EFFECT OF SIGNIFICANT OTHERS
ON GAMBLING TREATMENT OUTCOMES

by

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ABSTRACT

Aims: This study investigates the effect of significant others and demographic factors associated with treatment outcomes and length in treatment of pathological gamblers who received treatment through Oregon Problem Gambling Services (OPGS).

Design: This is a cohort study of individuals who received gambling treatment.

Setting: OPGS provides in- and outpatient services for gamblers in Oregon, as well as for family members of gamblers.

Participants: Participants were 4,410 adult gamblers who discharge from treatment between August, 2001 and April, 2007. 307 gamblers had significant others participate in family treatment programs.

Measurements: OPGS Enrollment Forms provided gambler gender, age, ethnicity, education level, employment status, gambling-related debt, and whether the gambler had a significant other at the time of enrollment. OPGS Termination Forms provided information on the type of discharge (successful/unsuccessful) and treatment length (in days). Additionally, data from matched significant others indicated which gamblers had significant others participate in treatment.

Findings: Results showed that age, ethnicity, gambling debt, and having a significant other are associated with gambling treatment outcomes of success or non-success. Education level moderates the effect of having a significant other participate in treatment.

Additionally, it was found that age, ethnicity, education, employment, and having a significant other participate in treatment significantly impacted gamblers' length in treatment.

Conclusions: These findings indicate that there may be a benefit to integrating significant others in gambling treatment methods. Significant others may act as social supports for gamblers seeking treatment, and involving loved ones in gambling treatment models may positively affect gambler treatment outcomes.

BACKGROUND

Although gambling is a form of entertainment for many people, some individuals develop a pattern of gambling that can be characterized as an addiction. In 1980, pathological gambling was officially recognized as a mental disorder with the publication of the third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III), and the criteria were significantly revised based on large-scale studies for the fourth edition (DSM-IV, 2000). The American Psychiatric Association (2000) currently classifies pathological gambling as an impulse control disorder that is a chronic and progressive mental illness. However, relatively little research has been dedicated to the identification and treatment of this disorder.

This study sought to distinguish how the characteristics of pathological gamblers and their significant others affected the gamblers' likelihood of successful treatment completion and the length of their treatment. In particular, this study focused on how gamblers' significant others participating in and completing a family member treatment plan influenced the gamblers' treatment outcomes. The background that follows describes (a) pathological gambling epidemiology, (b) risk factors for pathological gambling, (c) symptoms of pathological gambling, (d) diagnosis of the condition; (e) associated features, (f) treatment descriptions, (g) Oregon's gambling environment, (h) a description of Oregon Problem Gambling Services, and (i) the involvement of significant others in addiction treatment.

Pathological Gambling Epidemiology

The prevalence of pathological gambling is associated with multiple factors, including the availability and duration of availability of gambling. An increase in prevalence is influenced by an increase in the availability of legalized gambling (American Psychiatric Association [APA], 2000). Community-based studies have found lifetime prevalence numbers of pathological gambling ranging from 0.4% to 3.4% in adults, though some areas report numbers as high as 7% (APA, 2000). However, errors in some studies may have lead to an over-estimation of the prevalence of pathological gambling in society (Dickerson & Walker, 1996), and it has been suggested that a lack of consensus about the proper epidemiological methods necessary to measure pathological gambling prevalence has influenced the estimates (Culleton, 1989).

Some vulnerable populations may have a significantly higher prevalence of problem gambling. For example, a North Dakota study compared self-reported and assessed gambling problems of both Native Americans and Caucasians being treated for alcohol dependence (Elia & Jacobs, 1993). Using the South Oaks Gambling Screen (SOGS) in a group assessment, the authors found that 22% of Native Americans with alcohol dependence compared to 7.3% of Caucasians with alcohol dependence had SOGS scores indicative of a pathological gambling diagnosis (Elia & Jacobs, 1993). Furthermore, 41% of the Native Americans (compared to 21.3% of the Caucasians) in that sample reported having some difficulty with gambling. Studies on adolescents and college students have found that prevalence of problem gambling ranges from 2.8% to 8% (APA, 2000), and these numbers are typically higher among individuals seeking substance abuse treatment (Grant, Kim & Kushner, 2002).

Measuring pathological gambling requires distinguishing incidence from prevalence, because incidence is especially important to answer policy questions involving the effects of increased gambling opportunities and changes in regulations, industry practices, and technology. Currently, there seems to be very little research that examines the incidence of pathological gambling in a representative population and time period. Furthermore, literature on gambling rarely distinguishes, in an epidemiological sense, the difference between rates and proportions of pathological gamblers versus problem gamblers (Blaszczynski & Nower, 2002). The term “pathological gambling” is used to identify persons who meet the specific criteria in the DSM-IV for this condition (described below), while "problem gambling," and "gambling addiction" are terms used to describe gambling-related behaviors that may not meet DSM-IV criteria.

Risk Factors

Few typologies exist that describe different types of gamblers based on risk factors. Blaszczynksi (2000) identified how individuals may be predisposed (through genetics and personality trait combinations) to develop certain gambling-related behaviors. He proposed a three part typology (2000): A “normal” subgroup of people who can successfully reduce their gambling habits and have ‘normal’ personalities; an “emotionally vulnerable” subgroup; and a “biologically-based impulsive” subgroup. Others have explored risk factors for gambling independently; these include family history, personality traits, coping strategies, mental illness, genetic predisposition, and environmental factors.

A family history of gambling problems and substance abuse typically affects the development of a gambling problem. Pathological gambling is very similar in definition

and symptoms to substance dependence, and, like alcoholism, heredity may play a role. The DSM-IV states that disorders like pathological gambling and alcohol dependence are more common among parents of individuals who are pathological gamblers than among the general population, and multiple studies have found that children of pathological gamblers are more likely to become pathological gamblers as teenagers (Derevensky & Gupta, 1997; Jacobs, 2000; Liu & Wallisch, 1996). Children of problem gamblers also have higher levels of tobacco, alcohol, drug use, and overeating (Derevensky & Gupta, 1997). Studies on pathological gamblers in treatment reveal that up to 50% have histories of alcohol or drug abuse and a person's proneness to substance abuse likely influences their development of gambling problems (Armentano & Petry, 1999). Substance abuse disorders and pathological gambling are often co-occurring conditions, although it is unclear if a causal relationship exists; both conditions share many characteristics, and both have an underlying cause in lack of impulse control (Petry, 2001).

Individuals with certain personality traits may be predisposed to develop gambling problems. The habits underlying pathological gambling can be attributed to aspects of an individual's personality. Some traits that contribute to gambling problems include impulsivity, coping ability, and susceptibility to depression or antisocial behavior (Petry, 2001). For example, Petry (2001) demonstrated that pathological gamblers had high rates of discounting delayed rewards, and she found a significant relationship between impulsivity and gambling due to a lack of delayed gratification. Furthermore, McCormick and Taber (1980) established that the inabilities to control impulses and constant sensation-seeking behaviors are two major impulsivity-related signs of

pathological gambling. Individuals with gambling problems often develop an addiction because they experience irrational thoughts, such as the belief that they can control gambling outcomes by relying on superstitions and game plans

There are also various coping strategies that contribute to the development of a gambling problem. Ineffective coping skills when dealing with problem-solving tasks were found to have a high correlation with pathological and problem gambling (Hulsey & Lightsey, 2002). Additionally, Hulsey and Lightsey demonstrated a similar relationship between emotional coping and gambling, in combination with elevated impulsivity. People who are unable to cope with stressful situations may be more likely to develop a gambling problem, because they rely more heavily on their impulsive nature in dealing with problems rather than managing stress effectively.

Pathological gamblers also may display antisocial behavior and often experience irregular episodes of depression and mania. Eisen et al. (2001) investigated pathological gamblers and antisocial behavior using twins, and after controlling for genetic and shared environments, the authors found a positive association between gambling and antisocial behavior in the participants. Impulsivity was also found to be correlated with both pathological gambling and antisocial personality disorder (Eisen et al., 2001). Depression in some individuals has been demonstrated to play a role in the development or maintenance of a gambling problem. McCormick and Taber (1980) studied pathological gamblers undergoing gambling treatment, and patients who explained negative events as internal rather than external causes were more likely to experience episodes of relapse.

Genetic predisposition may influence the development of pathological gambling, but there is little research on the topic. Impulsivity is a strong characteristic of pathological gamblers, but for persons low on impulsivity, outside factors such as stress may be more likely to contribute to gambling problems (Hulsey & Lightsey, 2002). Stressors of many kinds can influence or exacerbate already existing gambling problems and other impulse-control disorders. Financial stressors especially affect gambling problems, especially for pathological gamblers who have undergone treatment (Hulsey & Lightsey, 2002). Financial stressors may cause them to relapse into gambling very quickly in order to compensate for any financial problem.

Males are at higher risk for developing pathological gambling than females. Many studies have shown men to be much more likely than women to developing pathological gambling. Men's generally higher levels of impulsivity and aggression compared to those of women probably contribute to the act of gambling (Ladd & Petry, 2002). Although males generally begin gambling at a younger age than women, they tend to seek treatment later for their condition and are more prone to relapse (Ladd & Petry, 2002). Women often give different reasons than men for chronic gambling. Women cite negative emotions or situational problems, whereas men usually cite the need to win and the need for monetary sustenance (El-Guebaly & Hodgins, 2004). Female gamblers also report fewer alcohol-related problems and fewer legal issues compared to their male counterparts (El-Guebaly & Hodgins, 2004).

For adolescents involved with gambling, family problems and conduct problems are further indicators and precursors of pathological gambling (Derevensky, Gupta & Hardoon, 2004). Behavioral problems early in life greatly increase the risk for the

development of problem gambling (Derevensky, Gupta & Hardoon, 2004). College students and young adults are prone to gamble and possibly to develop gambling addictions (Bengston, Dorr, Stinchfield & Winters, 1998). Perceived social norms for college students contribute to gambling frequency, expenditure, and the possible later development of gambling problems (Bengston, Dorr, Stinchfield & Winters, 1998). College students seem to be overly sensitive to norms that contribute to the maintenance of high-risk behavior such as gambling, alcohol consumption, and other similar activities (Larimer & Neighbors, 2003).

In addition to personal characteristics, environmental factors heavily influence an individual's progression to pathological gambling. Increased accessibility to gambling, such as wider distribution and closer locations of casinos and gaming machines, enhances a gambler's ability to participate (McMillen & Wenzel, 2004). Furthermore, Internet gambling has become more popular because it enables more people to start gambling more frequently and comfortably (Griffiths & Smeaton, 2004). In the community, retailers' advertisements and inducements and the eye-catching features of the gaming machines and venues can also influence an individual's decision to gamble persistently (Griffiths, 2005). Furthermore, government policies and regulations that protect gambling retailers and consumers validate gambling as a suitable social activity.

It is evident that many factors influence the development of pathological gambling, including heredity, personality traits, and the built environment. The National Gambling Impact Study Commission (University of Chicago, 1999) has published multiple reports that have helped identify the risk factors involved with gambling problems and behaviors.

Symptoms

Pathological gambling is characterized by a loss of control over gambling, deception about the extent of one's involvement with gambling, family and job disruption, theft, and chasing losses, or the effort to win back money lost while gambling (American Psychiatric Association [APA], 1994). Patterns of gambling that leads to pathological gambling are typically evident by early adolescence in males and early to middle adulthood in females (APA, 2000). Gambling is often viewed by the individual as a social activity for years until a stressor or other reason causes an abrupt increase in gambling. With the onset of pathological gambling comes an increase in (a) the frequency of gambling, (b) the amount of money wagered, and (c) a preoccupation with gambling and obtaining money with which to gamble (APA, 2000), and the patterns of gambling can occur regularly or episodically. Additionally, studies have found that the urge to gamble and pathological gambling is often association with episodes of anxiety and depression (McCormick & Taber, 1980).

Individuals with pathological gambling are typically competitive, restless, energetic, and easily bored. Distortion in thinking is often present, such as denial and overconfidence, and most pathological gamblers believe that money is both the cause of and solution to their problems (APA, 2000). When not gambling, individuals may be workaholics who thrive on deadlines and may be overly concerned with approval (Whitman-Raymond, 1998). Pathological gamblers often suffer from general medical conditions associated with stress, such as migraines, hypertension, and ulcers (APA, 2000). Of more concern is that pathological gamblers have relatively high rates of suicidal ideation and suicide attempts, and community-based studies have found suicide

attempt rates as high as 20% or more among problem and pathological gamblers (Hason & Zangeneh, 2006).

Pathological gamblers often exhibit certain physiological traits, such as high energy levels, hyperactivity, mood disorders, obsessive-compulsive, avoidant, and anxiety (Black & Moyer, 1998). Carlson et al. found significantly higher rates of additional impulse control disorders including Attention Deficit Disorder in compulsive gamblers than in controls (Carlson, Christenson, Marcotte & Specker, 1995), and another report showed high rates of Axis I psychopathology, such as depression and substance abuse/dependency, in pathological gamblers as compared to controls (Carlson, Edmonson, Johnson, Marcotte & Specker, 1996). Psychiatric patients were found to have a much higher incidence of pathological gambling than the general population (Blume & Lesieur, 1990), and persons with psychiatric and substance abuse disorders may be at higher risk to develop pathological gambling (Carlson, Edmonson, Johnson, Marcotte & Specker, 1996; Blume & Lesieur, 1990).

Diagnosis

A psychiatric evaluation and patient history can be used to diagnose pathological gambling, and several screening tools are available to assist health care providers in diagnosing this condition. The 1998 Gambling Impact and Behavior Study developed a questionnaire based on DSM-IV criteria (University of Chicago, 1999). The questionnaire was developed by investigating the gambling behaviors and attitudes of adults and youth in America, and by estimating the effects of gambling facilities on a variety of local economic and social indicators. However, the South Oaks Gambling Screen (SOGS) is the most extensively used, validated screening tool for the evaluation

of patients who are pathological gamblers (Blume & Lesieur, 1987). SOGS is a 20-item questionnaire based on DSM-III criteria for pathological gambling, and the survey continues to be a reliable tool according to the DSM-IV criteria. The Gamblers Anonymous Survey, which also has 20 questions and has not been clinically validated, may be helpful in providing clinical information and may help introduce the gambler to the Gamblers Anonymous program. A parallel survey entitled, "Are you living with a compulsive gambler?" was developed by Gambler's Anonymous and can be used to assist family members in coping with a problem gambler (McGurrin, 1994).

According to the DSM-IV (2000), the diagnostic criteria for pathological gambling include persistent and recurrent maladaptive gambling behavior as indicated by five (or more) of the following: (a) is preoccupied with gambling (e.g., preoccupied with reliving past gambling experiences, handicapping or planning the next venture, or thinking of ways to get money with which to gamble); (b) needs to gamble with increasing amounts of money in order to achieve the desired excitement; (c) has repeated unsuccessful efforts to control, cut back, or stop gambling; (d) is restless or irritable when attempting to cut down or stop gambling; (e) gambles as a way of escaping from problems or of relieving a dysphoric mood (e.g., feelings of helplessness, guilt, anxiety, depression); (f) after losing money gambling, often returns another day in order to get even ("chasing" one's losses); (g) lies to family members, therapist, or others to conceal the extent of involvement with gambling; (h) has committed illegal acts, such as forgery, fraud, theft, or embezzlement, in order to finance gambling; (i) has jeopardized or lost a significant relationship, job, or educational or career opportunity because of gambling;

and (j) relies on others to provide money to relieve a desperate financial situation caused by gambling.

Additionally, the DSM-IV criteria indicate the gambling behavior must not be better accounted for by a manic episode. This last distinction is essential, since a manic episode can sometimes include impulsive behavior such as gambling, and distinguishing gambling as part of a manic episode and pathological gambling has important treatment implications. It is also important to distinguish pathological gambling from other forms of gambling, such as social and professional gambling. The key difference between pathological and social gambling is the aspect of self-control (Smith, Volberg & Wynne, 1994). Social gambling usually occurs with friends and each gambling session lasts for a set period of time and involves pre-determined spending limits. In social gambling, the player gains satisfaction from the activity rather than from winning or losing the game (Smith, Volberg & Wynne, 1994). On the other hand, professional gambling revolves around discipline, and risks are usually limited. While some professional gamblers may experience problems associated with their gambling, the majority of these individuals will not meet the full criteria for pathological gambling (APA, 2000). Therefore, social and professional gamblers would be categorized as problem gamblers, while those who meet the specified criteria in the DSM-IV would be diagnosed as pathological gamblers.

Associated Features

Pathological gambling is associated with negative health consequences, including high rates of insomnia, gastrointestinal disorders, cardiac problems, high blood pressure, and headaches (Bergh & Kuhlhorn, 1994). Co-morbid psychiatric conditions are common among individuals with a gambling addiction. In past studies, up to 50% of

gamblers had substance use disorders (Compton, Cottler & Cunningham-Williams, 1998; Blume, Lesieur & Zoppa, 1985). Obsessive-compulsive disorder (Jones, Linden & Pope, 1986), attention-deficit disorder (Carlton, Manowitz & McBride, 1987), anxiety disorders (Jones, Linden & Pope, 1986; Blaszczynski & McConaghy, 1989), and depressive disorders (Bergh & Kuhlhorn, 1994; Blaszczynski & McConaghy, 1989) occur frequently in pathological gamblers, and some reports suggest that these conditions are genetically related with pathological gambling (Comings, Lesieur & Rosenthal, 1996). Of the 1,800 individuals treated in Oregon gambling programs in 2005, 18% reported at enrollment that they had experienced suicidal thoughts, 27% reported experiencing alcohol-related problems, and 11% reporting having drug-related problems (Marotta, 2006).

Pathological gambling can also result in serious personal and societal problems, including financial, legal, employment, and family-related difficulties. A recent report based on national data estimated the social-economic cost for each pathological gambler (measured from increased crime due to gambling, lost work time, bankruptcies and financial hardships faced by the families of gambling addicts) as more than $11,000 (Grinols, 2004). For Oregonians alone, this is an annual socio-economic cost of approximately $449 million due to problem gambling (Marotta, 2007). In 2003, gamblers seeking treatment in Oregon reported that their addiction led to poor job performance (14%), not paying bills on time (56%), committing illegal acts to obtain gambling money (34%), and jeopardizing or losing relationships (64%) (Marotta & Moore, 2003).

Treatment

Nationally-recognized gambling treatment programs offer individual and group sessions, goal setting, relapse prevention and education, and if required, medication management for co-occurring mental health conditions (National Council on Problem Gambling, 2007). Additionally, couple or family sessions can be scheduled if needed or requested. Gambling treatment programs often provide referrals to financial counselors who present debt management options such as debt consolidation, bankruptcy information, and financial planning education. Furthermore, gamblers seeking treatment are often directed to the local Gamblers Anonymous program, a 12-step self-help group for peer support around gambling reduction and maintenance of treatment gains. The treatment staff in most gambling treatment services includes masters-level and certified gambling counselors. Physicians, psychologists, and social workers are available for consultation according to individual gambler's needs.

The Oregon Department of Human Services (2006) defines successful gambling treatment completion as the individual's: (a) achievement of at least 75% of short-term treatment goals, (b) completion of a continued wellness plan (i.e., relapse prevention plan), and (c) lack of engagement in problem gambling behaviors for at least 30 days prior to discharge from the program. There is no set requirement for length of treatment, as length will vary among individual gamblers due to differences in addiction severity and in treatment goals. However, in 2003, the average length of enrollment for all gamblers in OPGS programs (regardless of treatment success/non-success status) was 140 days (roughly 5 months). For gamblers who complete treatment successfully, the

average length of enrollment was somewhat longer at 226 days (about 8 months) (Marotta & Moore, 2003).

A crucial part of pathological gambling treatment is helping the individual overcome irrational thoughts and impulsivity, since most pathologic gamblers believe they can control random events by following superstitions and by having methods planned out ahead of time (Cherkasky et al, 1996). Pathological gambling and substance abuse treatment goals are similar because they both focus on restoring a normal way of thinking and living, and multiple condition treatment programs are becoming increasingly popular (Blume & Lesieur, 1991). Gamblers Anonymous, modeled after Alcoholics Anonymous but with an emphasis on patience in the recovery process (Antze, Ferentzy & Skinner, 2006), is the main self-help group and uses a 12-step, abstinence-based treatment program (Petry, 2005). However, unlike the approach promoted by Alcoholics Anonymous, complete abstinence from gambling may not be necessary for successful treatment, and the efficacy of Gamblers Anonymous has not been well documented in controlled studies (Petry, 2005).

Gambling-related psychological therapies focus on determining an individual's reasons for gambling, confronting their defense tactics, and eliminating their "chasing" behaviors (efforts to win back money lost to gambling) (Boisvert, Ladouceur & Sylvain, 1997). A variety of approaches are used in the treatment of this condition, and cognitive, behavioral, and cognitive-behavioral therapies appear to be the most successful treatment techniques (Lopez & Miller, 1997). Cognitive treatment therapy involves identifying and correcting the pathological gambler's errors in judgment (Giroux, Jacques, Ladouceur, Letarte & Sylvain, 1998). Behavioral therapy considers pathological gambling as a

learned behavior, so this approach relies on techniques such as systematic exposure, desensitization, and improving skills (e.g., calming techniques and improving social skills) (Boisvert, Ladouceur & Sylvain, 1997). Cognitive-behavioral therapy is a combination of both of these treatment approaches, using elements of desensitization, relaxation methods, and skill-building, as well as relapse prevention (Boisvert, Ladouceur & Sylvain, 1997).

Gambling in Oregon

Oregon has more forms of legalized gambling and offers easier access to gambling than almost any other state (Marotta, 2007). Slot machines, Video Lottery Terminals (VLT), Bingo, and poker tables are just a few of the popular choices for gamers, and each of the nine Native American tribes in Oregon operates a large-scale casino. In 1986, Oregonians spent roughly $95 million on gambling-related activities, while today that yearly amount exceeds $1.3 billion (Marotta, 2007). The majority of Oregon's gambling-related sales (58%) are attributable to the Oregon State Lottery and 35% are attributable to Native American casinos (Marotta, 2007). In 2006, lottery sales in Oregon exceeded $1 billion and video lottery sales increased by nearly 25% from the previous year (Marotta, 2007).

Oregon Problem Gambling Services (OPGS)

OPGS is based within the Addiction and Mental Health Division of the Oregon Department of Human Services, and it is a state agency dedicated to providing gambling-related outreach, assessment, treatment, and prevention. The programs specifically target pathological and problem gamblers who seek to reduce and eliminate their gambling behaviors, and OPGS-funded providers are trained to counsel both gamblers seeking

treatment and any family members seeking treatment to cope with their loved one's gambling problems.

Outpatient problem gambling treatment involves assessment, individual treatment planning, one-on-one counseling, group counseling, treatment for concerned others if appropriate, case management, and aftercare planning. Oregon Lottery proceeds fund approximately 27 problem gambling outpatient treatment programs throughout the state, four residential treatment programs, and a state-funded Gambling Evaluation and Reduction (GEAR) programs. Included are specialized culturally competent programs targeting an African-American community and two Hispanic communities. Currently, significant others who are concerned about their loved one's gambling addiction are invited to partake in group, couple, or individual counseling with OPGS, but this is not a requirement.

General client information. The most recent published epidemiological data available for pathological and problem gamblers seeking treatment in Oregon are from 2005. A total of 1,714 gamblers and 345 family members sought treatment at OPGS treatment centers that year. Of the gamblers seeking treatment, 47.4% were male (52.6% female), and 33% of the family clients were male (67% female). The average age of the enrolled clients was 44.6 years and 87% of the clients were Caucasian. About a third (36%) of all clients were married and 25.5% were divorced. Clients had an average household income of $36,495 and an average gambling-related debt of $23,331. The primary locations of gambling occurred at video lottery retailers (69.9%) and casinos (17.3%), and the main gambling activities included video poker (69%), slot machines (14%), and cards (7%) (Marotta, 2007).

The information presented below is summarized from the OPGS Delivery Service Overview report for 2005-2007 (Marotta, 2006):

Funding. OPGS programs had a budget of $4.65 million from 2005-2007. These funds come from Legislative action transferring 1.0% of the Oregon State Lottery's profits into a Gambling Treatment Fund. Also, $1.2 million of the Oregon Lottery's budget goes toward advertisements and educational materials addressing responsible play and problem gambling. The National Council on Problem Gambling [NCPG] (2007), confirms the importance of gambling prevention efforts within their mission statement. Oregon is one of thirty-two states with a NCPG Affiliate council. Oregon's gambling prevention efforts are delivered through three separate administrative bodies: (1) OPGS, which delivers gambling treatment and education services; (2) county governments, which are provided roughly $700,000 annually to implement regionally-specific prevention plans; and (3) the Oregon Lottery, which allocates about $1,213,000 annually for public awareness programs (e.g. the "Play Responsibly" campaign).

Outreach Programs. Common outreach actions include screening for gambling problems within mental health programs, alcohol and drug abuse programs, corrections departments, and at-risk youth programs. Also, the "Play Responsibly" campaign generates thousands of phone calls to the Problem Gambling Helpline, and from 2004-2005, the gambling helpline received 5,028 calls. 2,916 were problem gamblers or concerned others of problem gamblers seeking help or information, and 2,357 referrals were made to state funded gambling treatment programs.

Treatment Delivery. OPGS provides free and confidential problem gambling services to all Oregonians who seek help, whether inpatient, outpatient, or over the

phone. A frequent access point to treatment begins with a call made to the state's Problem Gambling Helpline. The outpatient and inpatient treatment delivery system is composed of intervention programs broadly classified as Level 0.5, Level I, and Level II:

1. Level 0.5 interventions are considered least restrictive and consist of either self-funded Gamblers Anonymous groups or the state-funded Gambling Evaluation And Reduction (GEAR) program, which offers phone counseling and self-change manuals. GEAR participants receive 12-month evaluation and referral services.

2. Level I treatment involves a bio-psychosocial assessment, individual treatment planning, one-to-one counseling and/or case management sessions, group counseling, family involvement, if appropriate, and aftercare planning. Oregon operates roughly 27 Level I treatment programs.

3. Level II programs are composed of one statewide inpatient gambling treatment program and three regional centers that offer crisis-respite services. Individuals utilizing this level of care are most often referred from a Level I treatment program.

Involvement of Significant Other in Addiction

The majority of the literature involving family or significant others in addiction other than pathological gambling focuses on substance abuse disorders, such as alcohol abuse or illegal drug use. Stanton and Standish (1997) studied the effects of family and couples therapy on drug treatment outcomes and found family involvement to be an effective tool against drug addiction and relapse. Other studies focus on family interventions and treatment programs for family members of alcoholics (Sisson & Azrin, 1986). It is common for a family member to seek advice from a medical professional on how to approach their loved one about treatment and various techniques may be

suggested by the counselor (Langrod, Lowinson, Millman & Ruiz, 2005). For instance, the Community Reinforcement and Family Training (CRAFT) model is used to educate and support families of individuals with substance abuse by helping concerned significant others recognize and capitalize on moments when the patient is ready for change (Hill, Meyers & Miller, 1999). This approach shows significant others how to use positive reinforcements (rewards) and how to let the substance user suffer the natural consequences for their using behavior (Ward, 2007). Hill, Meyers and Miller (1999) have demonstrated the effectiveness of the CRAFT model among treatment-resistant alcoholics. Seeking professional help is often viewed as a last resort for the family because most significant others seeking treatment for a family member have tried multiple times to influence the family member's addictive habits (Brown & Lewis, 1999). Significant others of pathological gamblers may experience similar difficulties when approaching a loved one about their gambling addiction, and gambling treatment counselors often request that the concerned partner participates in multiple treatment sessions as a positive reinforcement for the gambler.

It is also possible for significant others or other family members to personally enroll in treatment plans specialized to help them cope with their loved ones' gambling addiction. A small number of studies involving significant others of gamblers have been conducted and all have shown some positive effect of a significant other's involvement on the gambler's treatment outcomes (Hodgins, Makarchuk, Skinner, Toneatto & Vincent, 2007). The South Oaks Leisure Activities Screen (SOLAS), a companion screening tool of the SOGS for use with significant others, has been employed in a variety of settings and is a commonly known instrument for detecting problem gamblers

through concerned significant others (Blume & Lesieur, 1993). Hodgins et al. (2007) examined minimal treatment interventions for significant others and compared three randomized intervention groups: a) significant others received a self-help workbook based on behavioral principles, modified from the CRAFT model; b) significant others received the workbook plus telephone support; and c) the control group received a treatment resource informational packet. The results of the study indicated that all participants experienced considerable improvement in personal and relationship functioning. Furthermore, participants reported that their loved one's gambling behavior and consequences had improved at the 3- and 6-month follow-up (Hodgins, Makarchuk, Skinner, Toneatto & Vincent, 2007).

From the available literature, it is apparent that there is utility in involving significant others in addiction treatment generally, and in gambling treatment specifically. There is evidence that significant other involvement improves the likelihood of successful drinking reduction treatment among problem drinkers (Dermen & Walitzer, 2004), and Grant et al. found that significant other involvement improved treatment retention in pathological gamblers (Grant, Kim & Kuskowski, 2004). Moreover, a gambling addiction can have a damaging affect on a significant other, as they experience elevated distress levels, lost time at work, and financial stress due to their partner's gambling-related debt (Wildman II, 1989). Gambling treatment programs that involve significant others address the needs of the family as well as the needs of the pathological gambler, which ultimately may help reduce the overall burden of the gambling problem. By involving and counseling significant others as a part of the gambler's treatment

program, the significant other can be maintained as a key component of the gambler's support network throughout treatment and recovery.

Significance

With pathological gambling becoming an increasingly common problem, it is important to have accurate information regarding the gamblers and significant others who seek treatment. However, there is a lack of information in the literature regarding those individuals, especially in Oregon, and this could affect gamblers' treatment outcomes and treatment program efficiency. It is unclear which personal and social characteristics influence pathological gamblers' successful completion of treatment. Therefore, it is crucial to establish which characteristics support successful gambling treatment versus unsuccessful treatment to improve the effectiveness of programs such as those provided by Oregon Problem Gambling Services.

In addition, although research is developing regarding pathological gamblers, little work has focused on gamblers' significant others. It may be especially important to examine the effect of significant others enrolling in gambling treatment with their partners, whether for support or personal counseling. It was observed that gamblers enrolled in OPGS programs who have family member involved in their recovery were often more likely to successfully complete treatment (Marotta & Moore, 2003), but research thus far has not specifically investigated variables related to a significant other's involvement in treatment and how the variables affect a gambler's treatment success and length of treatment. Furthermore, 41% of gamblers seeking treatment in Oregon in 2003 were married (Marotta & Moore, 2003), but it has not been established if having a significant other (whether simultaneously participating in family-oriented treatment or

not) influences treatment outcomes. The couple relationship has been relatively neglected in both clinical reports and in the research based on pathological gambling. It seems that significant others would be an important emotional and social resource for those with gambling problems and those seeking gambling treatment, yet there is a lack of knowledge regarding romantic partners of pathological gamblers.

This analysis will not only establish which gamblers' characteristics influence treatment outcomes, but will also determine how significant others (both involved and uninvolved in treatment) affect pathological gamblers' treatment outcomes. By identifying important predictor variables, more effective treatment programs may be created that better support gamblers' needs and encourage significant others' positive involvement in gambling treatment.

Hypotheses

Hypothesis 1. Partnered gamblers and single gamblers have different treatment outcomes as measured by *Gambling Treatment Outcome* of success/non-success and *Length of Treatment (in days)*. It is anticipated that gamblers with significant others are more likely to have successful treatment and longer length of treatment when compared to un-partnered gamblers.

Hypothesis 2. It is expected that the presence of a significant other in an OPGS family treatment program is positively associated with the gambler outcomes of interest, *Gambling Treatment Outcome* (successful/unsuccessful) and *Length of Treatment (in days)*. We predict that gamblers with a significant other participating in treatment are more likely to have successful treatment and longer treatment length compared to gamblers with a significant other not participating in treatment.

The results of this study will be useful in documenting the demographic and other characteristics that impact a treatment-seeking gambler's outcome and length of treatment. Furthermore, the study findings will highlight how a pathological gambler's treatment results may be influenced by a significant other's participation in a gambling treatment plan. The findings may be valuable in developing statewide policy with regard to significant other's involvement in gambling treatment programs both in Oregon and in other communities.

METHODS

Brief Overview

This cross-sectional study describes characteristics of treatment-seeking gamblers and available matched significant others (SOs) including demographics, gambling-related debt, and treatment outcomes gathered in a 5 ½ year period from August, 2001 to April, 2007. The purpose of this study is to identify which gambler characteristics significantly affect successful gambling treatment completion and length of treatment, with specific emphasis on how the presence of a significant other affects the gambler's treatment outcomes and length of treatment.

Setting

Study participants are individuals who participated in treatment at any of 27 locations funded by Oregon Problem Gambling Services (OPGS), a state agency that oversees outpatient counseling and treatment services for problem gambling. Individuals who may have gambling problems are referred to treatment by the state's gambling helpline, by the court system, through self-referral, or by other means.

When the gambler initially presented for treatment, OPGS collected enrollment data from gamblers and their significant others (when available) and completed the Gambling and Family Member Client Enrollment Record Abstracting Forms. OPGS qualified gambling counselors have been trained to complete these forms and to consult instructions (Appendix A) during the assessment. A translator was provided during the sessions if necessary.

Discharge data was collected by counselors using the corresponding Termination Form and instructions (Appendix B) at the final treatment session or retroactively to the

last treatment session if they stopped attending treatment. Discharge data must be collected and submitted within 90 days after the last date of service to an individual. The typical processes for dealing with non-attendance is as follows: after a client misses an appointment, staff will call the individual at least once, and 60 days after their last contact date will send a termination letter informing the client that they must attend treatment within 30 days to avoid having their file closed. When a file is closed due to non-attendance, it is labeled as an unsuccessful treatment discharge (and coded on the Termination Form as client "stopped coming - against staff advice"). Other specific explanations for an unsuccessful treatment outcome can be found in the Termination Form instructions (Appendix B).

Participants

OPGS provided data on 5,265 pathological gamblers who started treatment services between August, 2001 and March, 2007 and were discharged by April, 2007. Some gamblers had significant others who participated in the OPGS family treatment program; for these gamblers, there are matched enrollment and discharge data for the significant other. Inclusion criteria for the final sample of gamblers were: (a) pathological gamblers and any matched significant others who enrolled in outpatient treatment and who were discharged (successfully or unsuccessfully) before April 2007; (b) for gambling clients, the Enrollment Form must list "Pathological Gambling" under the Diagnostic Impressions section; and (c) gamblers and matched significant others must have greater than 0 days of treatment (i.e., they must have returned for more than just the initial intake session). Exclusion criteria were: (a) gambler or matched significant other age under the age of 18 at enrollment; and (b) incomplete or missing Enrollment or

Termination Form data. We excluded those with treatment length of 0 days because having the same enrollment and termination date indicates that the gambler or significant other only participated in the first day of treatment (enrollment) and did not return for any follow-up appointments. Gamblers or significant others with 0 days in treatment essentially did not participate in OPGS treatment other than intake, so we excluded them to specifically investigate those who engaged in treatment for 1 or more days. Inclusion and exclusion criteria limited our final sample to 4,410 gamblers.

We categorize the 4,410 gambler participants into three groups based on significant other characteristics at intake (See Table 1. Group 1 is 2,268 pathological gamblers seeking treatment that did not have a significant other; this group is classified as having no SO for the duration of the treatment episode. Group 2 is 1,835 pathological gamblers seeking treatment that self-identify as having a significant other, and that SO did not enroll in an OPGS treatment program for family members of pathological gamblers. The gamblers who had significant others with 0 days in treatment were also included in Group 2. Group 3 is 307 pathological gamblers seeking treatment that had a significant other enrolled in an OPGS family member treatment program for 1 or more days. (See Table 1 for more details on SO categorization.) We also created two independent variables that measured significant other characteristics for our analysis (*Any SO* ('yes' for Groups 2 & 3, 'no' for Group 1) measures the presence of a significant other in the gambler's life at enrollment, and *SO Participating in Treatment* ('yes' for Group 3, 'no' for Groups 1 & 2) measures the involvement of a significant other in a treatment program).

Table 1. Participant Categorizations

	Subject Category	# of Subjects
1	Pathological Gambler seeking treatment, no significant other	2,268
2	Pathological Gambler seeking treatment, significant other not involved in treatment	1,835
3	Pathological Gambler seeking treatment, significant other involved in treatment	307
	Total N	**4,410**

Independent Variables

The Gambling Client Enrollment Form is completed by qualified gambling treatment counselors upon gamblers' and significant others' enrollment into a treatment program. The forms provide information on the independent variables (see Table 2 and following explanation).

Table 2. Independent Variables and Measures

Independent Variable	**Categories**
Gender	Male, Female
Age at Enrollment	18-30, 31-40, 41-50, 51-60, 61+
Ethnicity	White, Black, Asian, Hispanic, Other
Education Level	K through <12th grade, High School Diploma, Undergraduate, Graduate+
Employment Status	Employed, Unemployed/Retired/Disabled
Gambling-related Debt	No Debt (<$100), Low Debt ($101-$5,000), High Debt (>$5,000)
Any SO	Yes, No
SO Participating in Treatment	Yes, No

Gender: The subject's gender is defined as *Male* or *Female*.

Age at Enrollment: Minors (under 18 years old) are excluded from this analysis and age categories are as follows: *18-30*; *31-40*; *41-50*; *51-60*; *61+*.

Ethnicity: The Enrollment Form lists multiple categories for ethnicity which are condensed for this analysis. Ethnicity for this analysis is categorized as: *White, Black,*

Asian, *Hispanic*, or *Other*. The *Asian* category includes participants who were categorized on the Enrollment Form as "Asian" or "Southeast Asian" (See Appendix A). *Hispanic* in this analysis includes those categorized on the Enrollment Form as "Hispanic (Mexican)," "Hispanic (Puerto Rican)," "Hispanic (Cuban)," and "Hispanic (Other)." *Other* is a combination of "Native American," "Alaskan Native," "Native Hawaiian/Other Pacific Islander," and "Other Race/Ethnicity" on the Enrollment Form.

Education Level: Education level is defined by the number of years of education (e.g., 10 for having completed 10th grade or 16 for having completed an undergraduate degree). Participants were categorized as having completed some or all of the following education levels: *K through < 12th grade* (K-11), *High School Diploma* or Equivalent (12), *Undergraduate* degree (13-16), and *Graduate* work or more (17+).

Employment Status: Participants are categorized as *Employed* or *Unemployed*/*Retired/Disabled*. The *Employed* category combines Enrollment Form categories of working "Full Time (35 or more hours/week)," "Part Time (17-34 hours/week)," and "Irregularly (>17 hours/week)". The *Unemployed/Retired/Disabled* category combines "Not Employed (employment sought)," "Not Employed (not looking)," "Retired," and "Disabled" from the original form.

Gambling-related Debt: The gambler's total debt attributable to their gambling problem is estimated by the gambler and recorded in dollars on the Enrollment form. For this analysis, these numbers were combined into three clear categories: *No Debt* (<$100); *Low Debt* ($101-$5,000); and *High Debt* (>$5,000). $5,000 was chosen as the Low/High Debt limit because it is the median value of the sample's gambling debts, and the data were skewed to the right (minimum = $0, maximum = $2,500,000).

Any SO: Gamblers who have a significant other (regardless of whether the significant other is participating in OPGS treatment) are labeled in this category as "Yes," while those without a partner are labeled as "No." We created an algorithm for categorizing gamblers regarding SO status: (a) All gamblers who listed "Married" or "Living as Married" in the Marital Status category of the Enrollment Form were classified as having a significant other; in addition, (b) all gamblers who had matched data of a significant other enrolled in OPGS treatment were also considered as having a significant other ("Yes"). Gamblers who listed "Never Married," "Divorced," "Widowed," or "Separated" on the Enrollment Form are considered as not having a significant other ("No"). This variable directly addresses Hypothesis 1: Null hypothesis = having a significant other does not affect *Gambling Treatment Outcome* and *Length of Treatment (in days)*; Alternative hypothesis = having a significant other positively affects *Gambling Treatment Outcome* (successful) and *Length in Treatment (in days).*

SO Participating in Treatment: Gamblers who have a significant other enrolled in OPGS treatment are labeled as "Yes." Those without a significant other and those who have a significant other but whose significant other was not in treatment are labeled as "No." If a significant other engages in treatment, it has been observed that they typically enroll at the same time as the gambler. This variable directly addresses Hypothesis 2: Null hypothesis = having a significant other participate in treatment does not affect *Gambling Treatment Outcome* and *Length of Treatment (in days)*; Alternative hypothesis = having a significant other participate in treatment positively affects *Gambling Treatment Outcome* (successful) and *Length in Treatment (in days).*

Outcomes (Dependent Variables)

The Gambling Client Termination Form, which is completed by clinical staff on the day of client discharge, provides the binary *Gambling Treatment Outcome* of (1) successful versus (2) unsuccessful gambling treatment, as well as the gambler's *Length of Treatment (in days)*. A successful gambling treatment discharge is defined as the individual's: (a) achievement of at least 75% of short-term treatment goals that were agreed upon at enrollment, (b) completion of a continued wellness plan (i.e., relapse prevention plan), and (c) lack of engagement in problem gambling behaviors for at least 30 days prior to discharge. To be designated as a successful treatment, the gambler must meet all three of these requirements. The length of treatment is measured in days from the date on the Enrollment Form to the recorded date on the Termination Form. As mentioned before, discharge data must be recorded within 90 days after the last date of service to an individual, so for those who are discharged as unsuccessful treatment due to non-attendance, the date of their last appointment is considered their discharge date.

Statistical Analyses

Statistical Package for Social Science (SPSS) was used to analyze the data and create the regression models. The distributions of demographic variables were investigated to determine if categorization and transformation would better fit the data. Regardless of how data were collected on the Enrollment and Termination Forms, we created categorical variables for most variables for ease of interpretation (see *Independent* and *Dependent Variables* for descriptions). The single exception is that gamblers' *Length of Treatment (in days)* was log transformed after reviewing a plot of the residuals (Q-Q Plot) and remains a continuous outcome variable. After these

modifications, scatter plots of the outcomes vs. the predictor variables were examined for possible outliers.

Descriptive statistics of the variables were used to describe the gamblers. Chi-square analyses (for discrete data) were conducted to explore whether there were significant differences between the three gambler categories (*No SO, SO not participating in Treatment, SO participating in Treatment*) in each demographic characteristic, including gender, age, ethnicity, education, employment and gambling debt using $p \leq 0.05$.

The probability of successful treatment outcome was modeled using logistic regression. Log length of treatment was modeled using linear regression. After reviewing the Wald statistics (logistic regressions) and the F-statistics (linear regressions) using $p \leq 0.10$, we decided that our multivariate analysis should include all the demographic variables regardless of statistical significance to capture how each variable affects the treatment outcomes of interest.

The effects of having a significant other compared to not having one on *Gambling Treatment Outcome* and *Length of Treatment* were measured by the variable *Any SO*, and significant odds ratios greater than 1.00 indicated that having a significant other has a positive effect on gambling success and longer treatment length compared to not having a significant other. Similarly, the effect of having a significant other participate in treatment compared to having a significant other not participate in treatment on the two outcomes were measured by the variable *SO Participating in Treatment*. A significant odds ratio above 1.00 showed that having a significant other participate in treatment has a

positive affect on gambler's treatment success and longer length of treatment compared to having a significant other not participate in treatment.

Additionally, potential interactions between gambler demographics and *SO Participating in Treatment* were identified and tested for significance. Backward elimination was performed using a statistical significance level of $p \leq 0.05$ for the Wald statistic (*Gambling Treatment Outcome* model) or F-statistic (log *Length of Treatment (in days)* model). Significant interactions indicated that the effect of having a significant other participating in treatment on *Gambling Treatment Outcome* and/or *Length of Treatment* was modified by the variable identified as an interaction term.

We chose not to investigate possible interactions between *Any SO* and the six demographic variables because from a clinical point of view, we cannot influence if a gambler has a significant other in their lives. However, it *is* possible for clinicians to influence an SO's participation in treatment. Since suggestion and persuasions can be used to get a significant other enroll, it was important for us to determine interactions between the demographic variables and the *SO Participating in Treatment* effect, but not necessarily for the *Any SO* effect since this variable cannot be influenced directly.

Human Subjects Consideration

This study was submitted for approval to the Oregon Health & Science University Institutional Review Board for the Protection of Human Subjects. Submission and approval of this study occurred in February-March 2007. The data set was de-identified and the analysis did not begin until IRB approval was obtained.

RESULTS

Descriptive statistics of the gambler characteristics can be found in Table 3. The gamblers are categorized into three groups: Group 1, Gamblers with No Significant Other at the time of Enrollment (N =2,268); Group 2, Gamblers with a Significant Other who did not participate in an OPGS treatment program (N = 1,835); and Group 3, Gamblers with a Significant Other participating in an OPGS treatment program (N = 307). The numbers of participants in each category group (and its percentage within that group) are recorded in Table 3, and significant between-group differences are identified with an asterisk. All six independent variables in Table 3 have asterisks, indicating the following variables have significant differences between the three gambler groups based on chi-squared p-values: gender; age; ethnicity; education; employment; and gambling debt. The Pearson's chi-squared test evaluates whether column percentages are constant across the three gambler categories, and with large samples such as ours, the tests will have small p-values (indicating significant differences between groups). By adjusting for these variables in our analysis, we are able to conclude that the *Any SO* and *SO Participating* effects are not due to differences in the demographic profiles of the groups.

Of particular interest from the Pearson's chi-squared test are the between-group differences of certain categories. For example, the percentage of females among Group 3 gamblers (SO participating in treatment) is low (33.2%) compared to Group 1 and Group 2 gamblers (53.1% and 48.7%, respectively). There is a higher percentage of 18-30 year olds (15.2%) in Group 1 (No SO) as compared to Group 2 (9.0%) and Group 3 (9.4%). Also, the percentage of gamblers with K through < 12 years of schooling in Group 3 is low (4.2%) compared to Groups 1 and 2 (both 11.9%), and a higher percentage of

Table 3. Pathological Gambler Characteristics by Gambler Category

	Gambler, No SO	Gambler, SO not participating in TX	Gambler, SO participating in TX	All Gamblers
Total N =	**2268 (51.4%)**	**1835 (41.6%)**	**307 (7.0%)**	**4410 (100.0%)**
Gender*				
Female	1064 (46.9%)	942 (51.3%)	102 (33.2%)	2108 (47.8%)
Male	1204 (53.1%)	893 (48.7%)	205 (66.8%)	2302 (52.2%)
Age at Enrollment (years)*				
18-30	345 (15.2%)	165 (9.0%)	29 (9.4%)	539 (12.2%)
31-40	618 (27.2%)	470 (25.6%)	94 (30.6%)	1182 (26.8%)
41-50	718 (31.7%)	605 (33.0%)	102 (33.2%)	1425 (32.3%)
51-60	423 (18.7%)	435 (23.7%)	63 (20.5%)	921 (20.9%)
61+	164 (7.2%)	160 (8.7%)	19 (6.2%)	343 (7.8%)
Ethnicity*				
White	2005 (88.4%)	1635 (89.1%)	238 (92.2%)	3923 (89.0%)
Black	60 (2.6%)	25 (1.4%)	3 (1.0%)	88 (2.0%)
Asian	90 (4.0%)	73 (4.0%)	8 (2.6%)	171 (3.9%)
Hispanic	44 (1.9%)	56 (3.1%)	6 (2.0%)	106 (2.4%)
Other	69 (3.0%)	46 (2.5%)	7 (2.3%)	122 (2.8%)
Education Level*				
K through <12	269 (11.9%)	219 (11.9%)	13 (4.2%)	91 (2.1%)
HS Diploma	1046 (46.1%)	812 (44.3%)	120 (39.1%)	2388 (54.1%)
Undergraduate	879 (38.8%)	720 (39.2%)	162 (52.8%)	1761 (39.9%)
Graduate+	74 (3.3%)	84 (4.6%)	12 (3.9%)	170 (3.9%)
Employment Status*				
Employed	1443 (63.6%)	1298 (70.7%)	228 (74.3%)	2969 (67.3%)
Unemployed/Retired/ Disabled	825 (36.4%)	537 (29.3%)	79 (25.7%)	1441 (32.7%)
Gambling-related Debt*				
No Debt (<$100)	507 (22.4%)	410 (22.3%)	55 (17.9%)	972 (22.0%)
Low Debt ($101-$5k)	697 (30.7%)	511 (27.8%)	72 (23.5%)	1280 (29.0%)
High Debt (>$5,000)	1064 (46.9%)	914 (49.8%)	180 (58.6%)	2158 (49.0%)
Gamblers' Treatment Outcomes				
Unsuccessful TX	1504 (66.3%)	1141 (62.2%)	138 (45.0%)	2783 (63.1%)
Successful TX	764 (33.7%)	694 (37.8)	169 (55.0%)	1627 (36.9%)
Gambler's Treatment Length				
Mean (days)	145.5	151.1	225.8	153.4
Minimum (days)	1	1	1	1
Maximum (days)	1914	2001	1575	2001

Note: Italicized categories indicate the baseline category.

* = Significant differences between Groups 1, 2, and 3 (χ^2 analyses) using $p \leq 0.05$.

gamblers with significant others in treatment (Group 1, 52.8%) have done some undergraduate work in comparison to gamblers in Group 1 (38.8%) and Group 2 (39.2%).

Gamblers with a significant other in treatment (Group 3) also have a higher percentage of employment (74.3%) than those with no significant other (Group 1, 63.6%). Lastly, Group 3 has a higher percentage of gamblers with debt greater than $5,000 (58.6%) compared to the gambler in Groups 1 and 2 (46.9% and 49.8%, respectively).

Outcome 1: Gambling Treatment Outcome (successful/unsuccessful)

Logistic regression analyses assessed the associations between the eight independent variables (*Gender, Age, Ethnicity, Education, Employment, Gambling Debt, Any SO, and SO Participating in Treatment*) and *Gambling Treatment Outcome* of success or non-success. We also included all possible 2-way interactions between *SO Participating* and the six demographic predictors. Interaction terms were eliminated by backwards elimination, using a 0.10 p-value cutoff.

Regression results including significance at $p \leq 0.05$ and $p \leq 0.01$ test levels are shown in Table 4. Table 4 gives the odds ratios and 95% confidence intervals of the eight predictor variables and significant interactions against *Gambling Treatment Outcome* (successful/unsuccessful). The results indicate a statistically significant interaction between *Education* and *SO Participating* ($p = 0.05$). Results for the main effects in the absence of significant interaction terms were virtually identical to those in Table 4.

The logistic regression of the binary variable *Gambling Treatment Outcome* indicates that Females have 1.11 times (95% CI: 1.00-1.30) the odds of having a successful treatment outcome compared to Males. When comparing *Age* categories against the outcome, older gamblers are significantly more likely to complete treatment successfully ($p < 0.01$) as compared to younger gamblers. More specifically, gamblers in the 18 to

Table 4. Demographics and Interactions vs. Gambler TX Outcome

Predictor	Category	Main Effects + Interaction terms	
		O.R.	95 % CI for O.R.
Gender			
(baseline)	Male	1	--
	Female	1.11*	1.00-1.30
Age			
	18-30	0.50**	0.38-0.67
	31-40	0.56**	0.43-0.72
	41-50	0.65**	0.51-0.83
	51-60	0.75*	0.59-0.97
(baseline)	60+	1	--
Ethnicity			
(baseline)	White	1	--
	Black	0.89	0.57-1.41
	Asian	1.43**	1.04-1.96
	Hispanic	1.03	0.68-1.55
	Other	0.61**	0.40-0.93
Education			
	K through <12	0.91	0.73-1.12
(baseline)	HS Diploma	1	--
	Undergraduate	0.95	0.82-1.09
	Graduate+	1.28	0.92-1.79
Employment			
(baseline)	Employed	1	--
	Unemployed/ Retired/ Disabled	0.96	0.83-1.09
Gambling Debt			
(baseline)	No Debt (<$100)	1	--
	Low Debt ($101-$5,000)	0.83**	0.70-0.99
	High Debt (>$,5,000)	0.98	0.83-1.15
Any SO			
	Yes	1.14*	1.00-1.30
(baseline)	No	1	--
SO Participating in TX			
	Yes	1.83**	1.25-2.68
(baseline)	No	1	--
Education * SO Participating in TX [Interaction Term]			
(baseline)	HS Diploma x SO participating	1	--
	K through <12 x SO participating	0.21*	0.04-1.01
	Undergraduate x SO participating	1.47	0.89-2.43
	Graduate+ x SO participating	0.939	0.27-3.28

* = Significant with $p < 0.05$

** = Significant with $p < 0.01$

30-years old category have 0.50 times (95% CI: 0.38-0.67) the odds of successful treatment compared to the baseline group of age over 60 years. The results for *Ethnicity* indicate that Asians have 1.43 times (95% CI: 1.04-1.96) the odds of having a successful treatment compared to Whites. Individuals in the *Ethnicity* category of "Other," which includes Native Americans, Alaskan Natives, Native Hawaiian/Other Pacific Islander, and those who chose Other Race/Ethnicity on the Enrollment Form,- are significantly less likely to have a successful treatment outcome compared to Whites (OR = 0.61, 95% CI: 0.40-0.93). *Gambling Debt* is also associated with *Gambling Treatment Outcome*; gamblers with Low Debt ($101-$5,000) have a significantly lower likelihood of successful treatment as compared to gambler with No Debt (<$100) (OR = 0.83, 95% CI = 0.70-0.99).

Table 4 shows that the variable *Any SO* has a significant odds ratio of 1.14 (95% CI: 1.00-1.30). *Any SO* measures the effect of having a significant other not in treatment, relative to having no significant other. The regression analysis suggests that gamblers with a significant other not participating in treatment have 1.14 times the odds of successful treatment as compared to those with no significant other.

Table 4 also shows that *SO Participating in Treatment* is associated with *Gambling Treatment Outcome,* but the presence of a significant interaction term indicates that *Education* modifies this relationship. Therefore, the *SO Participating in Treatment* effect depends on the gamblers' level of education. The calculations necessary to obtain the odds ratios and 95% confidence intervals for this interaction can be found in Table 5. Odds ratios in Table 5 are interpreted as the relative odds of success compared to subjects with an SO who does not participate in treatment.

Table 5. Odds Ratio and Calculations: *SO Participating in Treatment *Education*

SO Participating Effect:	General Equation for O.R.	Equation for O.R.	= O.R.
K through < 12	EXP ($\beta_{so\ part} + \beta_{int}$)	EXP (0.61 + -1.56)	0.39
HS Diploma (baseline)	EXP ($\beta_{so\ part}$)	EXP (0.61)	1.84
Undergraduate	EXP ($\beta_{so\ part} + \beta_{int}$)	EXP (0.61 + 0.39)	2.72
Graduate+	EXP ($\beta_{so\ part} + \beta_{int}$)	EXP (0.61 + -0.06)	1.73

Table 5 shows that gamblers with less than a high school diploma and who have a significant other participating in treatment have 0.39 times the odds of successful treatment compared to the baseline (gamblers with a high school diploma and no significant other participating in treatment). Gamblers who have completed some undergraduate work and have a significant other participating in treatment have 2.72 times the odds of successful treatment compared to the gamblers at that education level and with an SO who does not participate in treatment. Similarly, gamblers with graduate experience and with a significant other involved in treatment have 1.73 times the odds of successful treatment as compared to the gamblers at the same education level and with an SO who does not participate in treatment.

Outcome 2: log Length in Treatment (in days)

Linear regression analysis assessed the same eight independent variables against our second outcome of interest, log *Length in Treatment (in days)*. Table 6 provides the betas, 95% confidence intervals (betas), and the EXP(beta) for this model. EXP(beta) is a measure of the relative increase (if EXP(beta) > 1) or decrease (where EXP(beta) < 1) in the median days in treatment. This "acceleration" or "deceleration" factor allows us to express the effects of each predictor on the original scale. There are no significant

Table 6. Independent Variables vs. log Gambler Length in Treatment (in days)

Predictor	Category	Main Effects only		
		B	95% CI: B	EXP(B)
Gender				
(baseline)	Male	0	--	1
	Female	0.03	-0.01-0.06	1.03
Age				
	18-30	-0.21**	-0.29 - -0.13	0.81
	31-40	-0.14**	-0.21- -0.07	0.87
	41-50	-0.10**	-0.17- -0.03	0.91
	51-60	-0.04	-0.12-0.30	0.96
(baseline)	60+	0	--	1
Ethnicity				
(baseline)	White	0	--	1
	Black	-0.12*	-0.25-0.00	0.89
	Asian	0.03	-0.06-0.12	1.03
	Hispanic	-0.10	-0.21-0.01	0.91
	Other	-0.08	-0.18-0.03	0.92
Education				
	K through <12	-0.04	-0.01-0.02	0.96
(baseline)	HS Diploma	0	--	1
	Undergraduate	0.04*	0.00-0.08	1.04
	Grad+	0.09	0.00-0.18	1.09
Employment				
(baseline)	Employed	0	--	1
	Unemployed/ Retired/Disabled	-0.05**	-0.09- -0.02	0.95
Gambling Debt				
(baseline)	No Debt (<$100)	0	--	1
	Low Debt ($101-$5,000)	-0.02	-0.06-0.03	0.98
	High Debt (>$,5,000)	-0.05	-0.09-0.00	0.95
Any SO				
	Yes	0.03	-0.01-0.06	1.03
(baseline)	No	0	--	1
SO Participating in TX				
	Yes	0.25**	0.17-0.32	1.28
(baseline)	No	0	--	1

Note: Adjusted R Squared = 0.03
* = Significant with $p < 0.05$
** = Significant with $p < 0.01$

interactions between the six independent variables and *SO Participating* using $p \leq 0.10$, so the linear regression model in Table 6 includes only main effects.

The results show that our *Age* categories are significantly associated with log *Length in Treatment (in days)*, and from the EXP(B) we can see that median days in

treatment increase as gambler age increases. The *Ethnicity* variable in Table 6 shows that the median days in treatment for Black participants is 0.89 times the median days in treatment for the baseline (Whites). When comparing the outcome by *Education*, median days in treatment for gamblers with undergraduate education is 1.04 times the median days in treatment for gamblers with only a high school education. Furthermore, median days in treatment for gamblers who are Unemployed, Retired, or Disabled is 0.95 times the median days in treatment of employed gamblers.

Table 6 shows that the *Any SO* effect was not significantly associated (EXP(B) = 1.03, $p > 0.05$) with *Length in Treatment (in days)*. Lastly, the results indicate that *SO Participating in Treatment* is significantly associated with *Length in Treatment (in days)*. The results indicate that median days in treatment for gamblers with a significant other participating in treatment is 1.28 times the median days in treatment for those with a significant other not participating in treatment.

Lastly, Table 6 shows an Adjusted R Squared for this main effects model of 0.03. This value indicates that only 3% of the variance in *Length in Treatment* can be predicted from the independent variables in this model.

DISCUSSION

Given the importance of family members in many types of addiction treatment, such as alcohol (Azrin & Sisson, 1986) and drug abuse (Shadish & Stanton, 1997), it is critical for clinicians to be familiar with the characteristics of pathological gamblers and their significant others who are seeking treatment. It is especially important to identify which characteristics affect gambling treatment outcomes and treatment length, as well as to establish whether significant others influence these outcomes. This study sought to determine the impact of gambler characteristics and the involvement of significant others on gamblers' treatment success and length of treatment.

Assessment of Results

Our Pearson Chi-squared tests revealed that our three gambler categories (Group 1: No SO; Group 2: SO not participating in treatment; and Group 3: SO participating in treatment) are similar but present with some significant differences between the predictor variables. For example, Group 3 has a lower percentage of females than the other two groups, suggesting that male significant others are less likely to join their partner in gambling treatment than female significant others. Group 1 has a higher percentage of gamblers between the ages of 18-30 compared to the other two groups, which suggests that younger gamblers seeking treatment may be less likely to report having a significant other than older individuals. Additionally, Group 3 has (a) a higher percentage of undergraduate-educated gamblers, and (b) a lower percentage of gamblers with less than a high school education. These results suggest that gamblers seeking treatment who have a partner involved in treatment are generally more educated than gamblers seeking treatment without a significant other's involvement. It is also important to note that

gamblers in Group 3 are more often employed and have a higher percentage of people with high debt than the other two categories. This suggests that gamblers who seek treatment with a significant other more often have (a) higher gambling-related debts and (b) a steady income as compared to gamblers seeking treatment without a significant other. These group differences beg the question of whether the differences in gambling outcomes by group are attributable to the gambler presence of a significant other or a significant other's involvement in treatment (the factor by which the groups were established) or the other gambler characteristics, such as education, gambling debt, etc. However, with large samples, the Pearson's Chi-square test will results in small p-values. By taking potential confounders into consideration during our analysis, we are able to conclude that any important significant other effects, regardless of significant other participation in treatment, are not due to differences in the demographic makeup of the three groups.

The first hypothesis sought to determine if having a significant other affected gamblers' likelihood of (a) having a successful treatment outcome and (b) having a longer length of treatment compared to those without a significant other. We found that having a significant other was statistically important in the likelihood of a gamblers' successful treatment outcome, in that gamblers with a significant other who did not participate are 1.14 times as likely as those without a significant other in having a successful treatment outcome ($p = 0.05$). However, gamblers with a significant other not participating were not more likely than those without significant others to have a longer length of treatment. These results suggest that gamblers who have significant others in their lives may be positively influenced by the added support and encouragement of their

romantic partner, and that having a significant other may serve as motivational factor for the gamblers to successfully complete treatment, but not necessarily to stay in treatment longer.

Second, we hypothesized that the presence of a significant other in an OPGS family treatment program would have a positive effect on the gambler's treatment outcome and length of treatment when compared to gamblers with a significant other not involved in treatment. We found that gambler *Education* levels significantly modify the *SO Participating in Treatment* effect for gambler treatment outcome of success or non-success. This means that differing education levels influence how having a significant other participate in treatment affects gambling treatment outcomes. This interaction term reveals that having (a) less than a high school diploma (or equivalent); and (b) having a significant other participate in treatment, significantly decreases a gambler's likelihood of successful treatment. These results suggest that gamblers with less than a high school education should perhaps be discouraged from having their significant other participate in treatment because that may actually lower the gambler's chances of a successful treatment.

The linear analysis of *Length in Treatment (in days)* showed that median days in treatment for gamblers with a significant other participating in treatment is 1.3 times longer than those with significant others not involved in treatment. These findings suggest that significant others participating in treatment help to increase gambler retention in treatment and may, therefore, serve as an added motivation for the gambler to complete his personalized treatment program successfully.

The main results of our analysis suggest that having a significant other participate in an OPGS family treatment plan with the gambler may yield the best treatment results for the gambler as compared to gamblers seeking treatment without a significant other's involvement. Additionally, a gambler's level of education seems to moderate how having a significant other participate in treatment influences gambler treatment success. It also seems that having a significant other in one's life has a positive affect on a gambler's likelihood of treatment success as compared to single gamblers seeking treatment. Though length of treatment may not be affected by a gambler's "single" versus "partnered" relationship status, treatment length is significantly longer for those with a significant other participating in treatment compared to those with a significant other not involved in treatment. Participation of a significant others in treatment has been documented as a positive influence in other treatment-related research (Badger et al, 1994; Abrams et al, 1991), and similarly, our results support the hypothesis that significant others involved in gambling treatment have a positive impact on gamblers' treatment outcomes.

In addition to focusing on our two specific hypotheses, the regression analyses addressed a number of secondary associations that helped further elucidate our sample and the nature of the relationships between our variables. Our results indicate that multiple gambler characteristics may also be associated with gambler treatment outcomes and length of treatment. For instance, we found that Females are significantly more likely to successfully complete gambling treatment than Males, which is a similar result to a study of the treatment of heavy drinkers (Lei, Leigh, Sanchez-Craig & Spivak, 1989). Successful treatment and longer treatment length are also more likely as gambler age

increases, and treatment length significantly increases for gamblers who have completed undergraduate and graduate work. These results suggest that maturity and higher education play a role in a gambler's chances of successful treatment and treatment retention, and further research could help determine their exact relationship between these characteristics and treatment success.

We also found that individuals who are Black have significantly shorter treatment lengths as compared to White participants, and Asians have a significantly increased likelihood of successful treatment compared to participants who are White. There are many factors that could impact how ethnicity influences treatment outcomes, such as a gambler's socio-economic status, access to care and resources, and ethnic make-up of treatment facilities. Treatment outcomes for minorities may be improved by having treatment programs address language barriers and by increasing culturally sensitive treatment methods. We also found that gamblers who are unemployed, retired, or disabled have significantly fewer days in treatment compared to employed participants. This suggests that having a steady source of income may influence a gambler's level of engagement in treatment, and ultimately, financial stability may support a successful treatment outcome.

Additionally, it seems that gamblers with lower debt ($100-$5,000) have a decreased chance of treatment success and shorter treatment lengths compared to those with virtually no debt group (<$100). It is possible that those with low gambling-related debt do not commit to treatment as seriously as those with high debt (>$5,000), perhaps because those with high debt have experienced major financial difficulties and stronger motivation to address their gambling problems. Consequently, gamblers with high debt

may feel a sense of urgency that gamblers with low debt do not feel, which may translate to an increased dedication to treatment. Ultimately, our findings indicate that severity of debt, and by extension severity of gambling-related problems, are associated with treatment outcomes.

It is important to note that the adjusted R-squared value for the *Length of Treatment* regression model is very low (0.03). Since only 3% of the variance in treatment length can be explained by the independent variables in this main effects model, this suggests that our model does not fit the data accurately. The adjusted R-squared value is an overall measure of the strength of association, and does not reflect the extent to which any particular independent variable is associated with *Length in Treatment*. However, it is likely that other gambler variables not included in our dataset or in this model better explain the variance in *Length in Treatment*.

Our results reveal that there may be particular types of gamblers who are more or less inclined to successfully complete treatment. Typologies of gamblers or gambler profiles (e.g., Blaszczynski's three part typology, [2000]) may modify the role of significant others in treatment. For instance, individuals in Blaszczynski's first "normal" subgroup, (people who successfully reduce their gambling habits and have 'normal' personalities) and second "emotionally vulnerable" subgroup may be positively influenced by significant other involvement in treatment due to the added social and emotional support. Conversely, those who fall into Blaszczynski's last "biologically based impulsive" pathological gambler subgroup may not be as heavily influenced by significant other participation due to their predisposition for impulsive behaviors. Further

research is necessary to determine the relationship between gambling typologies and significant other effects.

Implications

The results of this study emphasize the importance of gambling treatment and interventions at the couple level, which may not be addressed adequately in the current OPGS system at the clinical and policy levels. OPGS has a diverse approach to treatment for gamblers, using a range of resources within the Oregon DHS system, as well as resources within the community, to assist gamblers presenting for treatment. Gamblers seeking treatment at OPGS receive counseling, relationship and family therapies, and financial counseling depending on their need. It is common for a range of treatment approaches to be used, both internal (e.g., OPGS personal and couples counseling) and external (e.g. self help groups such as Gamblers Anonymous, help lines, etc). Some individuals seeking treatment may also be referred to mental health treatment programs, legal and financial services, substance abuse treatment, and crisis intervention programs.

The positive results of using a variety of methods to treat problem gambling have been documented in the gambling literature (Blaszczynski & Silove, 1995; Potenza, 2005), and our study supports the notion that significant others are positively associated with gamblers' treatment outcomes and, therefore, should be integrated into the system of treatment approaches. This study identified that significant others are correlated with successful gambling treatment, and by conducting further research to confirm these findings, policy makers can enact changes that will effectively and efficiently incorporate significant others into their gambling treatment services.

Future Research

This study raises a number of questions that future research should address. For example, while this study adds to the literature on the general effect of significant others on gamblers' treatment outcomes, future research should address the role of significant others on specific treatment approaches and therapy techniques. This study suggests that, at least for some gamblers, having a significant other involved in the outpatient treatment processes may be viewed as an additional "intervention" that could be improved upon to increase positive treatment outcomes.

We did not evaluate the actual interventions that gamblers and their significant others received, and future research that assesses the impact of significant others on gamblers' treatment should incorporate the effectiveness of currently used treatment approaches for gambling addiction. Variations in treatment outcomes could be related to differences in counseling methods or different combinations of treatment approaches (Griffiths & Macdonald, 1999). This suggests the need for more evidence-based therapies and treatment models for problem gambling, and perhaps developing and testing a family treatment model for significant others of gamblers would be useful to OPGS and the wider gambling treatment community.

We recommend conducting a prospective study, where newly enrolled gamblers and significant others are followed forward through treatment and multiple characteristics are scrutinized against treatment outcomes. Furthermore, an intervention study could be conducted, where newly enrolling gamblers are encouraged to include their significant other in the treatment program and outcomes are followed forward. An increased treatment success rate as compared to those without significant others in treatment would

support the idea that a significant others' involvement in gambling treatment builds a support network for the recovering gambler, which ultimately helps the gambler successfully complete treatment and overcome their gambling addiction.

Limitations to study

There were several limitations to this study. The cross-sectional study design assessed associations between variables and did not establish a cause and effect relationship between the gambler characteristics, significant other effects, and the two gambling treatment outcomes of interest. Since the dataset was comprised of gamblers who sought treatment through OPGS and who had a DSM-IV diagnosis of "Pathological Gambling," the results may not be applicable to the general population of gamblers who have not sought treatment, or to those who have other family members (e.g., child, parent) participate in treatment. Also, the use of a sample of gamblers from only Oregon may make the results less generalizable to gamblers in other states and other treatment programs. Additionally, the sample size was reduced somewhat by excluding gamblers and significant others who did not have complete intake and discharge forms, but this was unlikely to affect the results.

Since multiple clinicians assessed the participants at enrollment and discharge, and a number of individuals entered the data in the database, this could have contributed to variability in the data. However, since all OPGS counselors were trained to consistently collect and enter data, the validity of the data was substantiated. Nevertheless, it is recommended that retest or inter rater reliability be conducted in future studies to strengthen the reliability of the data.

As in any research, factors that were not assessed could have associations with the outcomes. We did not have accurate assessments of gross income, intervention variability, alcohol/drug problems, or co-occurring mental illness, all of which are related to problem gambling generally (Oei & Raylu, 2007; Kaminer & Petry, 1999; Korn & Shaffer, 2002; Ladouceur & Toneatto, 2003) and could influence treatment outcomes. The Adjusted R Squared value reported under Table 6 for the full model of log *Length in Treatment (in days)* is very small (0.03), indicating that there is a lot of variability in treatment length that we are not capturing in with our model.

Lastly, although OPGS used standardized forms to enable counselors to collect consistent and reliable data, it did not use any measuring instruments whose reliabilities and validities have been thoroughly assessed. Inclusion of such instruments would assist in not only strengthening the data collected but also provide additional or more comprehensive information on certain variables. Regardless of these limitations, this is an important and valid study as it highlights risk factors for treatment outcomes and areas of possible new directions in relation to the prevention and treatment of gambling addiction.

SUMMARY AND CONCLUSIONS

The results of our study suggest that there may be value in including significant others in gambling treatment programs**.** There seems to be a benefit to integrating significant others into currently used gambling treatment methods since significant other involvement was found to be associated with successful treatment outcome and longer treatment length. Significant others may act as motivational and social supports for gamblers seeking treatment, and future research may reveal that significant others are a key component of successful gambling treatment. Incorporating significant others into the current gambling treatment system would require new treatment models, funding, training, and evidence-based procedures. The added support of a loved one's involvement in treatment, however, could have a significant impact on a gambler's treatment success and could assist the significant other in coping with the destructive effects of their partner's gambling problem.

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APPENDICES

Appendix A

Gambling Client Enrollment Abstracting Instructions

The data to be coded into each of the fields on the Client Enrollment Coding Form is discussed by numerical section identification found on the left side of the form.

LEAVE NO BLANK FIELDS

USE THE FOLLOWING CODES FOR ALL FIELDS WHERE THE INFORMATION IS EITHER UNKNOWN, NOT AVAILABLE, OR THE CLIENT HAS REFUSED TO PROVIDE.

UK – UNKNOWN
NA – DOES NOT APPLY
NC – NOT COLLECTED BY AGENCY
CR – CLIENT REFUSED

CORRECTED: Check this box only if the Form is being resubmitted to correct, or update, previously submitted information. Please make a photocopy of the original form, check the corrected box, and indicate the changes on the form with red ink. Please write clearly.

BLOCK 1: *Provider Identification*

Clinic/ Provider Identification: Facility or Clinic name where services are being provided. State issued clinic ID numbers/codes may be substituted.

Client Case Identification: This is the same local, discrete case identification that providers have been utilizing. Each client enrolling in the program must be assigned a discrete, confidential 10-character (maximum) alpha-numeric client case identification code by the providing agency. This identification code will be utilized to track the individual throughout his, or her, care with that agency. Readmissions must utilize the same client case identification (ID) - do not reassign client case codes for readmissions. This case identification must match all encounter data.

BLOCK 2: *Client Identification*

Client Identification Tracking Code: In order to standardize as much as possible with OMHAS CPMS data collection protocol this field consists of the second, third, and, fourth letters of the last name, second, third, and fourth letters of the first name, and second, third, and fourth letters of the birth name (not married name). Please use upper case and print clearly exaggerating letters U, V, I, L, D, and O.

Date of Birth: In American format – MM/DD/YYYY

Gender: M= Male, F=Female

Ethnicity:

01 White (Non-Hispanic)
02 Black (Non-Hispanic)
03 Native American
04 Alaskan Native
05 Asian
06 Hispanic (Mexican)
07 Hispanic (Puerto Rican)
08 Hispanic (Cuban)
09 Other Hispanic
10 Southeast Asian
11 Other Race/Ethnicity
12 Native Hawaiian/Other Pacific Islander

County: Clients County of Residence

01 Baker	09 Deschutes	17 Josephine	25 Morrow	33 Wasco
02 Benton	10 Douglas	18 Klamath	26 Multnomah	34 Washington
03 Clackamas	11 Gilliam	19 Lake	27 Polk	35 Wheeler
04 Clatsop	12 Grant	20 Lane	28 Sherman	36 Yamhill
05 Columbia	13 Harney	21 Lincoln	29 Tillamook	90 Washington State
06 Coos	14 Hood River	22 Linn	30 Umatilla	91 Idaho
07 Crook	15 Jackson	23 Malheur	31 Union	92 Nevada
08 Curry	16 Jefferson	24 Marion	32 Wallowa	93 California
				98 Other State

Client's Zip Code: The US Postal Service ZIP code assigned to the place of residence of the client.

Access Source: This field is to determine where the client acquired the contact information (including phone number) for your treatment agency. THIS CAN NOT BE "SELF"

Codes for Gambling:

AA Oregon Minimal Intervention Program (GEAR)
BB Oregon Gambling Helpline
CC Oregon Council on Problem Gambling
DD Oregon Gambling Foundation
80 Gamblers Anonymous
81 Consumer Credit Counseling
82 Regional/Local Central Intakes
83 Inpatient Gambling
84 Other Outpatient Gambling
85 National Council on Problem Gambling

87 Placard on Video Poker Machine
88 Placard or Sign in a Casino
89 Other Oregon Lottery Retailer Source
90 Other Oregon Casino Source
91 Yellow Page Ad
92 Newspaper Ad
93 Television Ad or Public Service Announcement
94 Radio Ad or Public Service Announcement
95 Web/Internet
96 TV News program or other programming
97 Radio News program or other programming
98 Newspaper/Other magazine news story or article

Individuals:

31 Private Health Professional
36 Previous/current client from the program
33 Family or Friend
34 Employer or EAP
47 Self Help Group (GA, NA, CA, etc.)
81 Oregon Partnership Helpline

Local or State Agencies:

04 MM-DD Agency
05 School
06 Other Community Agencies or Defense Attorney
07 Adult & Family Services (Welfare)
08 Children's Services Division
09 Employment Division
10 Health Division
11 Vocational Rehabilitation Division
12 Motor Vehicles Division
13 Mental Health Agency
35 Senior and Disabled Services
68 EPSDT/Medicheck
69 Social Security Administration
70 New Jobs Program (Welfare - AFS)
80 Oregon Health Plan

Criminal Justice System:

21 Court or Evaluator
22 Jail - City or County
23 Parole - County, State, Federal
24 Police/Sheriff - Local, State
25 Psychiatric Security Review Board
26 Probation -County, State, Federal
27 Alternatives to Street Crimes (TASC)
71 State Correctional Institution
72 Federal Correctional Institution

Alcohol and Drug Agencies:

40 Outpatient Chemical Dependency
41 Residential Care
42 Non-Hospital Detox
43 Hospital Detox
44 Private Hospital Alcohol / Drug Care
45 CIRT (Community Intensive Residential Treatment)
52 Methadone Maintenance/Detox
60 County Central Intake
73 Corrections A&D Program
77 Prevention / Early Intervention

Hospitals and Training Centers:

74 State Hospital/Training Center/Other Hospitals

Other

99 Other

Referral Source: Using the same codes as described above, indicate if a person, institution, or agency took deliberate action to get the client to the treatment provider. If no other person took ***deliberate*** action to get the client to contact the treatment provider then a code of 32 for a self-referral may be utilized.

32 Self

BLOCK 3: ***Enrollment Performance Indicators***

First Contact Date: The date in MM/DD/YY format that the client first contacted the program regarding admission or enrollment.

First Available Date: The date of the first available appointment.

Enrollment Date: The date that the client was first provided services. For treatment as usual programs this would be the first face-to-face contact. For minimal intervention programs with telephone only counseling this should be the date the client verbally agreed to enroll in the program.

Reason for Enrollment: This field is used to distinguish between clients (either gamblers or family clients) being seen for intended full treatment or those who might be seen simply for an assessment or for relapse prevention.

01 Regular Treatment Program
02 Assessment Only
03 Relapse Prevention / Abstinence Maintenance (Short term)
04 Other Brief Therapy
05 Other

BLOCK 4: *General Demographics*

Education: Highest *grade* completed (GED = 12)

Marital Status:

01 Never Married
02 Married
03 Widowed
04 Divorced
05 Separated
06 Living as Married

Living Arrangement:

01 Private Residence - Alone
02 Private Residence - with Spouse or Significant Other
03 Private Residence - with Parent, Relative, or Adult Child(ren)
06 Private Residence - with Friend(s) or Other Unrelated Person(s)
04 Non-Relative Foster Home
21 Treatment Foster Care (Youth only)
05 Institution: Hospital/Corrections
07 Skilled Nursing/Intermediate Care Facility
09 Residential Treatment Facility
28 Other Residential Facility/Group Home
16 Room and Board
97 Transient/Homeless
27 Other

Dependents: Number of individuals, **including self**, who are *dependent on the household income* by age group: Under 6 years of age; between 6 and 17 years old; between 18 and 64 years old; 65 and over years old. Please ensure each of the four boxes are completed with ZEROS if there are no dependents in the age categories.

Housing:

01 Own
02 Rent - no subsidies
03 Rent - with subsidies
04 Institution or Group Home
05 Homeless / Shelter
06 Other - Not paying rent ("Crashing" with friends or acquaintances)

BLOCK 5: *Employment*

Health Insurance: Type of health care benefits available:

00 None
01 MEDICARE
02 MEDICAID
03 Blue Cross/Shield
04 CHAMPUS
05 VA
06 Other Private
07 Other Public
08 OHP

Employment Status:

01 Full Time (35 or more hours / week)
02 Part Time (17 - 34 hours / week)
03 Irregular (Less than 17 hours / week)
04 Not Employed (Employment Sought)
05 Not Employed (Not Looking)
06 Retired
07 Disabled

Employability:

01 Student
02 Homemaker
03 Retired
04 Disabled – Physical or Mental Reasons
05 Incarcerated
06 Seasonal Worker
07 Temporary Layoff
10 Employable/working

Income Source: Primary source of household income:

00 None (no income)
01 Wages, Salary
05 Public Assistance/Welfare
07 Pension/Unemployment/Veteran
09 Other

Estimated Income: Estimated ***MONTHLY*** gross household income (in dollars).

BLOCK 6: *Current Gambling Characteristics*

Gambling Debt: Total estimate current unpaid debt related to gambling (in dollars). If no debt, fill with zeros.

Daily Expenditure: Average amount of money actually spent each day the client gambled during the last 30 days of most recent problem gambling episode in dollars. (This is not "handle" [amount spent including re-spending winnings] but actual out of pocket expenditure.)

Days Gambled: The number of days, out of the last 30 days of most recent problem gambling episode, the client spent gambling for money.

Gambling Pattern: This field is to track general characteristics of the frequency of gambling activities for clients that do not gamble on a regular, or somewhat regular, basis and may not have gambled in the past 30 days.

01 Regular gambler - gambles some every month. Including those who might be in early remission, have not gambled in the past 30 days but when gambling gambled some every month.
02 In the past 12 months able to maintain 30 or more days abstinence with lapses of 14 to 180 days at irregular intervals.
03 In the past 12 months maintains abstinence for 30 or more days and lapses into 1 to 14 day episodes.
05 No gambling in the past 12 months
06 Other gambling pattern

Primary Gambling Activity:

Type: This field should be coded with the client's primary gambling activity.

01 Video Poker
02 Sports-Other than lottery Sports Action
04 Cards
05 Horses/Dogs/Other Animals
06 Dice
08 Numbers
09 Bingo
10 Stocks/Commodities/Bonds
11 Slot Machines
12 Keno
13 Bowling, pool, golf or other skill games
14 Scratch Tickets/Pull Tabs/Breakopens
16 Roulette
17 Power Ball/Daily Four/Mega Bucks
19 Lottery Sports Action
20 Charitable games other than bingo (including raffles)
21 Video Line Games
22 Sweepstakes where a product was purchased to enter
24 Dominoes
25 "Fast Race" Electronic Horse or Dog racing "slot" type machines
15 Other
99 No preference of one type over another

Venue: Location or environment where the client engages in the primary gambling activity.

01 Oregon Video Poker Lottery Retailer (Bar/Pub)
02 Indian Gaming Center or Indian Gaming Casino
04 Bingo Hall (Use only - other than Indian Gaming Center/Indian Casino)
05 Food Store or Convenience Store - (Such as - purchase Oregon Lottery games)
06 Restaurant/Pub/Bar (Use only - where no State Video Poker/Line Machines are present)
07 Card Room - Public (Not IGC or Casino)
08 Private Club/Lodge
09 Horse or Dog Race Track/Off Track Betting Facility
10 Home (For other than Internet gambling can include Stocks/Commodities)
11 Internet Gambling - e.g. On-line Casinos, Lotteries - Not stocks or commodities
12 Family member or friend's home
13 Work
14 School
16 Day Trading Facility or Brokerage House

15 Other

Jurisdiction: State in which the primary gambling occurs.

01 Oregon	03 Idaho	05 Washington
02 California	04 Nevada	10 Other

Distance: The number of miles from the client's home to the primary gambling location. This field will be utilized to analyze potential catchment areas of gambling activity. Round to the nearest mile.

Event Time: Average duration of the primary gambling activity per session rounded to the nearest hour. If each session is less than one hour indicate 01. (Analysis categories will start with one hour or less.)

Secondary Gambling Activity: These fields are to be utilized to record the client's secondary gambling activity.

Type: Same coding as for primary gambling type.

Venue: Same coding as for primary gambling venue.

Jurisdiction: Same coding as for primary gambling jurisdiction.

Distance: Same coding as for primary gambling distance traveled rounded to the nearest mile.

Event Time: Same coding as for primary gambling event time.

Age First Gambled: Age, in years, at which the client first ever gambled for money.

Age of Problem Onset: Age, in years, at which first repeated problems associated with gambling were first experienced.

Length of Current Episode: Years and months of the duration of current episode of problems without a period of 12 months or more abstinence or non-problem gambling.

Total Episodes: Total number of distinct problem gambling episodes during the client's lifetime with at least a period of 12 months problem free between each episode.

Quit Attempts: Total number of serious, intentional attempts made by the client to quit, or control, gambling that resulted in at least 30 days of success.

Assisted Quits: Total number of serious, intentional attempts made by the client to quit, or control gambling aided by professional, or formal self-help such as GA, that resulted in at least 30 days of success.

BLOCK 7: *DSM-IV Diagnostic Impressions*

Primary: Indicated what the primary diagnostic impression is.

01 Not Mentally Ill/Diagnosis Deferred
02 Delirium, Dementia, Amnesic and Other Cognitive Disorders
03 Substance-related Disorders (also complete substance abuse diagnostic code & specifier)
04 Disorders due to General Medical Condition
05 Schizophrenia and Other Psychotic Disorders
06 Mood Disorders
07 Somatoform Disorders
08 Factitious Disorders
09 Anxiety Disorders
10 Adjustment Disorders
11 Personality Disorders
12 Sexual and Gender Identity Disorders
13 Sleep Disorders
14 Disorders Usually Diagnosed in Infancy, Childhood, or Adolescence
15 Impulse-Control Disorders (NOT PATHOLOGICAL GAMBLING)
16 Eating Disorders
19 Dissociative Disorders
20 **PATHOLOGICAL GAMBLING**
21 **PROBLEM GAMBLING**
22 RELATIONAL PROBLEM RELATED TO PROBLEM OR PATH. GAMBLING
25 Other

Secondary: Indicated what the secondary diagnostic impression is.
(Use same codes as above)

Substance Abuse: The Axis I diagnostic code for substance abuse/dependence if ever, or currently, diagnosed. For lifetime substance disorders the following "specifier" field should be completed.

Specifier: This field is to distinguish the status of the substance abuse/dependence disorder if in remission. (See DSM-IV-TR)

01 Early Full Remission
02 Early Partial Remission
03 Sustained Full Remission
04 Sustained Partial Remission
05 In a Controlled Environment

Pathological Gambling Specifier: Use this field to distinguish the status of the individuals who have been previously diagnosed as pathological gamblers but are in remission.

01 Early Full Remission
02 Early Partial Remission
03 Sustained Full Remission
04 Sustained Partial Remission
05 In a Controlled Environment

DSM-IV Score: Check each corresponding box for the criterion that was endorsed by the client (in order of presentation in the DSM-IV-TR , p. 671 - preoccupation, increasing tolerance, continuation with attempts to stop or control, restlessness or irritability, escape gambling, chasing losses, lying, antisocial

behavior to get money, jeopardized or lost relationships, bailout behavior) **DURING THE PAST 12 MONTHS**.

Presenting Danger: Use the following codes for each of the four "presenting" danger fields.

01 Thoughts
02 Threat
03 Plan
04 Action/Behavior
08 None of the Above

Presenting Danger – Suicide:

Presenting Danger – Other Physical Harm to Self:

Presenting Danger – Physical Harm to Others:

Presenting Danger – Harm to Property:

NOTE: If the client indicates that responses to any of the four suicide assessment areas delineated above are positive a standardized screen should be utilized. The currently recommended screen is the Beck Scale for Suicide Ideation (BSS). Documentation of assessment and intervention must be entered into the client's chart if there is any indication of suicidality or homicidality.

BLOCK 8: *Treatment History*

Commute Time to Treatment: This field is used to analyze the time necessary for clients to travel from their home to the treatment center. Record hours and minutes for the one-way trip.

Treatment History: Complete each set of fields for each of the general types of treatment (**gambling**, **alcohol and drug**, and **mental health**).

Times: Total number of distinct treatment episodes including outpatient and inpatient EXCLUDING this episode - do not include self-help.
00 None

Last Type Treatment:
00 None
01 Oregon state-funded outpatient
02 Oregon state-funded residential (inpatient)
03 Oregon state-funded minimal intervention
04 Private outpatient
05 Private residential/inpatient
09 Other

Term Type: Type of termination from the last (most recent previous) treatment.

00 No Treatment
02 Stopped coming – against staff advice – cap not reached
03 Treatment completed successfully
04 Further services not appropriate at this program
05 Non-compliance with rules
07 Moved from Catchment Area
08 No Transportation
09 Conflicting Hours
11 Incarcerated
12 Deceased
14 Program cuts or program closure (other than standard treatment session cap)
15 Physical or mental illness
16 Treatment subsidy ran out, client unwilling to pay, left against staff advice
17 Client Placed in Recovery Support Services

Date Completed: Month and year of completion (termination) from the most recent previous treatment.

Currently Enrolled: Use this field for Alcohol and Drug and Mental Health only for coding of concurrent treatment being received by the client.

00 Not currently enrolled
01 Same agency as that providing gambling treatment
02 Other state or publicly-funded agency
03 Other private insurance or self pay agency/therapist

Self-Help:

00 Not participated in Self-help
01 Previously attended - not in the past 30 days
02 Currently attending self-help for this category of problem (gambling, A&D, mental health).

BLOCK 9: *Personal & Social Costs Past 12-months*

Relationship Problems: During the past 12-months, has the client become divorced, separated, or lost a significant relationship due to gambling.

01 Yes
02 No

Job/School Problems: During the past 12-months, has the client lost a job, been expelled from school, or received formal disciplinary action at work or school in relation to gambling.

01 Yes
02 No

Lost Time: During the past 12-months, has the client missed time from work - due to gambling.

01 Yes

02 No

Bankruptcy: Filed or planning to file bankruptcy due to gambling losses.
01 Yes
02 No

Family Physical Aggression: During the past 12 months, has the client witnessed one family member becoming physical aggressive to another family member due to gambling related argument or frustration.
01 Yes
02 No

Legal: Does client currently have pending charges, was incarcerated within the past 12-months, or on probation for gambling related activities.
01 Yes
02 No

BLOCK 10: *Client Primary Contact Data*

Complete the name and address fields only with a signed release for follow-up. Check the box "Release Attached" and staple the signed release authorization to the form. Print this information clearly.

Appendix B

Gambling Client Termination Record Abstracting Form Instructions

The data to be coded into each of the fields on the Client Discharge/Termination Coding Form is discussed by numerical section identification found on the left side of the form.

LEAVE NO BLANK FIELDS

USE THE FOLLOWING CODES FOR ALL FIELDS WHERE THE INFORMATION IS EITHER UNKNOWN, NOT AVAILABLE, OR THE CLIENT HAS REFUSED TO PROVIDE.

UK – UNKNOWN
NA – DOES NOT APPLY
NC – NOT COLLECTED BY AGENCY
CR – CLIENT REFUSED

CORRECTED: Check this box only if the form is being resubmitted to correct, or update, previously submitted information. Please make a photocopy of the original form, check the corrected box, and indicate the changes on the form with red ink. Please write clearly.

BLOCK 1: *Identification*

Clinic/ Provider Identification: Facility or Clinic name where services were provided. State issued clinic ID numbers/codes may be substituted. This should be the same code as that on the Enrollment Form.

Client Case Identification Code: This is the same local, discrete case identification code that providers have been utilizing. Each client enrolling in the program must be assigned a discrete, confidential 10-character (maximum) alpha-numeric client case identification code by the providing agency. This identification code will be utilized to track the individual throughout his, or her, care with that agency. Readmissions must utilize the same case code - please do not reassign client case codes for readmissions. This case identification must match encounter data.

BLOCK 2: *Client ID Verification Information*

Enrollment Date: Date the client was enrolled in treatment for this episode of care. This field is used for confirmation of the case identification.

Date of Birth: In American format - DD/MM/YYYY. This field is used for confirmation in the database in the case that the Client Case ID provided is not legible.

Gender: M for Male; F for Female. This field is utilized for secondary confirmation along with the Date of Birth field if the Client Case ID provided is not legible or has been duplicated by the provider.

BLOCK 3: *Termination Data* All client records must be closed within the time prescribed by the prevailing contract with OMHAS. Clients being transferred from agency to agency must be closed at the first agency and then reopened at the accepting agency. Clients being transferred from residential gambling treatment should be opened and closed for that treatment modality and then reopened for outpatient treatment. Similarly, clients enrolled in minimal intervention projects should be closed in that level of care and re-opened in a new level of care as appropriate.

Last Service Date: Date in American format (MM/DD/YY) that the client was last seen at the clinic/provider agency.

Termination Type:

02 Stopped Coming – Against Staff Advice
03 Treatment Completed Successfully **
04 Further Services not Appropriate at this Program
05 Non-compliance with Rules
06 Client Refused Services
07 Moved from Catchment Area
08 No Transportation
09 Conflicting Hours
10 Evaluation Services Only
11 Incarcerated
12 Deceased
14 Program Cuts Or Program Closure (other than standard treatment session cap)
15 Physical or Mental Illness
16 Treatment subsidy ran out, client unwilling to pay, left against staff advice
17 Client Placed in Recovery Support Services

*** The definition for treatment completed successfully can be found in the prevailing contract with OMHAS.*

Treatment Type: Primary mode of treatment received by the client at this agency during this episode of care. (Based on ASAM levels of service.)

01 Outpatient 02 Intensive Outpatient/Partial Hospitalization

03 Residential/Inpatient
04 Medically-managed intensive inpatient
05 Long term residential (more than 30 days)
06 Evaluation or Assessment Only
07 Minimal - home-based intervention

Referral Type: Principle type of treatment referred to following this treatment.

00 None
01 Minimal - home-based intervention
02 Traditional Outpatient Structure Program with individual, group, and psychoeducational session for the client (and the family).
03 Outpatient – Individual therapist not with an organized program.
04 Residential - short-term crisis stabilization (less than 5 days)
05 Residential - mid-term care (5 to 30 days)
06 Medically Managed Residential Care - (Patient under direct supervision of an MD)
07 Residential - long-term (more than 30 days)
08 Gamblers' Anonymous
09 Other

Case Closing Date: Date the case record was administratively closed. MM/DD/YY

BLOCK 4: *General Demographics* (Utilized for statistical comparison across data collection waves.)

Education: Highest grade completed (GED = 12)

Marital Status:

01 Never Married
02 Married
03 Widowed
04 Divorced
05 Separated
06 Living as Married

Living Arrangement:

01 Private Residence - Alone
02 Private Residence - with Spouse or Significant Other
03 Private Residence - with Parent, Relative, or Adult Child(ren)
06 Private Residence - with Friend(s) or Other Unrelated Person(s)
04 Non-Relative Foster Home
21 Treatment Foster Care (Youth only)
05 Institution: Hospital/Corrections
07 Skilled Nursing/Intermediate Care Facility
09 Residential Treatment Facility
28 Other Residential Facility/Group Home
16 Room and Board
97 Transient/Homeless
27 Other

Dependents: Number of individuals, **including self**, who are *dependent on the household income* age group: Under 6 years of age; between 6 and 17 years old; between 18 and 64 years old; 65 and over years old. Please ensure each of the four boxes are completed with ZEROS if there are no dependents in the age categories.

Housing:

01 Own
02 Rent - no subsidies
03 Rent - with subsidies
04 Institution or Group Home
05 Homeless / Shelter
06 Other - Not paying rent ("Crashing" with friends or acquaintances)

BLOCK 5: *Employment*

Health Insurance: Type of health care benefits available:

00 None
01 MEDICARE
02 MEDICAID
03 Blue Cross/Shield
04 CHAMPUS
05 VA
06 Other Private
07 Other Public
08 OHP

Employment Status:

01 Full Time (35 or more hours / week)
02 Part Time (17 - 34 hours / week)
03 Irregular (Less than 17 hours / week)
04 Not Employed (Employment Sought)
05 Not Employed (Not Looking)
06 Retired
07 Disabled

Employability:

01 Student
02 Homemaker
03 Retired
04 Disabled
05 Incarcerated
06 Seasonal Worker
07 Temporary Layoff
10 Employable/working

Income Source: Primary source of household income:

00 None (no income)
01 Wages, Salary
05 Public Assistance/Welfare
07 Pension/Unemployment/Veteran
09 Other

Estimated Income: Estimated **MONTHLY** gross household income (in dollars).

BLOCK 6: *Gambling Related Problems*

Relationship Problems: During the past 12-months, has the client become divorced, separated, or lost a significant relationship due to gambling.

01 Yes
02 No

Job/School Problems: During the past 12-months, has the client lost a job, been expelled from school, or received formal disciplinary action at work or school in relation to gambling.

01 Yes
02 No

Lost Time: During the past 12-months, has the client missed time from work due to gambling.

01 Yes
02 No

Bankruptcy: Filed or planning to file bankruptcy due to gambling losses.

01 Yes
02 No

Family Physical Aggression: During the past 12 months, has the client witnessed one family member becoming physical aggressive to another family member due to gambling related argument or frustration.
01 Yes
02 No

Legal: Does client currently have pending charges, was incarcerated within the past 12-months, or on probation for gambling related activities.
01 Yes
02 No

BLOCK 7: ***Current Gambling Characteristics***

Gambling Debt: Total estimate current unpaid debt related to gambling (in dollars). If no debt, fill field with zeros.

Daily Expenditure: Average amount of money actually spent each day the client gambled during the past 30 days in dollars. (This is not "handle," but actual out of pocket expenditure.)

Days Gambled: The number of days, out of the past 30 calendar days, the client spent gambling.

Gambling Pattern: This field is to track general characteristics of the frequency of gambling activities for clients that do not gamble on a regular, or somewhat regular, basis and may not have gambled in the past 30 days.

01 Regular gambler - gambles some every month. Including those who might be in early remission, have not gambled in the past 30 days but when gambling gambled some every month.
02 In the past 12 months able to maintain 30 or more days abstinence with lapses of 14 to 180 days at irregular intervals.
03 In the past 12 months maintains abstinence for 30 or more days and lapses into 1 to 14 day episodes.
05 No gambling in since entering treatment
06 Other gambling pattern

Primary Gambling Activity:

Type: This field should be coded with the client's primary gambling activity – IF GAMBLED IN PAST 30 DAYS.

01 Video Poker
02 Sports-Other than lottery Sports Action
04 Cards
05 Horses/Dogs/Other Animals
06 Dice
08 Numbers
09 Bingo

10 Stocks/Commodities/Bonds
11 Slot Machines
12 Keno
13 Bowling, pool, golf or other skill games
14 Scratch Tickets/Pull Tabs/Breakopens
16 Roulette
17 Power Ball/Daily Four/Mega Bucks
19 Lottery Sports Action
20 Charitable games other than bingo (including raffles)
21 Video Line Games
22 Sweepstakes where a product was purchased to enter
24 Dominoes
25 "Fast Race" Electronic Horse or Dog racing "slot" type machines
15 Other
99 No preference

Venue: Location or environment where the client engages in the primary gambling activity. – IF GAMBLED IN THE PAST 30 DAYS.

01 Oregon Video Poker Lottery Retailer (Bar/Pub)
02 Indian Gaming Center or Indian Gaming Casino
04 Bingo Hall (Use only - other than Indian Gaming Center/Indian Casino)
05 Food Store or Convenience Store - (Such as - purchase Oregon Lottery games)
06 Restaurant/Pub/Bar (Use only - where no State Video Poker/Line Machines are present)
07 Card Room - Public (Not IGC or Casino)
08 Private Club/Lodge
09 Horse or Dog Race Track/Off Track Betting Facility
10 Home (For other than Internet gambling can include Stocks/Commodities)
11 Internet Gambling - e.g. On-line Casinos, Lotteries - Not stocks or commodities
12 Family member or friend's home
13 Work
14 School
16 Day Trading Facility or Brokerage House
15 Other
90 No gambling since entering treatment

Jurisdiction: State in which the primary gambling occurs – IF GAMBLED IN THE PAST 30 DAYS.

01 Oregon	03 Idaho	05 Washington
02 California	04 Nevada	10 Other Jurisdiction

Distance: The number of miles from the client's home to the primary gambling location. This field will be utilized to analyze potential catchment areas of gambling activity. Round to the nearest mile – IF GAMBLED IN THE PAST 30 DAYS.

Event Time: Average duration of the primary gambling activity per session rounded to the nearest hour. If each session is less than one hour indicate 01. (Analysis categories will start with one hour or less.) – IF GAMBLED IN THE PAST 30 DAYS.

Secondary Gambling Activity: These fields are to be utilized to record the client's secondary gambling activity – IF GAMBLED IN THE PAST 30 DAYS.

Type: Same coding as for primary gambling type – IF GAMBLED IN THE PAST 30 DAYS.

Venue: Same coding as for primary gambling venue – IF GAMBLED IN THE PAST 30 DAYS.

Jurisdiction: Same coding as for primary gambling jurisdiction – IF GAMBLED IN THE PAST 30 DAYS.

Distance: Same coding as for primary gambling distance traveled – IF GAMBLED IN THE PAST 30 DAYS.

Event Time: Same coding as for primary gambling event time– IF GAMBLED IN THE PAST 30 DAYS.

BLOCK 8: *DSM-IV Diagnostic Impressions*

Primary: Indicated what the primary diagnostic impression is.

01 Not Mentally Ill/Diagnosis Deferred
02 Delirium, Dementia, Amnesic and Other Cognitive Disorders
03 Substance-related Disorders (also complete substance abuse diagnostic code & specifier)
04 Disorders due to General Medical Condition
05 Schizophrenia and Other Psychotic Disorders
06 Mood Disorders
07 Somatoform Disorders
08 Factitious Disorders
09 Anxiety Disorders
10 Adjustment Disorders
11 Personality Disorders
12 Sexual and Gender Identity Disorders
13 Sleep Disorders
14 Disorders Usually Diagnosed in Infancy, Childhood, or Adolescence
15 Impulse-Control Disorders (NOT PATHOLOGICAL GAMBLING)
16 Eating Disorders
19 Dissociative Disorders
20 **PATHOLOGICAL GAMBLING**
21 **PROBLEM GAMBLING**
22 RELATIONAL PROBLEM RELATED TO PROBLEM OR PATH. GAMBLING
25 Other

Secondary: Indicated what the secondary diagnostic impression is.
(Use same codes as above)

Substance Abuse: The Axis I diagnostic code for substance abuse/dependence if ever, or currently, diagnosed. For lifetime substance disorders the following "specifier" field should be completed.

Specifier: This field is to distinguish the status of the substance abuse/dependence disorder if in remission. (See DSM-IV-TR)

01 Early Full Remission
02 Early Partial Remission
03 Sustained Full Remission
04 Sustained Partial Remission
05 In a Controlled Environment

Pathological Gambling Specifier: Use this field to distinguish the status of the individuals who have been previously diagnosed as pathological gamblers but are in remission.

01 Early Full Remission
02 Early Partial Remission
03 Sustained Full Remission
04 Sustained Partial Remission
05 In a Controlled Environment

DSM-IV Score: Check each corresponding box for the criterion that was endorsed by the client (in order of presentation in the DSM-IV-TR , p. 671 - preoccupation, increasing tolerance, continuation with attempts to stop or control, restlessness or irritability, escape gambling, chasing losses, lying, antisocial behavior to get money, jeopardized or lost relationships, bailout behavior) **DURING THE PAST 30 DAYS**.

Presenting Danger: Use the following codes for each of the four "presenting" danger fields.

01 Thoughts
02 Threat
03 Plan
04 Action/Behavior
08 None of the Above

Presenting Danger – Suicide:

Presenting Danger – Other Harm to Self:

Presenting Danger – Harm to Others:

Presenting Danger – Harm to Property:

NOTE: If the client indicates that responses to any of the four suicide assessment areas delineated above are positive a standardized screen should be utilized. The currently recommended screen is the Beck Scale for Suicide Ideation (BSS). Documentation of assessment and intervention must be entered into the client's chart if there is any indication of suicidality or homicidality.