UNLV | INTERNATIONAL GAMING INSTITUTE

Nevada Problem Gambling Study

Annual Report, Fiscal Year 2020

Prepared for the Nevada Department of Health and Human Services

Bureau of Behavioral Health Wellness and Prevention |

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ACKNOWLEDGMENTS, APPRECIATION, AND DISCLOSURES

This research team would like to acknowledge those who have supported this study through the Department of Health and Human Services Bureau of Behavioral Health Wellness and Prevention. These devoted souls include, most prominently, Kim Garcia, who is always around to support our efforts and answer any questions. Behind them (and us) are the committed volunteers on the state's Advisory Committee on Problem Gambling and the tireless efforts of the clinicians who serve the problem gamblers of Nevada. We are exceedingly grateful for the generosity of the problem gamblers in this research who have shared their personal stories with us.

Our intellectual debts are substantial, and allow us to thank an all-star cast of experts: Sarah St. John, who has built the foundations of this project and whose influence cannot be understated, Dr. Jeffery Marotta of Problem Gambling Solutions, consultant for the Nevada Problem Gambling Treatment System and our go-to person for research advice; Tim Christenson, formerly of the state of Arizona and the National Association of Problem Gambling Service Providers; Dr. Tim Fong at the UCLA Medical School Center for Gambling Studies; Dr. Brett Abarbanel at the UNLV International Gaming Institute; Dr. Juan Ramirez at the University of Nebraska; Paul Potter at the state of Oregon; and Keith Whyte of the National Council on Problem Gambling. All, remarkably, share some ownership of this important academic and human exercise on measuring problem gambling approaches.

Next we thank our UNLV International Gaming Institute staff – especially Nicole Schultz, Katherine Jackson, and Ebony Granato. At the Department of Sociology, Robert Futrell has allowed us use of so many department resources to help keep this study running smoothly. We also thank Dax Miller at the UNLV Institutional Review Board for his assistance over the years.

And of course, at a more immediate and intimate level, our backbone is our research team. We are indeed a proud "research factory," as one of our astute team members put it, and our factory would not be nearly as productive without Emily Coombes and Alessandra Lanti, two research assistants who have helped us collect data and who will surely contribute much in the future to problem gambling research.

Disclosures: The UNLV International Gaming Institute serves as a global academic resource for gaming industry stakeholders, and as such engages in research and teaching for industry, government, and non-profit entities. Over the course of this study, Dr. Bo Bernhard has received funding from the Nevada Department of Health and Human Services, the Nevada Governor's Office of Economic Development, and on research and advising projects for the Japanese Government, the Saipan Government, Bull Venture Gaming, Caesars Entertainment, Wynn Resorts, IGT, MGM Resorts, Paragon Gaming, Techlink Entertainment, Ocho Gaming, and the Las Vegas Sands Corporation. Finally, he has spoken at international conferences sponsored by academic, government, and industry sources, and he has received travel and honoraria for doing so.

EXECUTIVE SUMMARY

"I was able to be honest and talk about what was going on with me. They helped me see a way out"

OVERVIEW

The objective of the Nevada Problem Gambling Study is to provide information management and research-based insights on the effectiveness of Nevada's six state-funded treatment providers in FY20. A total of 436 Nevada residents received problem gambling services in FY20. In Northern Nevada, The Reno Problem Gambling Center provided a variety of outpatient services, while Bristlecone Family Resources and New Frontier Treatment Center provided both outpatient and residential problem gambling services. In Southern Nevada, the Problem Gambling Center in Las Vegas, Finding Hope Therapy, and Mental Health Counseling and Consulting (MHCC) provided outpatient problem gambling services to problem gamblers and concerned others.

In FY20, there was a 23% decline in outpatient enrollments. The pandemic and stay-at-home orders likely account for much of this decline. All clinics quickly adapted to the crisis and began offering telehealth services in addition to face-to-face services in order to support their clients' needs.

On average, the treatment population are single white men, around 45 years old. The treatment population is not representative of the overall Nevada population and tends to be more white, less educated, with lower household income. The majority of the treatment population seeking services have a DSM-5 score indicating severe gambling disorder and are seeking treatment for the first time. Around 50% of clients who were discharged in FY20 were discharged after successfully completing 75% of their treatment goals, which is a good indicator of the effectiveness of Nevada's treatment system as well as the positive post-treatment follow up.

CLIENT FOLLOW UP

We completed 331 post-treatment interviews with gamblers and 58 with concerned others. Clients were overwhelmingly happy with the accessibility and quality of the treatment provided. Specifically, clients entered treatment within two days of making contact with providers, on average; a statistic that shows just how dedicated these providers are to meeting the needs of a population that is often in crisis when reaching out for help. This is reflected in the fact that 95 percent of those interviewed in follow-up surveys said that they would recommend their provider to a friend or family member.

Clients reported reduction in gambling behaviors across all interviews, and around 34% of clients had not gambled at 12 months post enrollment. This number is around 70% at 30 days post enrollment, indicating a need to continue to support recovery through aftercare after successful discharge from a treatment program.

In addition to reduction in gambling behaviors and satisfaction with treatment services, clients also report improvement in daily life functioning and wellbeing—such as improved relationships, performance at work or school, and reduction in symptoms and problems related to gambling.

TREATMENT SYSTEM SUMMARY QUICK GLANCE

Total number of people receiving a **problem gambling evaluation** in FY20	436
Outpatient Services	
Number of **gamblers** entering outpatient treatment	290
Average number of sessions per client treatment episode	17.4
Average cost per client treatment episode	$1,259
Number of **concerned others** entering outpatient treatment	47
Average number of sessions per client treatment episode	9.9
Average cost per client treatment episode	$731
Over the past year, **percent change** in the number of clients (see Figure 2)	-23.1%
Residential Services	
Number of clients entering **residential gambling treatment**	63
Average length of stay in residential treatment	25.4 days
Maximum length of stay in residential treatment	55 days
Average cost per client treatment episode	$2,826
Over the past year, **percent change** in the number of clients (see Figure 2)	+5%
Number of clients receiving assessment only	36
Number of clients receiving court-mandated treatment	44
Access	
Average number of days between first contact and first available service	1
Average number of days between first contact and treatment entry	1.5
Average number of days between first available date and treatment entry	.7
Successful Completion of Treatment Program	
Total non-adjusted percent of successfully discharged clients	34.4%
Percent of successfully discharged clients, adjusted for external factors.	50%
Client Satisfaction	
"I would recommend this agency to a friend or family member."	95%
Improvements in Functioning and Well-Being after 90 days	
"I am getting along better with my family."	92%
"I do better in school and/or work."	89%
"I have reduced my problems related to gambling."	97%
"I am meeting my goal to stop or control my gambling."	94%
Improvements in Functioning and Well-Being after 12 months	
"I am getting along better with my family."	84%
"I do better in school and/or work."	79%
"I have reduced my problems related to gambling."	87%
"I am meeting my goal to stop or control my gambling."	90%

UTILIZATION OF PROBLEM GAMBLING TREATMENT SYSTEM

The Nevada Problem Gambling Treatment System is showing a pattern of declining enrollments (see Figures 1 and 2 below). Specifically, in FY2020 there was an 23.1 percent total decrease in clients who received outpatient services as gamblers and as concerned others, a steeper decline from FY2019 which was an 11.9% decrease from FY2018. Residential enrollments were 63 in FY2021, slightly above historical averages (58.5 average enrollments FY2012-19).

Figures 1 and 2 show the total outpatient and residential enrollments by fiscal year as well as the percent change from year to year.

Figure 1: Outpatient Enrollments by Fiscal Year

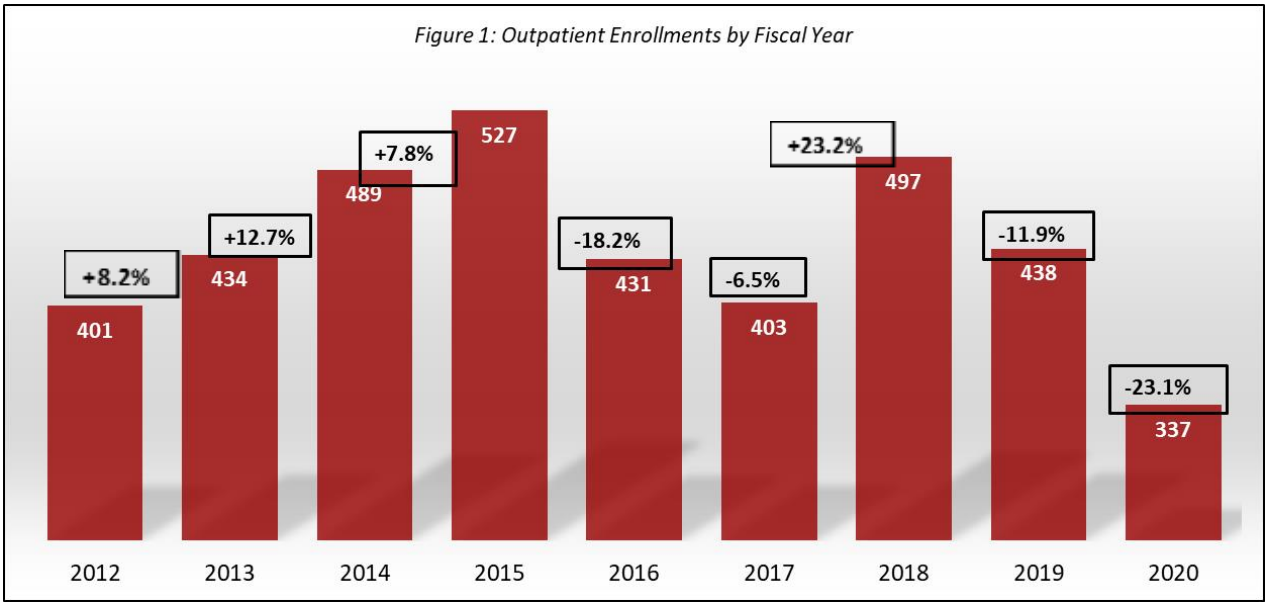
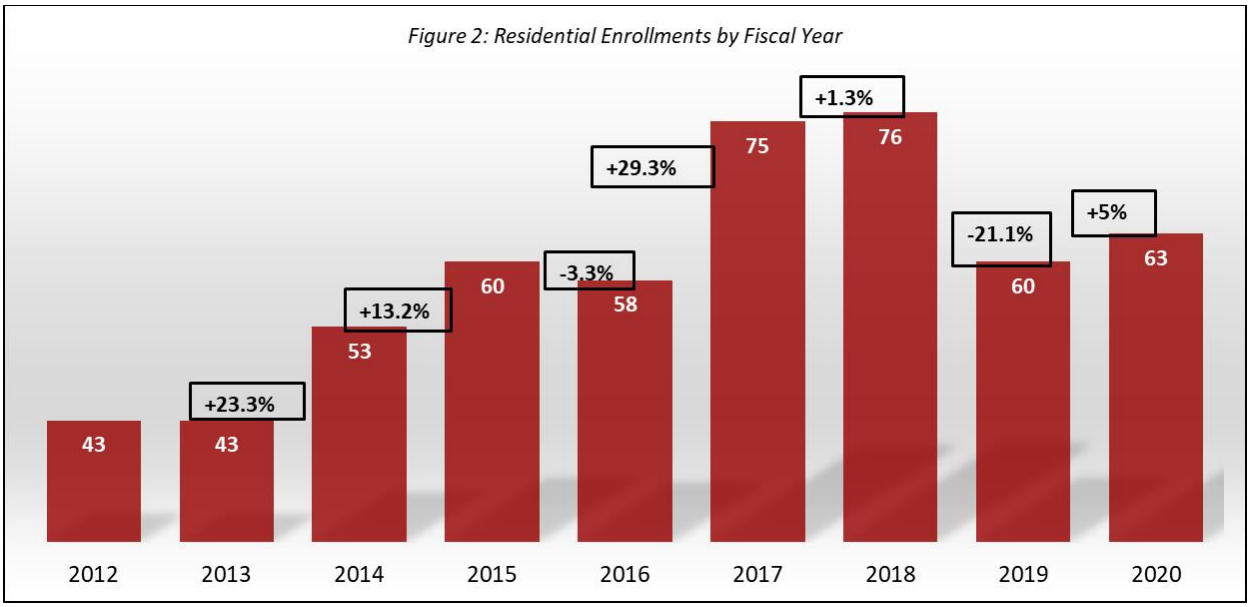


Figure 2: Residential Enrollments by Fiscal Year



HOW FUNDS ARE USED

The majority of the Problem Gambling Fund utilized in fiscal year 2020 funded treatment providers (58%). Prior to FY2020, services provided directly to problem gamblers and concerned others were the only activities reimbursable to treatment providers. However, "Program and Treatment Support Activities" performed by treatment providers became reimbursable November 2018, with initial FY19 guidelines limiting these type of reimbursements to 15% of each provider's overall budget. Allowed Program and Treatment Support Activities include funds spent by providers on advertising services, data reporting and quality assurance, workforce development, and materials used during treatment (see Exhibit 4 of the Nevada *DHHS Problem Gambling Services Strategic Plan: FY2020 & FY2021* for the complete list of reimbursable Program and Treatment Support Activities, aka "Add-on Procedure Codes").

The overwhelming majority of funds utilized by treatment providers continue to be used for treatment activities in FY2020 (78%). About half of the funding utilized for treatment covered outpatient groups and individual counseling sessions, while 19 percent covered the costs of providing residential treatment to gamblers. The remaining funding supported the completion of assessments with people seeking treatment ("intakes"), Certified Problem Gambling Counseling Interns' (CPGC-I) supervision meetings, and transitional housing for gamblers.

Treatment providers used around 21% of their budgets to support activities other than treatment, known as Program and Treatment Support Activities. These include advertisements for treatment services (13%), data reporting and quality assurance activities (3%), workforce development activities (2%), and the purchase of materials used during treatment (2%).

Meanwhile, less than 1 percent of all funds utilized by treatment providers supported Continuing Care services, or Aftercare (.8%). Aftercare is utilized to facilitate continued recovery and is provided to clients who have already completed problem gambling treatment. The majority of aftercare services in FY2020 were provided to clients who had completed treatment within the past 12 months, while a very limited amount of extended aftercare services were provided to clients 13-36 months after discharge (.5% and .3% of overall system-wide reimbursements, respectively).

The majority of clients who enrolled in treatment for their gambling problems in FY2020 were entering treatment for the first time (62% of outpatient gamblers and 75% of residential gamblers). However, almost 1 in 5 gamblers seeking treatment had previously *completed* one or more treatment program. With a treatment recidivism rate (percent of clients entering treatment who had previously *started* treatment at least once before) around 25 percent for clients seeking residential treatment and 38.3 percent seeking outpatient treatment, aftercare services are an important component of the Nevada Problem Gambling Treatment system. Aftercare services were expanded under the *Strategic Plan* in FY2020 to provide to enable treatment providers to increase relapse prevention support to gamblers in early recovery.

DEMOGRAPHICS OF TREATMENT POPULATION

Table 1. Client Demographic Characteristics, FY 2020	Outpatient Gamblers N=290	Residential Gamblers N=63	Concerned Others N=47
Average Age	47 years old	39 years old	48 years old
Gender			
Male	53%	64%	38%
Female	47%	36%	62%
Race/Ethnicity			
White, non Hispanic	67%	75%	73%
Native American or Alaskan	2%	13%	2%
Black or African American	7%	2%	2%
Asian	8%	2%	6%
Hispanic or Latino	13%	5%	13%
Native Hawaiian or Other Pacific	4%	0	4%
Other race or ethnicity	1%	2%	0
Marital Status			
Single, Never Married	29%	50%	13%
Separated, Widowed, Divorced	34%	41%	25%
Married or Live-in Partner	37%	9%	63%
Other Status	1%	0	5%
Education			
Less than High School	7%	13%	2%
High School or GED	33%	50%	25%
Some College	33%	34%	25%
Bachelor's Degree or More	26%	3%	48%
Household Income			
Less than $10,000	17%	63%	4%
$10,000-$14,999	4%	8%	0
$15,000-$24,999	11%	13%	4%
$25,000-$35,999	10%	8%	11%
$35,000-$49,999	13%	3%	22%
$50,000-$74,999	20%	5%	15%
$75,000-$99,999	9%	0	17%
$100,000-$149,999	8%	0	15%
$150,000 or more	9%	0%	11%
Employment Status			
Full-Time	54%	5%	54%
Part-Time	8%	0	6%
Disabled or Retired	18%	13%	25%
Unemployed	18%	78%	11%
Other	3%	5%	4%
DSM-5 Score			
Subclinical Gambling Disorder	3%	2%	100%
Mild (4-5)	9%	11%	0
Moderate (6-7)	25%	28%	0
Severe (8-9)	62%	59%	0

DATA COLLECTION PROCEDURES

The data provided in this report represents clients who have received treatment or enrolled in one of seven state-funded problem gambling treatment programs in fiscal year 2020. Demographic, gambling, and diagnostic data were collected during the intake process through a questionnaire administered by the clinician with the client present. Billing and services data were entered in the UNLV system monthly by the clinics. Treatment evaluation data were collected through confidential follow-up interviews with clients after they enrolled in treatment. Our methodological processes were approved by UNLV's Human Subjects Committee (protocol 711298-6). This list details our data collection processes:

- Clients enter clinic seeking services. During this time, the clinician completes the intake process, and then enters the data into UNLV's database.
- For each client, each month, clinics enter the number of contact hours, the type of service they provided, who provided the service and what their role is, and the amount billed.
- After completion of services or 60 days of no-contact with client, the clinician discharges the client from the UNLV database system and designates the reason for discharge.
- All clinics receiving funding from the state were asked to inform clients of this study during intake interviews and ask for their consent to be contacted for the follow up interviews and contact information. The individual clinics were responsible for obtaining signatures on consent forms from all clients agreeing to participate in confidential follow-up interviews.
- Research assistants from UNLV-IGI then attempted to contact every client a minimum of four times to conduct computer-assisted telephone interviews (at varying times of day and weekdays/weekends). If clients did not answer, generic, non-identifying messages were left indicating that they were being contacted for a compensated UNLV study, and that they could contact our office to let us know the best time to contact them. When attempting to locate a client without a valid phone number, IGI sought updated contact information from the clinic where the client received treatment.
- All clients who completed interviews were compensated with a $25 Visa giftcard.
- All participants were read an informed consent statement describing the objectives of this research, informing them of their rights as a participant (including the right to refuse to participate), and detailing the strict confidentiality procedures of the research. Throughout the interview, clients were repeatedly reassured that their names would never be associated with their answers.
- All participants then verbally consented to participate.
- Clients were contacted at three different time points in their recovery process. The initial interview is conducted 30 days after completing an intake at a clinic. The second interview is conducted 90 days after intake, and the final interview is conducted 12 months after intake.

We conducted a total of 313 follow-up interviews with problem gamblers at 7 different gambling treatment programs: Bridge Counseling Associates (6), Bristlecone Family Resources (26), the Problem Gambling Center in Las Vegas (100), New Frontier Treatment Center (26), Reno Problem Gambling Center (87), Finding Hope (14), and Mental Health Counseling and Consulting (MHCC) (54).

We also conducted 58 follow-up interviews with family members and loved ones of problem gamblers who enrolled in treatment at Las Vegas Problem Gambling Center (26), Reno Problem Gambling Center (29), and MHCC (3). Family members are encouraged to attend treatment in order to support the gamblers in their lives as well as to recover from their own related problems associated with a loved one's gambling behaviors.

The completed interviews (*n*) associated with the clinics varied widely, with some clinics contributing significantly fewer completed interviews. Additionally, the overall characteristics of the client base at each clinic varies widely, in ways that may impact clients' participation in treatment to address problems related to their gambling. Some providers serve a client base with greater engagement with the criminal justice system, who are also receiving other mental health or addiction services, and/or clients who are homeless or at high risk for homelessness.

These challenges impact our ability to contact clients for interviews about their experiences in treatment as well. Our biggest research challenge is locating clients post-treatment; phone numbers are out of service or clients simply do not return calls. Predictably, we observe the most success contacting clients for the 30 day interview (112), followed by the 90 day interview (126), and the least success at the 12 month interview point (103).

The tables and figures in the following pages summarize ratings of items from the Mental Health Statistics Improvement Program (MHSIP) questionnaire, as well as additional questions specific to problem gambling. The first section presents data from all the clinics and is organized by time of interview (30 day, 90 day, and 12 month). In the second section, we present clinic by clinic comparisons of the same data. To facilitate interpretation, we have broken the items down into four broad categories: access to treatment services (α=*.567*)[1], treatment quality and helpfulness (α=*.347*), treatment effectiveness (α=*.946*), and overall ratings of treatment services (α=*.860*). During the interviews, participants were asked to rate their level of agreement with various statements on a five-point Likert scale ranging from Strongly Disagree (1) to Strongly Agree (5). Scores closest to 5 indicate the strongest level of agreement. We also asked about current gambling behaviors (as of time of interview) and engagement with community based support groups.

Finally, we asked participants open-ended questions about the quality of their treatment services. These questions were as follows:

- What was the most helpful part of the program for you?
- What was the least helpful part of the program for you?
- Were there any services that were not provided by the problem gambling treatment program that you would have liked to see provided?
- Finally, we asked participants if they would like to share any additional elements of their "story" with the research team.

We coded answers using inductive category development.[2] Where appropriate, we elaborate on the quantitative data with quotations from participants to give a human voice to their experiences in treatment. [3]

[1] Cronbach's alpha measures the internal consistency of items in a scale. Numbers approaching 1 indicate high internal consistency. Our measures show high internal consistency, meaning that we are confident that we are measuring what we intend to measure.
[2] Categories are developed based on frequency and significance, through a continuous process of coding and interpretation.
[3] The quotations throughout this report represent statements from participants engaging in treatment at all programs.

TREATMENT SERVICES OUTCOMES

Overall, the treatment participants we interviewed provided very positive assessments in an impressive variety of spheres – including access to services, treatment quality and helpfulness, treatment effectiveness, reduction in gambling behaviors, and overall ratings of the quality of service. Treatment is highly impactful on clients' quality of life, shown through sustained improvement in their relationships, employment, and problems related to gambling. Around 80% of clients reported improvement in these areas after 90 days post enrollment and continued to see improvement after 12 months post enrollment.

Significantly, 50% percent of clients discharged in fiscal year 2020 system-wide were discharged successfully, meaning they had completed at least 75% of their treatment goals, a continued wellness plan, and had not engaged in problem gambling behaviors for at least 30 days prior to discharge. Based on our analysis of both quantitative and qualitative data, we found that respondents were most positive about the cost of treatment services, treatment access, group counseling, the educational information provided, and the bonds they shared with their peers in treatment.

Although participation in treatment appears to help clients abstain from gambling during their actual time in treatment, around half of our participants indicated that they had gambled again a year after entering treatment – an unsurprising rate in the field of addiction studies. As gambling scholars and clinicians move away from pure abstinence models of recovery as the only means of addressing gambling problems, it is important to recognize that clients may prioritize reduction in levels of gambling as their primary goal in treatment. Treatment aimed at reducing gambling, like treatment aimed at establishing abstinence from gambling, helps to reduce the harms associated with gambling. In this vein, we feel it is important to specify that while half of participants had gambled within the year following treatment entry, over 90 percent of participants had reduced their levels of gambling since entering treatment. Like abstinence from gambling, this reduction in gambling activities significantly impacts the problems participants experience that are associated with their gambling and with their quality of life.

Ultimately, treatment program participants expressed feelings of self-awareness, acceptance, achievement, and hope after the completion of their treatment. Given these clients' often desperate statuses when they arrived at these clinics, these pages reveal dramatic improvements. Participants indicated that these programs helped to increase their confidence, empower them, give them the strength to avoid gambling, and in many cases, saved their lives. These strong outcomes represent a genuine victory for those dedicated to helping problem gamblers turn their lives around in the state of Nevada – and emphasizes the crucial need to continue supporting these programs.

ACCESS TO TREATMENT SERVICES

The ability to easily access treatment services is arguably one of the most important components of recovery from addiction. If problem gamblers experience cost, transportation, or other access barriers, the likelihood that they will participate in treatment, and thereby recover from their addiction, declines dramatically. Clients expressed tremendous gratitude that services were available to them. Many clients expressed transportation difficulties or scheduling conflicts but felt that the sacrifices they had to make were warranted given the value of the services they received. We must of course mention that continuing to provide access to services through the pandemic has been critical to the success of participants' abilities to meet their goals to stop or control their gambling. The selection of quotes below show how important quick access to free treatment has been in helping participants get on the path to recovery.

> *"I'm glad the program exists and they need better advertisement because they are hard to find and know about them."*
>
> *"Sometimes they did not have someone available to talk because shortage of counselors"*
>
> *"The individual counseling was very beneficial. And they worked a little with my work schedule. They are flexible."*
>
> *"I hope they don't cancel the online Zoom meeting because that is the only way I can do it."*
>
> *"I had a hard time finding meetings and help. Hard to find where to go, should make themselves more prominent in the community."*

In the interviews, we asked program participants to evaluate five aspects of their access to treatment services. In Table 2 below, we display average scores for these five items. Overall, the mean scores are very high, indicating a strong level of agreement with each of the positively worded statements (average scores are above 4, meaning that the overall average response is between "agree" and "strongly agree").

Table 2. Average Ratings of Access to Services

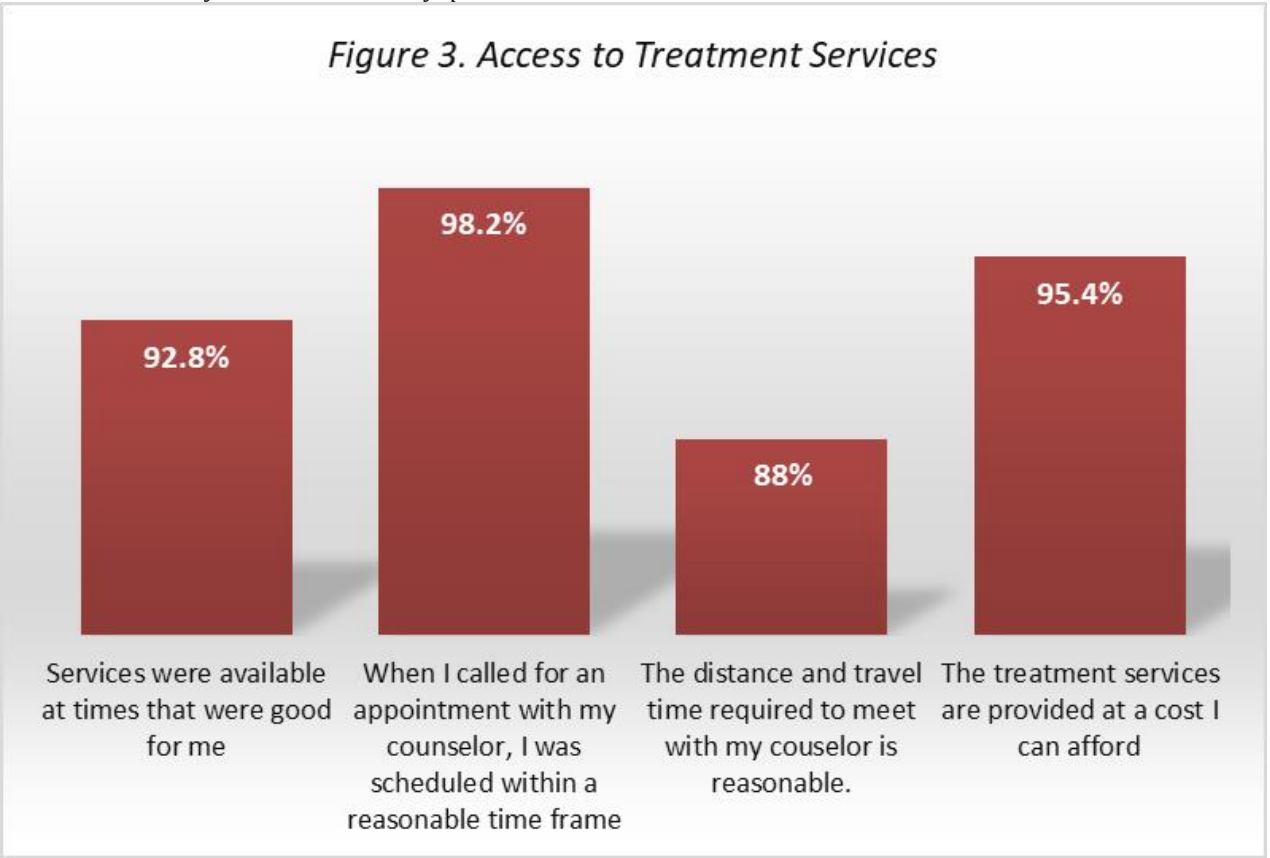
ACCESS TO SERVICES	**Average Score**
(Cronbach's α = .577)	
1. Services were available at times that were good for me.	4.57
2. When I called for an appointment with my counselor, I was scheduled within a reasonable time frame.	4.78
3. The distance and travel time required to meet with my counselor was reasonable.	4.41
4. The treatment services were provided at a cost I could afford.	4.68

Note: These questions are only asked on the 30 day follow-up questionnaire, as responses are unlikely to change over time. In contrast, evaluation of treatment received and satisfaction with services may change as time passes.

Figure 3 (below) presents the percentage of participants who agreed or strongly agreed with each statement related to access to treatment services. A large majority of clients felt positively about

their access to treatment services, although several clients we spoke with still struggled with accessing services, particularly those with transportation difficulties and those that live in rural areas.

Note: Items are only asked on the 30 day questionnaire.



TREATMENT QUALITY AND HELPFULNESS

In Table 3, we present average scores for items related to the quality of treatment and the helpfulness of treatment staff and services, organized by length of time since starting treatment. Treatment participants responded most positively to items measuring staff encouragement and group counseling. Overall, participants provided extremely positive feedback about the quality and helpfulness of the services they received. All average scores are over 4, indicating an overall average response between strongly agree and agree.

Table 3. Average Ratings of Treatment Quality and Helpfulness

TREATMENT QUALITY and HELPFULNESS	**Average Score**		
(Cronbach's α = .778)	*30 day*	*90 day*	*12 month*
5. I felt comfortable sharing my problems with my counselor.	4.80		
6. Staff have encouraged me to take responsibility for how I live my life.	4.65		
7. Staff have been sensitive to my cultural background (race, religion, language, etc.).	4.54		
8. Group counseling has been helpful.	4.58	4.54	4.40
9. Individual counseling has been helpful.	4.69	4.60	4.68
10. Family counseling has been helpful.	4.20	4.50	4.34
11. My aftercare plan has been helpful.	4.47	4.36	4.28

Clients overwhelmingly report that group counseling is the most helpful aspect of their treatment. However, not everyone is comfortable in a group setting, and they have expressed the appreciation for the flexibility that the programs offer to accommodate their needs. The combination of group and individual therapy seems to work well for most clients.

> *"My counselor was amazing. Learning the way the addiction was broken down and the psychology behind was explained and how intricate it works and how many chemicals are released, gaining this knowledge was very helpful."*
>
> *"It saved my life!"*
>
> *"My counselor was persistent and there for me"*

Figures 4 and 5 (below) represent the percentage of participants who positively rated the quality and helpfulness of their treatment. Over 80% of participants agreed or strongly agreed across all measures that they received high quality treatment and that staff were helpful. They felt comfortable sharing their problems with their counselor, staff encouraged them to take responsibility for how they lived their lives, staff were sensitive to their cultural backgrounds, and group and individual counseling services were helpful.

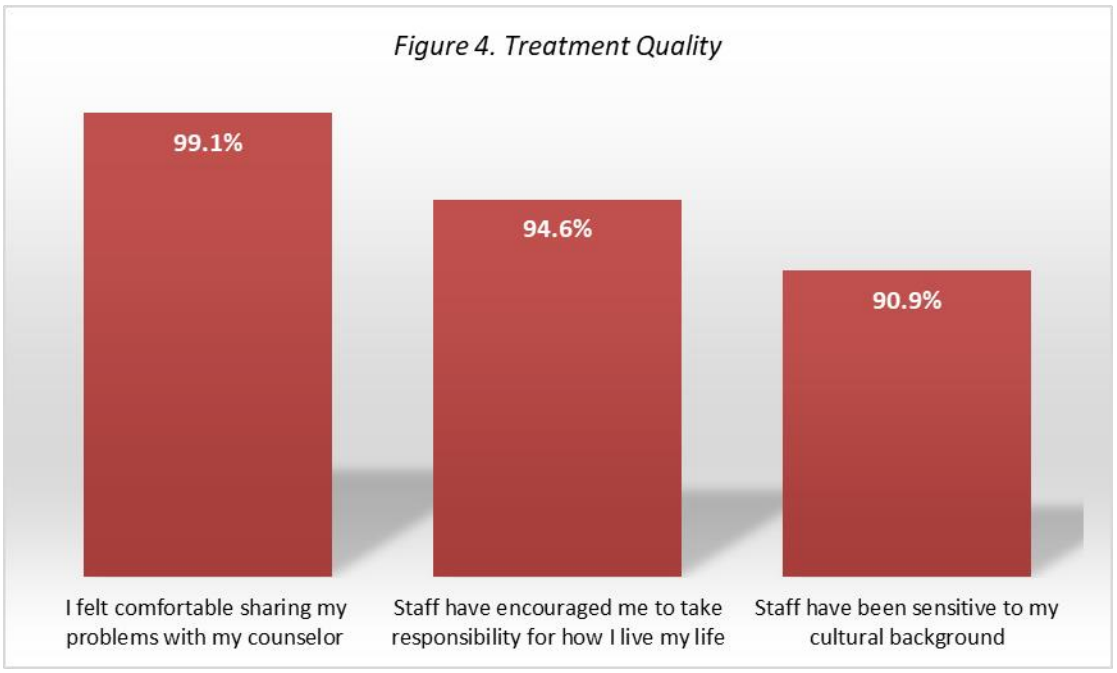


Figure 4. Treatment Quality
99.1%
94.6%
90.9%
I felt comfortable sharing my problems with my counselor
Staff have encouraged me to take responsibility for how I live my life
Staff have been sensitive to my cultural background

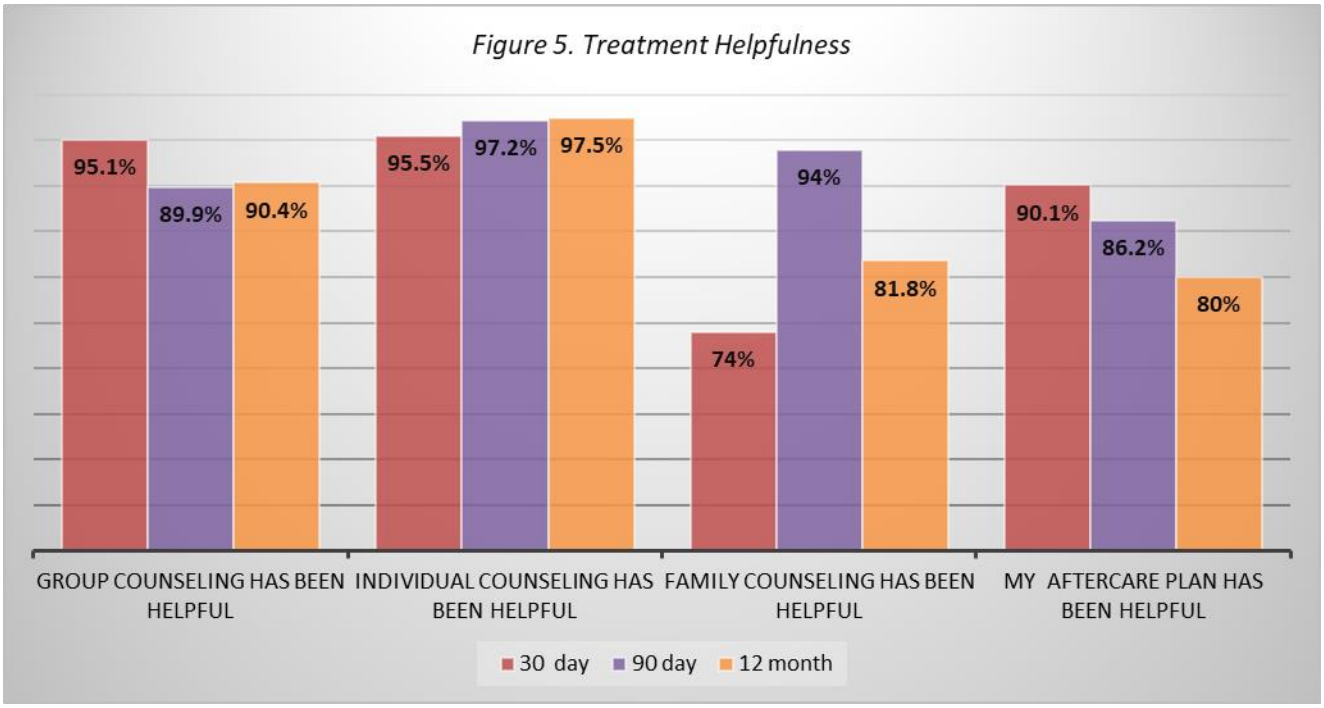


Figure 5. Treatment Helpfulness
95.1%
89.9%
90.4%
95.5%
97.2%
97.5%
74%
94%
81.8%
90.1%
86.2%
80%
GROUP COUNSELING HAS BEEN HELPFUL
INDIVIDUAL COUNSELING HAS BEEN HELPFUL
FAMILY COUNSELING HAS BEEN HELPFUL
MY AFTERCARE PLAN HAS BEEN HELPFUL
30 day
90 day
12 month

GROUP COUNSELING

The importance of group counseling was expressed by program participants most strongly in their responses to the open-ended question asking about the most helpful aspect of their treatment services ("What was the most helpful part of the program for you?"). In fact, group counseling was the most praised component of program services among all participants. A small percentage of participants expressed feeling insecure while sharing their personal experiences with the group or not feeling the camaraderie that they had expected with a particular group; however, they were appreciative that the programs have different types of treatment options available and are willing to work with clients to give them the type of help they want and what they think will work best to address their gambling problems.

The comments below reflect the overwhelming satisfaction that clients have with the group therapy format:

> *"Individual counseling was very effective as time went on. But group counseling was very helpful at the beginning. It was just so important to be able to be with your peers and talk to them about what you are going through"*

> *"Overall, the whole IOP [intensive outpatient] program is tremendous. From the minute you go in there and get assessed, you start to feel better. The counseling, the treatment, the group therapy. It's amazing that the state offers that and finances it and pays for it. It's truly a work of art as long as you work the steps yourself. It helped me to come back from the most broken I've ever been. To have my moving on celebration is amazing. It's just uplifting. I am a secretary at GA and anyone in there that is struggling I recommend the program. I think at least 22 people that I recommended have gone through IOP."*

> *"The group helped me understand the wreckage that I caused."*

Being in group therapy gives participants a sense that they are not alone and that their problems are surmountable. Many of them have expressed that, prior to treatment, they felt alone and that no one could understand what they were going through. In group therapy, they are able to see that so many others share their experiences and draw inspiration from those that have been successful in dealing with their gambling problems. They feel a sense of obligation to the group as well, which becomes motivating to them in times of uncertainty because they do not want to let down the group. Although group therapy is the most highly praised among participants, it was not for everyone. For those who did not connect in the group setting, they expressed gratitude that individual therapy was available.

THE CLIENT-COUNSELOR RELATIONSHIP

Participants often talked about the quality of the relationships they had with their counselors and other staff at the clinics. They feel welcomed, unjudged, supported, and in the hands of experts. They especially appreciate having counselors who have shared their experiences with addictions.

> *"My counselor worked with me on being able to communicate, learning to solve my problem instead of running to the casino."*
>
> *"My counselor is so compassionate. She's helped so many people that I know and I'm grateful to have her in my life."*
>
> *"The acceptance, understanding and education! I'm grateful for my counselor.It helps me in every part of my life. She is amazing! She is very supportive! I'm so grateful!!."*
>
> *"The counselor had been through it and I felt understood. Having a spiritual counselor with similar faith helped a lot, helped me trust him"*

Relationships with counselors set the foundation for participants' recovery. Several people who had experienced "slips" or relapse felt that they could return to treatment and be welcomed by their counselors.

INFORMATION AND EDUCATION

Although we did not ask about the quality of the information presented during the treatment program in the interview, several participants commented on how the information and education they received during their time in treatment was the most helpful part of the program for them. The knowledge they gained about how addictions operate gave these individuals the confidence and empowerment they needed to reduce or quit their gambling. A selection of quotations illustrating this idea is presented below:

> *"Dr. Rick's explanation of brain chemicals during the gambling process and the fact that they have not given up on me is why I'm here today."*
>
> *"I learned a lot about the wheel of your senses and needs and that was very good. They dissected our brain and way of thinking when gambling"*
>
> *"The educational part was the best for me. Learning how the mind chemistry works."*
>
> *"My counselor was amazing. Learning the way the addiction was broken down and the psychology behind was explained and how intricate it works and how many chemicals are released, gaining this knowledge was very helpful."*

Participants expressed that having this knowledge helped them understand their own behaviors and reduced the shame and stigma they felt as a result of their addiction.

TREATMENT EFFECTIVENESS

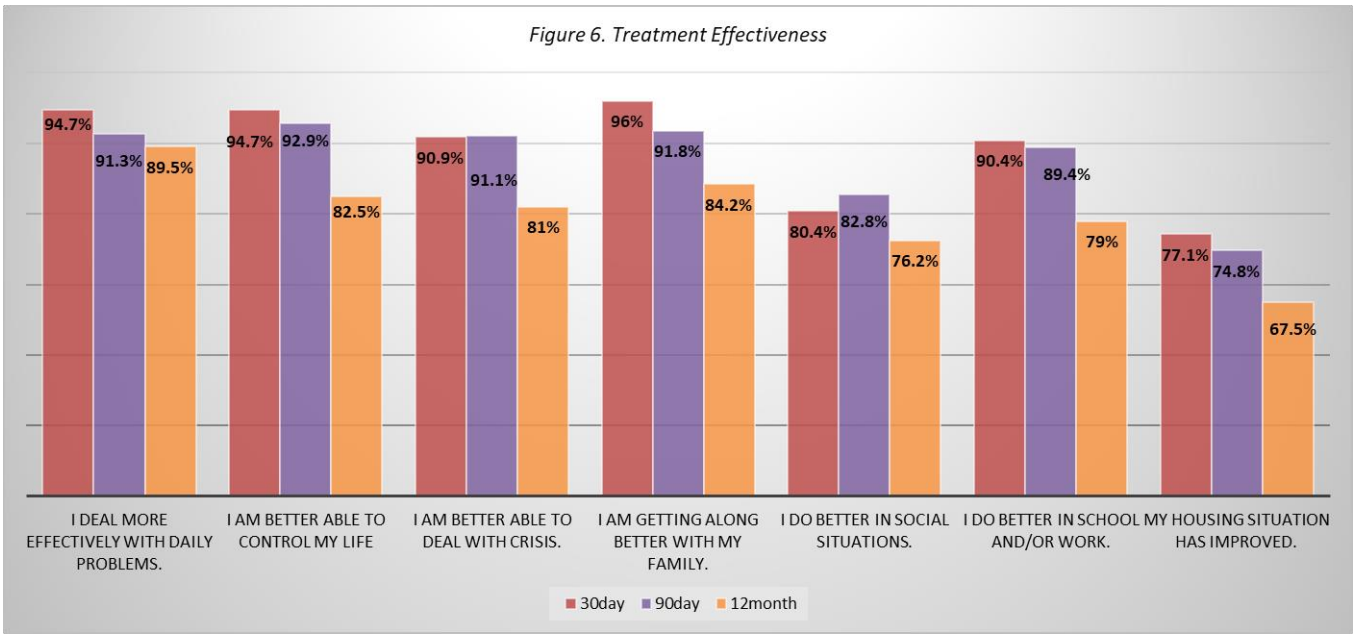
Participants' ratings of access to and the quality of their treatment services are important indirect indicators of treatment effectiveness, but more direct measures of treatment effectiveness come from participants' self-reports of improvement in daily life functioning. In Table 4 (below), we present mean scores for items that evaluate the extent to which treatment services have resulted in measureable improvements in personal, family, financial, professional, and overall well-being. For each of the positively worded statements below, participants were asked whether they had observed improvements in their lives "as a direct result of services [they] received." As with ratings of treatment services, items measuring treatment effectiveness were categorized on a 5 item Likert Scale from Strongly Agree (5) to Strongly Disagree (1), such that higher means represent greater agreement with the statement.

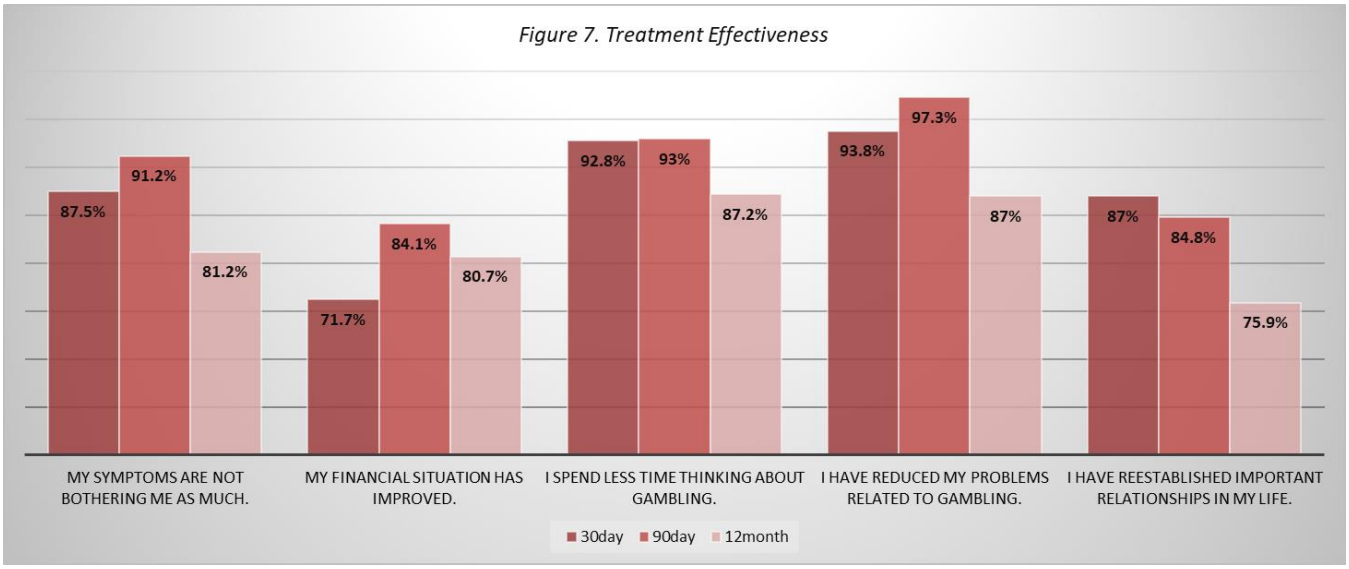
Table 4. Average Ratings of Treatment Effectiveness

TREATMENT EFFECTIVENESS	**Average Score**		
(Cronbach's α = .934)	*30 day*	*90 day*	*12 month*
12. I deal more effectively with daily problems.	4.49	4.44	4.42
13. I am better able to control my life.	4.46	4.42	4.26
14. I am better able to deal with crisis.	4.38	4.43	4.27
15. I am getting along better with my family.	4.57	4.51	4.32
16. I do better in social situations.	4.15	4.23	4.08
17. I do better in school and/or work.	4.32	4.38	4.14
18. My housing situation has improved.	4.11	4.18	4.09
19. My symptoms are not bothering me as much.	4.30	4.37	4.15
20. My financial situation has improved.	4.08	4.28	4.17
21. I spend less time thinking about gambling.	4.44	4.50	4.27
22. I have reduced my problems related to gambling.	4.45	4.65	4.32
23. I have re-established important relationships in my life.	4.28	4.30	4.15

Overall, participants reported improvement in all categories of life functioning. The levels of observed improvement were highest for being able to deal more effectively with daily problems (Item 12), being able to better control one's life (Item 13), and reducing problems related to gambling (Item 22). Observed improvement was lowest for participants' housing and financial situations (Items 18 and 20). These two particular items are arguably the most difficult to improve over the course of treatment since they are influenced by external factors beyond the impact of treatment services. Often the financial damage from problem gambling is catastrophic and takes years to improve. Participants expressed wanting more help from programs in addressing financial issues and more help meeting basic needs while entering recovery.

Figures 6 and 7 below illustrate the percentage of clients who positively rated the statements regarding the effectiveness of their treatment.





The effectiveness of treatment on reducing gambling behaviors and improving quality of life was also clear from the responses to the open-ended questions asked of participants.

> *"They helped me get my life back and get rid of the obsessive thoughts about gambling."*

> *"Understanding really what a gambling addiction looks like was critical. Living in NV everybody gambles, so knowing what addiction looks like is really important. I had never heard the term "chasing your loses" which is what I was often doing. Identifying and learning about it was really important for me. The statistics about addiction were also helpful."*

Participants consistently spoke about how treatment helped them to become more self-aware and accept themselves, gave them feelings of hope, and gave them tools that helped them reduce their gambling behaviors.

OVERALL QUALITY

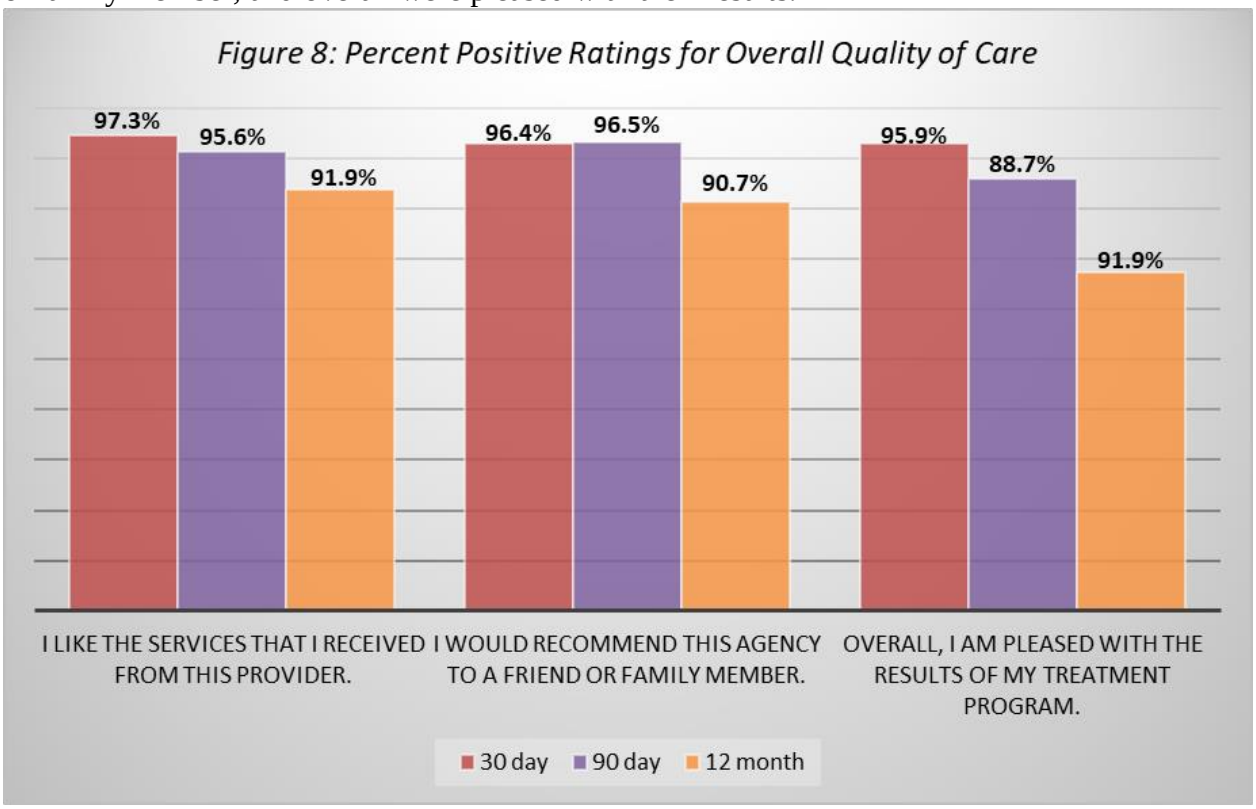
The fourth domain of the treatment evaluation included questions on the overall quality of the treatment. Results in Table 5 suggest that participants are overwhelmingly positive about the overall quality of the program. In fact, the item that asks participants if they would recommend the agency to a friend or a family member was one of the most positively rated items on the questionnaire.

Table 5. Average Ratings of Overall Quality Indicators

OVERALL QUALITY	**Average Score**		
(Cronbach's α = .863)	*30day*	*90 day*	*12 month*
25. I like the services that I received from this service provider.	4.81	4.71	4.60
26. I would recommend this agency to a friend or a family member.	4.77	4.73	4.58
27. Overall, I am pleased with the results of my treatment program.	4.67	4.58	4.36

Note: None of the differences between the 30 day, 90 day, or 12 month groups are statistically significant.

Figure 8 illustrates the strong level of agreement with statements asking participants about their overall experiences with the treatment program. Over 85% of participants agreed or strongly agreed that they liked the services they received, that they would recommend the agency to a friend or family member, and overall were pleased with their results.



When participants were asked about the least helpful components of the treatment program or what they would change about the program, they typically mentioned scheduling conflicts, conflicts with specific counselors, outdated printed materials, and the lack of suitable alternatives to Gamblers Anonymous (GA) for support in the community. We discuss GA later in this report.

IMPACT OF SERVICES ON GAMBLING BEHAVIORS AND OTHER ADDICTIONS

We also asked participants a series of questions related to their prior and current gambling behavior and problems with other types of addictions – a challenge with significant ramifications for several of the state's treatment clinics. In addition to basic descriptive statistics in this section, we present Pearson correlation coefficients to demonstrate the extent to which participants' ratings of their treatment services are significantly associated with improvements in gambling behaviors.

GAMBLING BEHAVIORS

The impact of treatment services on gambling behaviors is impressive. Over 90% of all participants had reduced their gambling since the time when they gambled most heavily. Complete abstinence from gambling was highest at 30 days post enrollment, with 65% of participants reporting no gambling since enrolling in treatment. After 90 days, that number drops to 45%, and at 12 months 34% of participants had not gambled at all since enrolling in treatment. Many people had experienced some "slips" where they gambled once or several times, but they were able to get back into their recovery and were doing well at the time of the interview.

Only a small percentage of people we interviewed had gambling reduction as their treatment goal, the vast majority seeking complete abstinence from gambling. Another small percentage of participants were not meeting their goals at the time of the interview. At 12 months post-enrollment, around 11% of participants were not meeting their goals to quit or control their gambling, compared to only 2% at 30 days. Among these individuals who returned to gambling regularly after receiving treatment, the most common types of gambling included slot machines and video poker.

Our findings suggest that participating in treatment helps addicts abstain from gambling during their actual time in treatment and that effect may diminish over time. Table 6 shows that engagement in gambling increases as time since intake in the program increases. These differences in gambling behaviors between time of interviews are statistically significant (at $p<.001$).

Table 6. Current Gambling Behaviors

Which of the following statements best characterizes your gambling since enrolling in the program….	**% "Yes"**		
	30 day	*90 day*	*12 month*
28. … I have not gambled since enrolling into the program.	65.2	45.2	33.7
29. … I had one "slip" where I gambled, then got back on my recovery program.	14.3	21.7	17.4
30. … I've had several "slips" since enrolling in the program and am back on track.	15.2	20.0	25.6
31. … My goal is controlled gambling, and I am gambling and meeting my goal to gamble without problems.	3.6	7.0	12.8
32. … I am not meeting my goal to stop or control my gambling.	1.8	6.1	10.5

33. Thinking back to the period of time when you gambled most heavily, have you reduced your gambling since this time?	95.7	100	97.7

Table 7, on the next page, demonstrates several statistically significant correlations between reduction in gambling behaviors and evaluation of treatment services. The shaded boxes show items that are strongly correlated.

In order to assess reduction in gambling behaviors and harms from gambling, participants were asked how much they agreed with the following statements:

- I spend less time thinking about gambling (5 pt. Likert Scale).
- I have reduced my problems related to gambling (5 pt. Likert Scale).
- My symptoms are not bothering me as much (5 pt. Likert Scale).
- Which of the following statements best characterizes your gambling since enrolling in the program?
    1. I have not gambled since enrolling into the program.
    2. I had one "slip" where I gambled, then got back on my recovery program.
    3. I've had several "slips" since enrolling in the program and am back on track.
    4. My goal is controlled gambling, and I am gambling and meeting my goal to gamble without problems.
    5. I am not meeting my goal to stop or control my gambling.

  We categorized answers to this question as "meeting goals" (answers 1-4) or "not meeting goals" (answer 5).

There are strong and moderate positive correlations between evaluation of treatment services and a reduction in problems related to gambling, spending less time thinking about gambling, meeting gambling goals, and a reduction in symptoms. Simply put, participants who report they have improvement in their lives related to a reduction in gambling behaviors also evaluate their treatment services highly.

Positively rating treatment services has been shown to improve outcomes. For a more detailed account, see Monnat, Bernhard, Abarbanel, St. John, and Kalina's (2014) article "Exploring the Relationship between Treatment Satisfaction, Perceived Improvements in Functioning and Well-being and Gambling Harm Reduction among Clients of Pathological Gambling Treatment Programs." The article uses data collected in previous years as part of the Nevada Problem Gambling Study and is published on pages 688-696 of Volume 50, Issue 6 of *Community Mental Health Journal*.

Table 7. Correlations between Reduction in Gambling Behaviors and Evaluation of Treatment Services

	I spend less time thinking about gambling	**I have reduced problems related to gambling**	**My symptoms are not bothering me as much**	**Currently meeting my goals to stop/ control my gambling**
Overall, I am pleased with the results of my treatment program.	.486***	.576***	.464***	.396***
I like the services that I received from this service provider.	.362***	.390***		
I would recommend this agency to a friend or a family member.	.352***	.378***		
Family counseling has been helpful.	.305***	.380***	.352***	
My aftercare plan has been helpful.	.401***	.407***	.421***	
Individual counseling has been helpful.		.355***		
Group counseling has been helpful.		.327***		

*Note: ***significant correlation at the p<.001 level; **at the p<.01 level; *at the p<.05 level. Positive correlations indicate that ratings of services and level of agreement with statements about improvement in gambling behavior increase together. Dark gray shaded cells indicate a moderate strength correlation; unshaded cells indicate a weak strength correlation. Blank cells indicate correlation was not significant or very weak.*

INVOLVEMENT IN SELF-HELP GROUPS

Several of the treatment programs encourage or require clients to participate in community support groups, such as Gamblers Anonymous (GA), GamAnon, Celebrate Recovery, or Smart Recovery. These groups can provide support for long term recovery after a client has left the gambling treatment program, and/or provide complementary support in the community during treatment.

Table 8 (below) shows how strongly participants felt they were encouraged to use GA and whether they actually attended GA during their treatment program. Items were categorized on a 5-item Likert Scale from Strongly Agree (5) to Strongly Disagree (1), such that higher scores represent greater agreement with the statement. Most participants were encouraged to use GA, although not as many actually attended GA while in treatment.

Table 8. Involvement in Community Support Groups

GAMBLERS ANONYMOUS	**Average Scores**
(Cronbach's α = .430)	
33. During my treatment program, I *have been encouraged* to use Gamblers Anonymous and/or GamAnon or another community support group on a regular basis.	4.69
34. During my treatment program, I *have attended* Gamblers Anonymous, etc. on a regular basis.	4.23

Note: Items 33-34 are only asked on the 30 day questionnaire.

Table 9 (below) reports current attendance at GA (or other community support groups), as indicated by an affirmative response to items with Yes/No response options. Approximately half of participants were currently attending GA at the time of the interview, and over 90% of respondents found these meetings to be helpful regardless of whether they were currently attending GA. A small percentage of participants attend other types of community support groups besides GA and similarly, found these groups to be helpful.

Table 9. Current Attendance and Evaluation of Community Support Groups

GAMBLERS ANONYMOUS	**% "Yes"**		
	30 day	*90 day*	*12 month*
35. Do you currently attend Gamblers Anonymous meetings?***	72%	50%	43%
36. Have you found these meetings to be helpful?	91%	93%	92%
37. Do you currently attend any other community peer support meetings?	33%	30%	27%
38. Have you found these other meetings to be helpful?	97%	97%	96%

Although these data show great benefits from attendance at GA and other community support groups, participants expressed mixed feelings about these meetings. Some feel that GA is an effective complement to problem gambling treatment, while others have expressed strong dislike for GA and 12-step programs in general. Participants spoke less often about other community

support groups, often mentioning that they had "heard about" them but not participated. GA is the most widely used community-based support group among participants.

Participants generally see Gamblers Anonymous as complementary to their treatment programs and frequently comment that GA alone was not enough to help them fully address their gambling problems. To summarize, they mostly think GA provides value but not as a replacement for clinical treatment. Those who are critical of GA take issue with its spiritual orientation, relatively unorganized structure, and unwelcoming cliques. Those that feel comfortable and welcomed in GA are able to make use of it as a recovery tool.

> *"Going to GA and the combination with my counselor was amazing"*

> *"It is mainly because of the casino closure that I'm not gambling (COVID 19), not mainly the program. GA is helpful to learn about the steps, but in the program I did not need to go over the 12 step again and again, I needed help to know why I didn't put them in practice."*

These finding suggest that clinics should check in with clients who are using GA and see if they are able to reap the benefits of that community support, and to help clients find suitable alternatives if GA is not a good fit for them.

OTHER ADDICTIONS

We also examined the broader issue of other chemical and/or behavioral addictions by asking participants whether they had problems with other addictions prior to treatment and whether those problems persisted after treatment. The most commonly identified addiction prior to participation in gambling treatment was nicotine (31.6%). Alcohol addiction was the second most common (19.5%), and methamphetamine addiction was third (9.6%). Addictions to THC, cocaine, opiates, prescriptions drugs, sports enhancement drugs, shopping, sex, the internet, and food were minimal, with fewer than 10% of participants reporting pre-treatment addictions to each. Around half of those that reported problems with other addictions prior to treatment for gambling addiction continued to experience problems after treatment. At the time of their most recent interview, only 2.9% of participants indicated that they continued to have a problem with alcohol addiction. Among the more striking findings was that current methamphetamine use was less than 1% among research participants. Reported current problematic addictions to nicotine remain high at 22%. Nicotine use may continue after other problematic addictions are ameliorated because its negative effects are primarily experienced after long-term use and perhaps because it is less urgently addressed by the problem gambler and the clinics. The reduction in other chemical and/or behavioral addictions are not necessarily a product of the problem gambling treatment program, as they may have addressed these issues prior to treatment or concurrently while participating in treatment for their gambling problems.

Results presented in Table 10 suggest that participation in problem gambling treatment appears to help with these broader addictive problems.

Table 10. Percent of Participants Indicating Problems with other Addictions

OTHER ADDICTIONS	**% "Yes"**
33. Prior to treatment were there other addictions that were problematic for you?	53.7%
34. Are any addictions currently problematic?	25.9%

Participants in gambling treatment sometimes found they could use the same tools to address their other problematic addictions whether or not they were actively seeking to.

> *"They were teaching me how to control myself and the situation, and it even helped me with the drinking."*

CONCERNED OTHERS

"I am very grateful for the program and opportunity to get the help that I need. I couldn't have done it without them. I'm still in the process and going regularly. But it's been a total blessing in my life."

The following section presents information from 58 family members and other loved ones of gamblers who entered treatment for support in their own lives or to support the gamblers in their treatment. Our concerned other participants were in treatment at Las Vegas Problem Gambling Center (*n*=26), Reno Problem Gambling Center (*n*=29), and MHCC (n=3).

Tables 11 and 12 (below) shows concerned others' evaluation of treatment effectiveness and treatment quality and helpfulness. Items were categorized on a 5-item Likert Scale from Strongly Agree (5) to Strongly Disagree (1), such that higher scores represent greater agreement with the statement.

Table 11. Concerned Others' Average Ratings of Treatment Effectiveness

TREATMENT EFFECTIVENESS	**Average Scores**
42. I deal more effectively with daily problems.	4.38
43. I am better able to control my life.	4.32
44. I am better able to deal with the problem gambler in my life.	4.26
45. I am getting along better with my family.	4.27
46. I do better in social situations.	4.28
47. I do better in school and/or work.	4.24

Table 12. Concerned Others' Average Ratings of Treatment Quality and Helpfulness

TREATMENT QUALITY and HELPFULNESS	**Average Scores**
35. I felt comfortable sharing my problems with my counselor.	4.50
36. Staff have encouraged me to take responsibility for how I live my life.	4.50
37. Staff have been sensitive to my cultural background.	4.85
38. Group counseling has been helpful.	4.57
39. Individual counseling has been helpful.	4.65
40. Family counseling has been helpful.	4.52
41. My aftercare plan has been helpful.	4.39

The enrollment of concerned others is not as common as that of gamblers in our study, and their level of involvement with the treatment program varies significantly by client. The impact that problem gambling has on their everyday lives also varies dramatically, but they express gratitude that the problem gambling program is available to help them understand the gambler in their life and to feel less alone.

"Group meetings when everybody shared their stories and you felt a sense of community and saw results, and so I felt hope that the program was successful and was going to be successful for my husband."

"We were able to attend a discussion class together, so husband saw other concerned others struggling and understood me better. Everybody having the same problem gave a sense of belonging"

"The support and understanding and communication that I was able to dialogue with the counselors; helping me with my codependency; helped me stop enabling the gambler. Supporting me in making a plan."

Concerned others expressed feelings of relief when learning about problem gambling. They felt empowered to help the people in their lives who suffer from problem gambling, and they gained tools to help themselves cope with the enormous stress related to their loved ones' gambling.

CONCLUSION

To summarize, these direct and indirect measures of the evaluation of treatment services and improvements in quality of life and gambling behaviors provide strong evidence that problem gambling treatment works. Through the Mental Health Statistics Improvement Program (MHSIP) survey and additional questions about past and current gambling behaviors, we were able to assess participants' thoughts and feelings about their access to treatment services, the quality and helpfulness of those services, and the effects of services on their daily lives.

Participants were overwhelmingly positive about their treatment services, especially as those services related to their relationships with their counselors and their experiences in group counseling. Almost all participants indicated that they have reduced their gambling since entering treatment or discontinued gambling altogether. These strong outcomes represent a major victory for those dedicated to helping problem gamblers recover from their addiction and improve their overall quality of life. From a policy perspective, this research demonstrates the importance of continued support for these crucial services.

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