. Your answers will be kept confidential, so please respond openly and honestly.

ID# _____ Today's Date: **(mm/dd/yr):** ___ **/** ___ **/** ___

GAMBLING FREQUENCY:

1. *Since beginning trea*tment, how often have you:

	Never	Once A Month	Less than 1-3 Days Month	1-2 Days A Week	3-6 days Per Week	Daily	*If yes, where do you **most frequently** play?*
a. Played cards (e.g. blackjack, 21, poker, etc)	1	2	3	4	5	6	___Casino ___Away from casino ___internet ___ Other
b. Played the Lottery (including Powerball, scratch offs, lotto, daily numbers)?	1	2	3	4	5	6	
c. Played pull tabs?	1	2	3	4	5	6	
d. Bet on the outcome of a sporting event (such as the Super Bowl or Final Four;)?	1	2	3	4	5	6	__Internet __Office/workplace __ Casino __ Bookie __ Other
e. Bowled, shot pool, played golf, or played some other game of skill for money?	1	2	3	4	5	6	
f. Played slot machines, poker machines, video lottery terminals (VLTs) or other gambling machines?	1	2	3	4	5	6	__ Casino __ Internet __ Other
g. Played bingo for money?	1	2	3	4	5	6	__ Casino __ Internet __ Charitable Event __ Other
h. Bet on horses, dogs, or other animal racing	1	2	3	4	5	6	__ Track __ Off-Track __ Bookie __ Internet __ Other
i. Played dice games for money (i.e. craps, over and under)	1	2	3	4	5	6	__ Casino __ Internet __ Other
j. Played Keno (at a bar, restaurant, casino, or other public place)	1	2	3	4	5	6	__ Bar/ restaurant/etc. __ Casino __ Internet __ Other
k. Wagered or gambled on high risk stocks, commodities or real estate?	1	2	3	4	5	6	
l. Played other forms of gambling (Please specify)_____	1	2	3	4	5	6	

Have you gambled at all during the past 4 weeks?
If yes, continue
If no, Skip to Item 2 on Page 4

Timeline Follow Back

*This section takes a detailed look at your gambling habits over the past 4 weeks. Please think of which **days** you gambled over this time period, which **games** you gambled on those days, how many **hours** you spent gambling each day, and how much **money** you won or lost each day. Your win or loss refers to the net amount – that is, the amount you walked out with minus the amount you walked in with. If you did not gamble on a given day, place a "0" in the box. You may refer to the following example for guidance.*

EXAMPLE: I did not gamble yesterday, but I did play the slot machines on the day before. I spent about 4 hours playing that day, and when I left, I had lost about $250. The day prior to that, I bought scratch-offs, and spent about 5 minutes playing, and I won $2. On Wednesday, I played the Powerball, and I bought $20 worth of tickets and spent about 10 minutes of time, but didn't win, so I was down $20 for the day. Last Monday, I went to the casino and played both cards and slots – I spent about 8 hours there, and lost approximately $500.

Yesterday

Day	Sun	Sat	Fri	Thurs	Wed	Tues	Mon	Day
Type	*0*	*slots*	*scratch-offs*	*0*	*lottery*	*0*	*slots & cards*	Type
Time	*0*	*4 hrs*	*5 min.*	*0*	*10 min.*	*0*	*8 hrs*	Time
Win or Loss	*0*	*-250*	*+2*	*0*	*-20*	*0*	*-500*	Win or Loss

Using the previous example as a guide, please fill in the following calendar to represent your gambling behaviors during the past 4 weeks:

	↓ Yesterday							
Day								Day
Type								Type
Time								Time
Win or Loss								Win or Loss

Day								Day
Type								Type
Time								Time
Win or Loss								Win or Loss

Day								Day
Type								Type
Time								Time
Win or Loss								Win or Loss

Day								Day
Type								Type
Time								Time
Win or Loss								Win or Loss

STAGE OF CHANGE:

2. **Please indicate which of the following statements best applies to you right now.**

1. I have no intentions of changing my gambling.
2. I am considering reducing or stopping my gambling in the next six months.
3. I plan to reduce or quit my gambling in the next month.
4. I have already begun to reduce or quit my gambling within the last month.
5. I reduced or quit my gambling since entering treatment and have been able to maintain these changes during this period of time.

RECOVERY EFFORT:

3. **Which of the following statements comes closest to describing your gambling behavior since you have been in treatment?**

1. I have not gambled at all
2. On one or two occasions I returned to my previous gambling behavior, but otherwise I have not gambled or have significantly reduced my gambling
3. I have gradually cut back on my gambling
4. I gamble regularly, but less than I used to
5. My gambling has remained the same or increased

4. **Since entering treatment, have you made efforts (i.e. taken steps, made progress) in any of the following areas? Please answer yes, no, or not applicable.**

	Yes	No	N/A
a) Financial (e.g. saw a financial advisor, made financial restitution)	1	2	3
b) Employment (e.g. sought employment, employment assistance)	1	2	3
c) Legal (e.g. consulted with lawyer)	1	2	3
d) Marital/Family (e.g. saw a marital/family therapist)	1	2	3
e) Peer/Friends (e.g. attempted to make amends)	1	2	3
f) Coping with emotional problems	1	2	3
g) Coping with substance abuse problems	1	2	3
h) Attending GA meetings	1	2	
i) Attaining a GA sponsor	1	2	
j) Working on GA steps	1	2	
k) Stopping or reducing your gambling	1	2	
l) Are you sticking to a budget	1	2	
m) Are you following a repayment or restitution plan	1	2	

5. How many Gamblers Anonymous meetings have you attended since entering treatment? _____

MENTAL HEALTH:

6. How many days in the past 30 have you had serious conflicts with your family? _____ days

7. How many days in the past 30 have you had serious conflicts with other people? _____ days

Have you had a significant period that was not a direct result of alcohol or drug use in which you experienced:

	Yes	***No***
8. Depression in the past 30 days……	1	2
9. Anxiety or tension in past 30 days ……	1	2
10. Hallucinations in past 30 days……	1	2
11. Trouble understanding, concentrating, or remembering in past 30 days…	1	2
12. Compulsive behavior, such as binge-eating, fasting, or sexual activity in past 30 days……..	1	2
13. Violent behavior in past 30 days……..	1	2
14. Thoughts of suicide in past 30 days……..	1	2
15. Attempted suicide in past 30 days……..	1	2
16. Have you been prescribed medication for any psychological or emotional problems in the past 30 days?……	1	2
17. How many days in the past 30 days have you experienced these emotional or behavioral problems?	_____ days	

18. How much have you been troubled or bothered by these emotional or behavioral problems in the past 30 days?
    1. not at all
    2. slightly
    3. moderately
    4. considerably
    5. extremely

19. How important to you now is treatment for these emotional or behavioral problems?
    1. not at all
    2. slightly
    3. moderately
    4. considerably
    5. extremely

BEHAVIOR AND SYMPTOM IDENTIFICATION SCALE (BASIS- 32):

20. Please indicate the level of difficulty you have been having in the *past week* in the various areas listed below by circling the appropriate number.

	No Difficulty	A little difficulty	Moderate difficulty	Quite a bit Of difficulty	Extreme Difficulty
a. managing day-to-day life (i.e. getting places on time, handling money, making everyday decisions)	1	2	3	4	5
b. household responsibilities (i.e. shopping, cooking, laundry, cleaning, other chores)	1	2	3	4	5
c. work (i.e. completing tasks, performance level, finding/keeping a job)	1	2	3	4	5
d. school (i.e. academic performance, completing assignments, attendance)	1	2	3	4	5
e. leisure time or recreational activities	1	2	3	4	5
f. adjusting to major life stresses (i.e. separation, divorce, moving, new job, new school, a death)	1	2	3	4	5
g. relationships with family members	1	2	3	4	5
h. getting along with people outside of the family	1	2	3	4	5
i. isolation or feelings of loneliness	1	2	3	4	5
j. being able to feel close to others	1	2	3	4	5
k. being realistic about yourself or others	1	2	3	4	5
l. recognizing and expressing feelings appropriately	1	2	3	4	5
m. developing independence, autonomy	1	2	3	4	5
n. goals or directions in life	1	2	3	4	5
o. lack of self-confidence, feeling bad about yourself	1	2	3	4	5
p. apathy, lack of interest in things	1	2	3	4	5
q. depression, hopelessness	1	2	3	4	5
r. suicidal feelings or behavior	1	2	3	4	5
s. physical symptoms (i.e. headaches, aches and pains, sleep disturbance, stomach aches, dizziness)	1	2	3	4	5
t. fear, anxiety, or panic	1	2	3	4	5
u. confusion, concentration, memory	1	2	3	4	5
v. disturbing or unreal thoughts or beliefs	1	2	3	4	5
w. hearing voices, seeing things	1	2	3	4	5

	No Difficulty	A little difficulty	Moderate difficulty	Quite a bit Of difficulty	Extreme Difficulty
x. manic, bizarre behavior (i.e. racing thoughts, increased talking, less need for sleep)	1	2	3	4	5
y. mood swings, unstable moods	1	2	3	4	5
z. uncontrollable, compulsive behavior (i.e. eating disorder, hand-washing, hurting yourself)	1	2	3	4	5
aa. sexual activity or preoccupation	1	2	3	4	5
bb. drinking alcoholic beverages	1	2	3	4	5
cc. taking illegal drugs, misusing drugs	1	2	3	4	5
dd. controlling temper, outbursts of anger/violence	1	2	3	4	5
ee. impulsive, illegal, or reckless behavior	1	2	3	4	5
ff. feeling satisfaction with your life	1	2	3	4	5

TREATMENT COMPONENT HELPFULNESS:

During treatment, you received a number of services. As you read each one, please indicate how helpful it was by circling the appropriate number.

	Much Help	Some Help	Little Help	No Help	Did Not Receive
21. Gambling Assessment (at the time of admission)	1	2	3	4	5
22. Individual counseling	1	2	3	4	5
23. Group counseling	1	2	3	4	5
24. Family counseling	1	2	3	4	5
25. Peer support group	1	2	3	4	5
26. Financial counseling	1	2	3	4	5
27. Lectures	1	2	3	4	5
28. Homework assignments	1	2	3	4	5
29. Films / Videos	1	2	3	4	5
30. Orientation to Gamblers Anonymous	1	2	3	4	5
31. Legal Assistance (i.e., meet w/ attorney, probation officer)	1	2	3	4	5
32. Assessment or counseling for other mental health problems	1	2	3	4	5
33. Other (please specify) _____ _____	1	2	3	4	5

Please indicate your level of agreement with each of the following statements:

	Strongly Agree	Agree	Disagree	Strongly Disagree
34. Counselors had very little time for me	1	2	3	4
35. Counselors did not explain what treatment was about	1	2	3	4
36. I feel prepared to begin a new lifestyle after treatment	1	2	3	4
37. Staff were sincerely interested in me	1	2	3	4
38. I clearly understood program expectations	1	2	3	4
39. The program was often disorganized	1	2	3	4
40. Staff told me when I was making progress	1	2	3	4
41. I felt I had the right to disagree with staff and voice my opinion	1	2	3	4
42. I rarely became upset about the treatment process	1	2	3	4
43. My family and/or significant other was/were as involved as they wanted to be in my treatment.	1	2	3	4

44. Below are 4 statements about how you would feel recommending this program to a friend or relative who is in need of similar help. Please indicate which one you agree with the most.

1. Yes, I would definitely recommend this program.
2. Yes, I think I would recommend this program.
3. No, I don't think I would recommend this program.
4. No, I would definitely not recommend this program.

45. Do you feel the length of treatment was:

1. Too short
2. About right
3. Too long

How satisfied have you been with:

	Very Satis-fied	Satis-fied	Dis-Satis-fied	Very Dis-Satis-fied	Does Not Apply
46. Your counselor(s)	1	2	3	4	5
47. Skills/strategies learned to remain gambling free	1	2	3	4	5
48. The overall services you received	1	2	3	4	5

If you were dissatisfied, please explain _____

_____

49. What was most helpful about this program? _____

_____

_____

50. What would you change about this program? _____

_____

_____

51. Do you have any further comments or suggestions? _____

_____

_____

Items 6 - 19 are taken from the Addiction Severity Index (ASI) with permission.
Items 20a-20ff are taken from the McLean BASIS-32 questionnaire with permission.
Gambling Treatment Discharge Questionnaire revised 1/17/06.

Thank you for filling out this questionnaire. Please seal the questionnaire in the envelope provided and return to the therapist/treatment staff.

University of Minnesota
GAMBLING TREATMENT OUTCOME STUDY
Follow up Form

Thank you for being a part of the Gambling Treatment Outcome Study. The study involves 6 and 12-month post discharge follow ups. We will be contacting you based on the information provided on this form.

Please PRINT the following information:

NAME: First_____ Middle_____ Last_____
ADDRESS:_____
City:_____ State:_____ Zip:_____
TELEPHONE: Home:_____ Work:_____
Cell/Other: _____
EMAIL ADDRESS: _____
DATE OF BIRTH:_____
PREVIOUS LAST NAMES (include maiden):_____

Please indicate your preferred method of contact for the follow ups:
US mail:_____
Telephone:_____
Email:_____

Please indicate your preferred method for conducting the follow ups:
Questionnaire by US mail:_____
Interview by phone:_____

GAMBLING TREATMENT SERVICES QUESTIONNAIRE

(To Be Completed By Treatment Program Staff at completion of ***Primary Treatment***)

PROGRAM/PROVIDER_____

ID# _____ Today's Date (mm/dd/yr): ___ / ___ / ___

1. Was client admitted? ___ Yes ___ No If no, date of intake assessment_____
Mo-day-yr

If client was not admitted, mark the main reason for non-admission:

___ Assessment Only
___ Did not meet admission criteria
___ Wants to try GA first
___ Conflict with work schedule
___ Will not abstain from alcohol/drugs
___ Must first serve jail time
___ No child care available
___ No show
___ Canceled
___ Cannot afford to pay for treatment
___ Other, specify: _____
_____

Client referred to:_____

If client was not admitted to treatment, you may stop here.

2. Admission date_____
Month-day-year
Discharge date_____
Month-day-year

Total number of sessions completed: _____

Primary Therapist _____

Leave of Absence (i.e.,weeks of missed/skipped treatment sessions):
psych_____weeks
medical_____weeks
legal_____ weeks
other_____ weeks
(specify)_____

3. What health insurance does the client have? (Mark all that apply)

___ None
___ Health Partners
___ Blue Cross/Blue Shield
___ Medica
___ State health plan
___ Medical Assistance
___ Other commercial insurance (please specify)_____
___ Other HMO (please specify)_____
___ Other (please specify)_____
___ Unknown

4. Method of payment (Check all that apply)

___ Self-payment
___ Private insurance
___ HMO
___ Employer
___ State Gambling Treatment Grant
___ Medicaid
___ Public Fund
___ Other_____

5. Please write out all psychiatric diagnoses and DSM-IV codes:

Diagnosis: Code

_____ _____
_____ _____
_____ _____

6. Was the client taking any prescribed psychoactive medications during treatment?

___ Yes (please specify the type of medication) _____
___ No

7. To what extent did client complete the treatment plan?

___ Client did not complete the plan at all
___ Client completed less than half of the treatment plan
___ Client completed about half of the plan
___ Client completed more than half of the plan, but not the entire plan
___ Client completed the plan in its entirety

8. Discharge Status from Primary Treatment

___ Complete
___ Incomplete (if status is incomplete, check which of the following applies):
___ Against staff advice
___ At staff request
___ Absent without leave
___ Transfer to _____

9. If the client did not complete treatment, what are the reason/s? (mark all that apply)

___ conflict of work and treatment schedules
___ refused to stop or reduce gambling behaviors
___ child care was not available
___ will not abstain from alcohol/drugs
___ was incarcerated
___ other mental illness interfered with treatment (e.g., too depressed)
___ dropped out for no known reason
___ Other (please specify)_____

10a. ***How many billable hours*** of each of the following treatment services did the client receive over the course of treatment?

_____ Assessment process
_____ Individual counseling
_____ Group counseling
_____ Family counseling
_____ Marital counseling

10b. ***Please estimate the number of hours*** of the following treatment services the client received:

_____ Peer support group
_____ Financial counseling
_____ Assessment or counseling for other mental health problems
_____ Lectures
_____ Films
_____Homework assignments
_____ Legal Assistance (i.e., meet w/attorney, Probation officer)
_____GA orientation/participation
_____ Other (Specify) _____

11. Did the client have his or her partner/significant other participate in activities?
_____Yes _____No

12. Referrals during or after ***primary*** treatment (Check all that apply)

___ Treatment Program Aftercare
___ Gamblers Anonymous
___ Alcoholics Anonymous
___ Narcotics Anonymous
___ Other 12 Step Group (Specify)_____
___ Inpatient CD treatment
___ Outpatient CD treatment
___ Inpatient Mental Health Treatment
___ Outpatient Mental Health Treatment
___ Family/Marital Counseling
___ Court/Legal/Corrections
___ Financial Counseling
___ Vocational
___ Other (Specify)_____

13. Was the client assigned a GA sponsor, case manager, or aftercare contact person?
___ Yes
___ No
___ Unknown

Please return this form to Client's Packet and verify the client's current address and telephone number on the client's Consent Form and update if necessary. Thank you.

SIGNIFICANT OTHER DISCHARGE QUESTIONNAIRE

This questionnaire asks about your involvement in treatment. Your answers will be kept confidential, so please respond openly and honestly.

ID# _____ Today's Date: (mm/dd/yr) ___ / ___ / ___

1. What is your relationship to the client?
1 Spouse/partner
2 Boyfriend/girlfriend
3 Friend
4 Relative(Specify)_____
5 Other:_____

2. How old are you?:_____

3. What is your gender? 1 Male 2 Female

4. How long have you known the client?
1 Less than one year
2 1-2 years
3 3-5 years
4 6 or more years

5. How much contact have you had with the client during the past six months?
1 daily
2 weekly
3 monthly
4 less than monthly
5 no contact at all

6. Did you participate in the client's treatment, that is, participate in family night, attend therapy sessions with him/her, etc.?
1 Yes
2 No

7. If you did not participate in the client's treatment, why not?
1 The client did not want me to
2 Treatment provider did not invite me to participate
3 I chose not to participate
4 My schedule did not allow me to participate
5 Other reasons (please specify)_____

8. If you did not participate in the client's treatment, do you wish that you could have?
1 Yes
2 No

9. If you did participate, were you involved with the client's treatment to the extent you wanted?
1 Yes
2 No

During treatment, you may have received a number of services. As you read each one, please indicate how helpful it was by circling the appropriate number.

	Much Help	Some Help	Little Help	No Help	Did Not receive
10. Individual counseling	1	2	3	4	5
11. Group counseling	1	2	3	4	5
12. Family counseling	1	2	3	4	5
13. Peer support group	1	2	3	4	5
14. Financial counseling	1	2	3	4	5
15. Lectures	1	2	3	4	5
16. Homework assignments	1	2	3	4	5
17. Films / Videos	1	2	3	4	5
18. Orientation to GA/Gam-Anon	1	2	3	4	5
19. Legal Assistance (i.e., meet with an attorney, probation officer)	1	2	3	4	5
20. Assessment or counseling for other mental health problems	1	2	3	4	5
21. Other (please specify) _____ _____	1	2	3	4	5

Please indicate your level of agreement with each of the following statements:

	Strongly Agree	Agree	Disagree	Strongly Disagree
22. The counselor(s) had very little time for me	1	2	3	4
23. The counselor(s) did not explain what treatment was about	1	2	3	4
24. I feel prepared to help the client begin a new lifestyle after treatment	1	2	3	4
25. The counselor was sincerely interested in me	1	2	3	4
26. I clearly understood treatment expectations	1	2	3	4
27. Treatment was often disorganized	1	2	3	4
28. The counselor(s) told me when the client was making progress	1	2	3	4
29. I felt I had the right to disagree with the counselor(s) and voice my opinion	1	2	3	4
30. I rarely became upset about the treatment process	1	2	3	4

31. I was involved in treatment to the extent I wanted to be 1 2 3 4

32. Below are four statements about how you would feel recommending this program to a friend or relative who is in need of similar help. Please indicate which one you agree with the most.

1 Yes, I would definitely recommend this counselor/program.
2 Yes, I think I would recommend this counselor/program.
3 No, I don't think I would recommend this counselor/program.
4 No, I would definitely not recommend this counselor/program.

33. Do you feel the length of treatment was:

1 Too short
2 About right
3 Too long

How satisfied have you been with:

	Very Satis-fied	Satis-fied	Dis-Satis-fied	Very Dis-Satis-fied	Does Not Apply
34. Counselor(s)	1	2	3	4	5
35. Skills/strategies learned to help the client remain gambling free	1	2	3	4	5
36. The overall services you received	1	2	3	4	5

If you were dissatisfied, please explain_____

_____

37. Looking back on when you were about to start participating in the client's treatment, what types of services did you need from the treatment provider? Please describe in your own words

_____

_____

_____

38. Did you receive these services?

1. Yes, all the services
2. Some, but not all
3. No, I did not receive any of these services

If not, why not? _____

_____

39. If you received treatment services, what service was most helpful to you as a significant other?

40. What was most helpful for the client in the treatment he/she received?

41. What would you change about treatment?

42. Do you have any further comments or suggestions for improving treatment services for families?

43. How has the client's gambling problems affected you and your family?

44. Are you involved in the client's budget, money protection plan, repayment or restitution plan?
1 Yes 2 No
If yes, please describe:

Thank you for filling out this questionnaire. Please seal the questionnaire in the envelope provided and return to the therapist/treatment staff.

Gambling Treatment 6-Month Follow-Up Questionnaire

This questionnaire asks about you and your experiences in the past six months. Please read each question carefully. Your answers will be kept confidential, so please respond openly and honestly.

ID# _____ Today's Date (mm/dd/yr): ___ / ___ / ___

DEMOGRAPHICS:

1. What is your current marital status:

1 Single / never married
2 Married / partnered
3 Widowed
4 Separated
5 Divorced
6 Living together

2. With whom do you currently live? (circle all that apply)

1 Alone
2 Spouse/significant other
3 Children/step-children
4 Parents
5 Roommate
6 Other (Specify)_____

3. What has been your employment status for most of the past 6 months?

1 Full-time
2 Part-time
3 Occasional/season work
4 Student
5 Unemployed
6 Homemaker
7 Disabled
8 Retired

4. What is your current occupation?
(*if retired, what was your occupation?)*

_____

5. What is your annual household income?:

1 Less than $10,000
2 More than $10,000 up to $20,000
3 More than $20,000 up to $30,000
4 More than $30,000 up to $40,000
5 More than $40,000 up to $50,000
6 More than $50,000 up to $75,000
7 More than $75,000 up to $100,000
8 More than $100,000

6. As you read each of the following income sources, please indicate which ones you have received in the past 6 months:

	Yes	*No*
Wage or Salary	1	2
Alimony	1	2
Child support	1	2
Retirement/Pension	1	2
Disability	1	2
Public Assistance	1	2
Social Security Income (SSI)	1	2
Inheritance/Trust fund	1	2
Gambling	1	2
Other (Specify)_____	1	2

GAMBLING FREQUENCY:

Below is a list of various types of gambling. Please indicate how often (if at all) you have played the following types of gambling activities within the *last 6 months*.

7. During the last *6 months* how often have you:

	Never	Less than Once A Month	1-3 Days Month	1-2 Days A Week	3-6 days Per Week	Daily	*If yes, where do you **most frequently** play?*
a. Played cards (e.g. blackjack, 21, poker, etc)	1	2	3	4	5	6	___Casino ___Away from casino ___internet ___ Other
b. Played the Lottery (including Powerball, scratch offs, lotto, daily numbers)?	1	2	3	4	5	6	
c. Played pull tabs?	1	2	3	4	5	6	
d. Bet on the outcome of a sporting event (such as the Super Bowl or Final Four;)?	1	2	3	4	5	6	__Internet __Office/workplace __ Casino __ Bookie __ Other
e. Bowled, shot pool, played golf, or played some other game of skill for money?	1	2	3	4	5	6	
f. Played slot machines, poker machines, video lottery terminals (VLTs) or other gambling machines?	1	2	3	4	5	6	__ Casino __ Internet __ Other
g. Played bingo for money?	1	2	3	4	5	6	__ Casino __ Internet __ Charitable Event __ Other
h. Bet on horses, dogs, or other animal racing	1	2	3	4	5	6	__ Track __ Off-Track __ Bookie __ Internet __ Other
i. Played dice games for money (i.e. craps, over and under)	1	2	3	4	5	6	__ Casino __ Internet __ Other
j. Played Keno (at a bar, restaurant, casino, or other public place)	1	2	3	4	5	6	__ Bar/ restaurant/etc. __ Casino __ Internet __ Other
k. Wagered or gambled on high risk stocks, commodities or real estate?	1	2	3	4	5	6	
l. Played other forms of gambling (Please specify)_____	1	2	3	4	5	6	

Timeline Follow Back

*This section of the questionnaire takes a detailed look at your gambling habits over the past 4 weeks. Please think of which **days** you gambled over this time period, which **games** you gambled on those days, how many **hours** you spent gambling each day, and how much **money** you won or lost each day. Your win or loss refers to the net amount – that is, the amount you walked out with minus the amount you walked in with. If you gambled <u>at all</u> within the past 4 weeks, please circle the timeframe of "4 weeks". If you did not gamble in the past 4 weeks, please circle "typical month" and complete the calendar as a typical month would appear. If you did not gamble on a given day, place a "0" in the box. You may refer to the following example for guidance.*

EXAMPLE: I did not gamble yesterday, but I did play the slot machines on the day before. I spent about 4 hours playing that day, and when I left, I had lost about $250. The day prior to that, I bought scratch-offs, and spent about 5 minutes playing, and I won $2. On Wednesday, I played the Powerball, and I bought $20 worth of tickets and spent about 10 minutes of time, but didn't win, so I was down $20 for the day. Last Monday, I went to the casino and played both cards and slots – I spent about 8 hours there, and lost approximately $500.

Past 4 weeks **or Typical month (*please circle*)**

Yesterday

Day	Sun	Sat	Fri	Thurs	Wed	Tues	Mon	Day
Type	*0*	*slots*	*scratch-offs*	*0*	*lottery*	*0*	*slots & cards*	Type
Time	*0*	*4 hrs*	*5 min.*	*0*	*10 min.*	*0*	*8 hrs*	Time
Win or Loss	*0*	*-250*	*+2*	*0*	*-20*	*0*	*-500*	Win or Loss

Using the previous example as a guide, please fill in the following calendar to represent your gambling behaviors during the past 4 weeks (or a typical month):

Past 4 weeks or Typical month (*please circle*)

↓ **Yesterday**

Day								Day
Type								Type
Time								Time
Win or Loss								Win or Loss

Day								Day
Type								Type
Time								Time
Win or Loss								Win or Loss

Day								Day
Type								Type
Time								Time
Win or Loss								Win or Loss

Day								Day
Type								Type
Time								Time
Win or Loss								Win or Loss

STAGE OF CHANGE:

8. Which of the following statements best applies to you right now.

1 I have no intentions of changing my gambling.
2 I am considering reducing or stopping my gambling in the next six months.
3 I plan to reduce or quit my gambling in the next month.
4 I have already begun to reduce or quit my gambling within the last six months.
5 I reduced or quit my gambling over six months ago and have been able to maintain these changes for at least six months.

GAMBLING BEHAVIOR:

9. Which of the following statements comes closest to describing your gambling behavior in the past 6 months?

1 I have not gambled at all
2 On one or two occasions I returned to my previous gambling behavior, but otherwise I have not gambled or have significantly reduced my gambling
3 I have gradually cut back on my gambling
4 I gamble regularly, but less than I used to
5 My gambling has remained the same or increased

10. During the past 6 months, how many months have you abstained from gambling? _____ *months*
(NOTE: response should reflect TOTAL time abstained)

11. *If you have gambled at all in the past 6 months*, please indicate the reasons you believe led to your return to gambling:

1 I bet for the feeling of excitement I get
2 I bet to get money I need
3 I bet because others around me were betting
4 I bet because I have a good time
5 I bet because I feel lonely
6 I bet because it's challenging
7 I bet because it's an important part of my social life
8 I bet because I felt sad or depressed
9 I bet for other reasons_____

12. *If you have gambled at all in the past 6 months*, how much new debt if any, have you accumulated due to gambling?
$ _____

12a. *(if yes to Q12)* To whom do you owe money, and how much do you owe?

Lender	*amount*		
a1. _____		a2. $_____	
b1. _____		b2. $_____	
c1. _____		c2. $_____	
d1. _____		d2. $_____	

13. If you have gambled at all in the past 6 months, what is the largest amount of money you have lost gambling on any *one* day?

$ _____

14. Of the friends with whom you have spent time in the past 6 months, how many friends gamble?

1 None
2 Less than half
3 About half
4 Over half
5 All

DSM-IV DIAGNOSTIC CRITERIA:

For the next set of questions, please rate your experiences during the *past 6 months*, by circling a 1 for "yes" or a 2 for "no"

	Yes	*No*
15. Have there been periods when you spent a lot of time thinking about gambling, such as past gambling experiences, future gambling ventures, or ways of getting money with which to gamble?	1	2
16. Have you needed to gamble with larger amounts of money or with larger bets in order to feel the same feeling of excitement?	1	2
17. Have you tried to cut down or stop your gambling several times and been unsuccessful?	1	2
18. Did you feel quite restless or irritable after you tried to cut down or stop gambling?	1	2
19. Do you feel that you gamble as a way to run away from personal problems or to relieve uncomfortable emotions, such as nervousness or sadness?	1	2
20. After you lose money gambling, do you often return another day to try to win back your losses?	1	2
21. Have you lied to family members, friends, or others in order to hide your gambling from them?	1	2
22. Have you committed any illegal acts (such as writing bad checks, theft, forgery, embezzlement, or fraud) to finance your gambling?	1	2
23. Have you almost lost or actually lost someone or something important to you because of gambling?	1	2
24. Have you relied on others to bail you out and pay your gambling debts or to pay your bills when you have financial problems caused by gambling?	1	2

SOUTH OAKS GAMBLING SCREEN (SOGS):

25. When you gamble, how often do you go back another day to win back the money you lost?
    1 Never
    2 Some of the time (but less than half the time)
    3 Most of the time I lost
    4 Every time I lost

26. Have you ever claimed to be winning gambling but weren't really?
    1 Yes, most of the time
    2 Yes, less than half the time I lost
    3 No, never

	Yes	***No***
27. Do you feel you have a problem with gambling?	1	2
28. Did you ever gamble more than you intended?	1	2
29. Have people criticized your gambling or told you that you had a gambling problem?	1	2
30. Have you felt guilty about the way you gamble or what happens when you gamble?	1	2
31. Have you felt like you would like to stop gambling but you didn't think you could?	1	2
32. Have you hidden betting slips, lottery tickets, I.O.U.'s, gambling money, or other signs of gambling from your spouse, children, or other important people in your life?	1	2
33. Have you argued with people you live with over how you handle money?	1	2
33a. (If yes to Q33), Have money arguments centered on your gambling?	1	2
34. Have you borrowed money from someone and not paid them back as a result of your gambling?	1	2
35. Have you lost time from work, school, or other responsibilities due to gambling?	1	2

35a. (*If yes to Q35)* How many days have you lost from work (or school/responsibilities) during the past 6 months? _____ **days**

36. Below is a list of different financial sources. If you have borrowed money to gamble or to pay gambling debts, who or where did you borrow from in the *past 6 months*.

	Yes	***No***
a. Household money (mortgage/rent, groceries, etc)	1	2
b. Spouse (if applicable)	1	2
c. Other relatives or in-laws	1	2
d. Banks, loan companies, or credit unions	1	2
e. Credit cards	1	2
f. Loan sharks	1	2
g. Cashed in stocks, bonds, or other securities	1	2
h. Sold personal or family property	1	2
i. Borrowed on your checking account (or wrote bad checks)	1	2
j. Have (had) a credit line with a bookie	1	2
k. Have (had) a credit line with a casino	1	2

GAMBLING- RELATED FINANCIAL PROBLEMS:

37. In the past 6 months, have you done any of the following activities, in order to gamble, due to gambling problems, or to pay a gambling debt:

	Yes	***No***
a) spent money saved for such things as retirement, children's college fund or other future needs	1	2
b) taken an item to a pawn shop?	1	2
c) obtained money from cash advance agencies?	1	2
d) canceled or cashed in life insurance?	1	2
e) canceled or stopped paying for health insurance?	1	2
f) canceled or stopped paying for automobile insurance?	1	2
g) canceled or stopped paying for home insurance?	1	2
h) taken out a second mortgage on your home?	1	2
i) taken out a home improvement loan?	1	2
j) taken out a car loan?	1	2
k) taken out a business loan?	1	2
l) incurred business debt?	1	2
m) been unable to pay taxes?	1	2
n) taken out other kinds of loans or debts?	1	2
o) filed bankruptcy?	1	2

If yes, how much money did you file for? $ _____

38. Due to gambling, have you missed, skipped, or avoided payment of the following bills *in the past 6 months:*

	Yes	***No***	**(If yes) how many times did this occur?** 0	1	2	3	4	5	6	7	8	9	10	11	12	13+
a) mortgage/rent	1	2	O	O	O	O	O	O	O	O	O	O	O	O	O	O
b) utilities	1	2	O	O	O	O	O	O	O	O	O	O	O	O	O	O
c) car payment	1	2	O	O	O	O	O	O	O	O	O	O	O	O	O	O
d) credit cards	1	2	O	O	O	O	O	O	O	O	O	O	O	O	O	O
e) food/groceries or clothing	1	2	O	O	O	O	O	O	O	O	O	O	O	O	O	O
f) medical expenses (i.e. prescription drugs, doctor bills, etc)	1	2	O	O	O	O	O	O	O	O	O	O	O	O	O	O

GAMBLING- RELATED LEGAL PROBLEMS:

39. Please indicate if you have engaged in any of the following in order to gamble, due to gambling problems, or to pay a gambling debt *in the past 6 months*. If you have, please specify the number of times. (Remember your answers are confidential; please respond honestly).

	Have you ever done it?		*If Yes,* # of times in past 6 months	In the past 6 months?	
	Yes	***No***		**Were you arrested…** *Yes*	*No*
a. Forgery/Counterfeiting *(e.g. check forgery)*	1	2	_____	1	2
b. Theft by check (e.g. writing bad checks; issuance of a worthless check; dishonored check)	1	2	_____	1	2
c. Embezzlement *(from employer, clients, or other source)*	1	2	_____	1	2
d. Robbery or Burglary *(e.g. convenience store, private home, purse snatching, etc.)*	1	2	_____	1	2
e. Drug charges *(e.g. drug use, possession, selling, or intent to sell)*	1	2	_____	1	2
f. Assault or Domestic Violence	1	2	_____	1	2
g. Prostitution	1	2	_____	1	2
h. Gambling offenses *(e.g. alter tickets, counterfeit ticket, cheating, book-making)*	1	2	_____	1	2
i. Violation of probation/parole	1	2	_____	1	2

40. What is your current legal status?

1 none
2 parole
3 probation
4 awaiting charges, trial, or sentence

ALCOHOL AND DRUG USE:

During the past 6 months, how frequently have you used:

	Never	**Less than once a Month**	**1-3 days a Month**	**1-2 days a Week**	**3-6 days a Week**	**Daily**
41. Tobacco (cigarettes, chew)	1	2	3	4	5	6
42. Alcohol (beer, wine, liquor)	1	2	3	4	5	6
43. Marijuana or hash	1	2	3	4	5	6
44. Other drugs ***(not for medical purposes)*** please specify:_____	1	2	3	4	5	6

	Never/ seldom	Sometimes	Often	Always
45. In the past 12 months, how often did you drink alcohol or use drugs while gambling?	1	2	3	4

POST- TREATMENT SERVICE UTILIZATIONS:

46. In the past 6 months, which of the following services have you received?

	Yes	*No*	**If yes, how many sessions/meetings were attended?**
a. Gambling treatment primary program	1	2	_____
b. Gambling treatment extended care or aftercare sessions	1	2	_____
c. Gamblers Anonymous (GA)	1	2	_____
d. Budget/Pressure relief meeting	1	2	_____
e. Alcoholics/Narcotics Anonymous	1	2	_____
f. Other 12-step group _____	1	2	_____
g. Inpatient alcohol/drug dependency treatment	1	2	_____
h. Outpatient alcohol/drug dependency treatment	1	2	_____
i. Inpatient mental health treatment	1	2	_____
j. Outpatient mental health treatment	1	2	_____
k. Financial counseling	1	2	_____
l. Vocational counseling	1	2	_____
m. Marital counseling	1	2	_____
n. Other support group	1	2	_____
o. Other service/counseling	1	2	_____

47a. Are you sticking to a budget?	1	2	
47b. Are you following a repayment or restitution plan?	1	2	3 not applicable

48. **Gambler's Anonymous (GA) Participation:**

	Yes	***No***	***N/A***
a. Do you have a GA sponsor?	1	2	3
b. Have you done the 12th step in GA?	1	2	3
c. Have you sponsored a GA member?	1	2	3

CLIENT SATISFACTION:

49. If you participated in the gambling treatment program's extended care or aftercare services, how satisfied were you with the treatment you received?

1 Very satisfied
2 Mostly satisfied
3 Mildly dissatisfied
4 Quite dissatisfied
5 Did not participate

50. How satisfied were you with the help that you received at GA?

1 Very satisfied
2 Mostly satisfied
3 Mildly dissatisfied
4 Quite dissatisfied
5 Did not participate

51. How often has your spouse or significant other attended Gam-Anon or GA meetings in the past 6 months?

1 Never
2 Once or twice
3 3-5 times
4 6-9 times
5 10-19 times
6 20 or more times
7 Not applicable

OUTCOMES:

Please describe your status over the past 6 months in each of the following life areas:

	Excellent	*Good*	*Fair*	*Poor*	*N/A*
52. Relationship with spouse/significant other	1	2	3	4	5
53. Relationship with immediate family	1	2	3	4	5
54. Relationship with friends	1	2	3	4	5
55. Relationship with Higher Power	1	2	3	4	5
56. Self-image (how you feel about yourself)	1	2	3	4	5
57. Physical health	1	2	3	4	5
58. Emotional health	1	2	3	4	5
59. Participation in recreational activities	1	2	3	4	5
60. Ability to handle problems	1	2	3	4	5
61. Ability to assume responsibility	1	2	3	4	5
62. Job performance	1	2	3	4	5
63. Job satisfaction	1	2	3	4	5

64. How is your job performance now, as compared to before treatment?

1 A great deal better
2 Somewhat better
3 About the same
4 Somewhat worse
5 Much worse
6 Not applicable

65. How do you get along with your spouse or significant other, as compared to before treatment?

1 A great deal better
2 Somewhat better
3 About the same
4 Somewhat worse
5 Much worse
6 Not applicable

66. How do you get along with your immediate family now, as compared to before treatment?

1 A great deal better
2 Somewhat better
3 About the same
4 Somewhat worse
5 Much worse
6 Not applicable

MENTAL HEALTH:

67. How many days in the past 30 have you had serious conflicts with your family?

_____ days

68. How many days in the past 30 have you serious conflicts with other people?

_____ days

Have you had a significant period, (that was not a direct result of alcohol/drug use) in which you have:

	Yes	***No***
69. Experienced serious depression in the past 30 days	1	2
70. Experienced serious anxiety or tension in past 30 days	1	2
71. Experienced hallucinations in past 30 days	1	2
72. Experienced trouble understanding, concentrating, or remembering in past 30 days	1	2
73. Experienced compulsive behavior, such as binge-eating, fasting, or sexual activity in past 30 days	1	2
74. Experienced trouble controlling violent behavior in past 30 days	1	2
75. Experienced serious thoughts of suicide in past 30 days	1	2
76. Attempted suicide in past 30 days	1	2
77. Been prescribed medication for any psychological or emotional problems in the past 30 days	1	2

78. How many days in the past 30 days have you experienced these psychological or emotional problems? _____ days

79. How much have you been troubled or bothered by these psychological or emotional problems in the past 30 days?

1 not at all
2 slightly
3 moderately
4 considerably
5 extremely

80. How important to you now is treatment for these psychological problems?

1 not at all
2 slightly
3 moderately
4 considerably
5 extremely

BEHAVIOR AND SYMPTOM IDENTIFICATION SCALE (BASIS- 32):

81. Please indicate the amount of difficulty you have been having in the *past week* in the area of:

	No difficulty	A little difficulty	Moderate difficulty	Quite a bit of difficulty	Extreme Difficulty
a. managing day-to-day life (i.e. getting places on time, handling money, making everyday decisions)	1	2	3	4	5
b. household responsibilities (i.e. shopping, cooking, laundry, cleaning, other chores)	1	2	3	4	5
c. work (i.e. completing tasks, performance level, finding/keeping a job)	1	2	3	4	5
d. school (i.e. academic performance, completing assignments, attendance)	1	2	3	4	5
e. leisure time or recreational activities	1	2	3	4	5
f. adjusting to major life stresses (i.e. separation, divorce, moving, new job, new school, a death)	1	2	3	4	5
g. relationships with family members	1	2	3	4	5
h. getting along with people outside of the family	1	2	3	4	5
i. isolation or feelings of loneliness	1	2	3	4	5
j. being able to feel close to others	1	2	3	4	5
k. being realistic about yourself or others	1	2	3	4	5
l. recognizing and expressing feelings appropriately	1	2	3	4	5
m. developing independence, autonomy	1	2	3	4	5
n. goals or directions in life	1	2	3	4	5
o. lack of self-confidence, feeling bad about yourself	1	2	3	4	5
p. apathy, lack of interest in things	1	2	3	4	5
q. depression, hopelessness	1	2	3	4	5

	No difficulty	A little difficulty	Moderate difficulty	Quite a bit of difficulty	Extreme Difficulty
r. suicidal feelings or behavior	1	2	3	4	5
s. physical symptoms (i.e. headaches, aches and pains, sleep disturbance, stomach aches, dizziness)	1	2	3	4	5
t. fear, anxiety, or panic	1	2	3	4	5
u. confusion, concentration, memory	1	2	3	4	5
v. disturbing or unreal thoughts or beliefs	1	2	3	4	5
w. hearing voices, seeing things	1	2	3	4	5
x. manic, bizarre behavior (i.e. racing thoughts, increased talking, less need for sleep)	1	2	3	4	5
y. mood swings, unstable moods	1	2	3	4	5
z. uncontrollable, compulsive behavior (i.e. eating disorder, hand-washing, hurting yourself)	1	2	3	4	5
aa. sexual activity or preoccupation	1	2	3	4	5
bb. drinking alcoholic beverages	1	2	3	4	5
cc. taking illegal drugs, misusing drugs	1	2	3	4	5
dd. controlling temper, outbursts of anger/violence	1	2	3	4	5
ee. impulsive, illegal, or reckless behavior	1	2	3	4	5
ff. feeling satisfaction with your life	1	2	3	4	5

Items 25 to 36k are derived from the South Oaks Gambling Screen with permission.
Items 52-63 are derived from Hazelden Foundation with permission.
Items 67 to 80 are derived from the Addiction Severity Index with permission
Items 81a-81ff are derived from the McLean BASIS-32 questionnaire with permission.
Follow up questionnaire revised 2/16/06.

Thank you for filling out this questionnaire. Please return this completed questionnaire in the self-addressed stamped envelope provided.