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Nevada Problem Gambling Study

Annual Report, Fiscal Year 2018

Prepared for the Nevada Department of Health and Human Services

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ACKNOWLEDGMENTS, APPRECIATION, AND DISCLOSURES

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Our intellectual debts are substantial, and allow us to thank an all-star cast of experts: Dr. Jeffery Marotta of Problem Gambling Solutions, consultant for the Nevada Office of Community Partnerships and Grants 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.

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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 Rachel MacFarlane and Wilson To, 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. None of the other study authors have disclosures.

EXECUTIVE SUMMARY

"It's changed my life, and I'll keep preaching about it and spreading awareness."

The Nevada Problem Gambling Treatment System saw growth in Fiscal Year 2018, following a two-year period of declining client engagement (see Figure 1 below). Two new providers, Bridge Counseling Associates and RISE Center for Recovery, were awarded grants to provide treatment in southern Nevada to problem gamblers and those affected by their gambling. Additionally, one provider historically funded through the Problem Gambling Fund, Pathways Counseling Center, chose not to seek funding as an organization; but a third new practice, Mental Health Consulting and Counseling, was awarded a grant after staff from Pathways formed a new partnership. These new providers accounted for about half the growth system-wide, while an increase in clients serviced by providers who were already part of the system accounted for the remainder. Specifically, there was a 23.33 percent total increase in clients who were provided outpatient services as gamblers and as concerned others. There was also minimal growth in the number of gamblers who received residential treatment for their gambling problems (1.33%), following considerable growth the previous year (Fiscal Year 2017, 29.31%).

Treatment providers continued to be accessible to clients and to provide treatment that clients are overwhelmingly happy with. 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 96 percent of those interviewed in follow-up surveys said that they would recommend their provider to a friend or family member.

The objective of the Nevada Problem Gambling Study is to provide information management and research-based insights on the effectiveness of Nevada's state-funded treatment programs. This research is informed by two primary resources: 1) the peer-reviewed literature on problem gambling treatment evaluation[1], and 2) a specific framework suggested by the leading experts in state-supported problem gambling treatment (including those on Nevada's Advisory Committee on Problem Gambling). Using the Mental Health Statistics Improvement Program (MHSIP) questionnaire, questions about previous and current gambling and other addictive behaviors, and open ended questions, we gathered information on problem gamblers' evaluation of their treatment services, the impact of those services on quality of life and functional well-being, and the relationship between service quality and reductions in gambling behaviors.

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, with 92 percent or more of clients reporting improvement in their relationships, employment, and problems related to gambling 90 days after beginning treatment and 80 percent or more reporting the same one year following treatment entry. Significantly, 84 percent of clients discharged in fiscal year 2018 system-wide

[1] To see a comprehensive review of the literature on problem gambling treatment evaluation, see Bernhard, Bo J., Shannon Monnat, Sarah A. St. John, and Brett L. L. Abarbanel. 2010. "The Nevada Problem Gambling Project: Follow-Up Research." UNLV International Gaming Institute: Las Vegas.

were discharged successfully, meaning they had completed at least 75 percent 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.

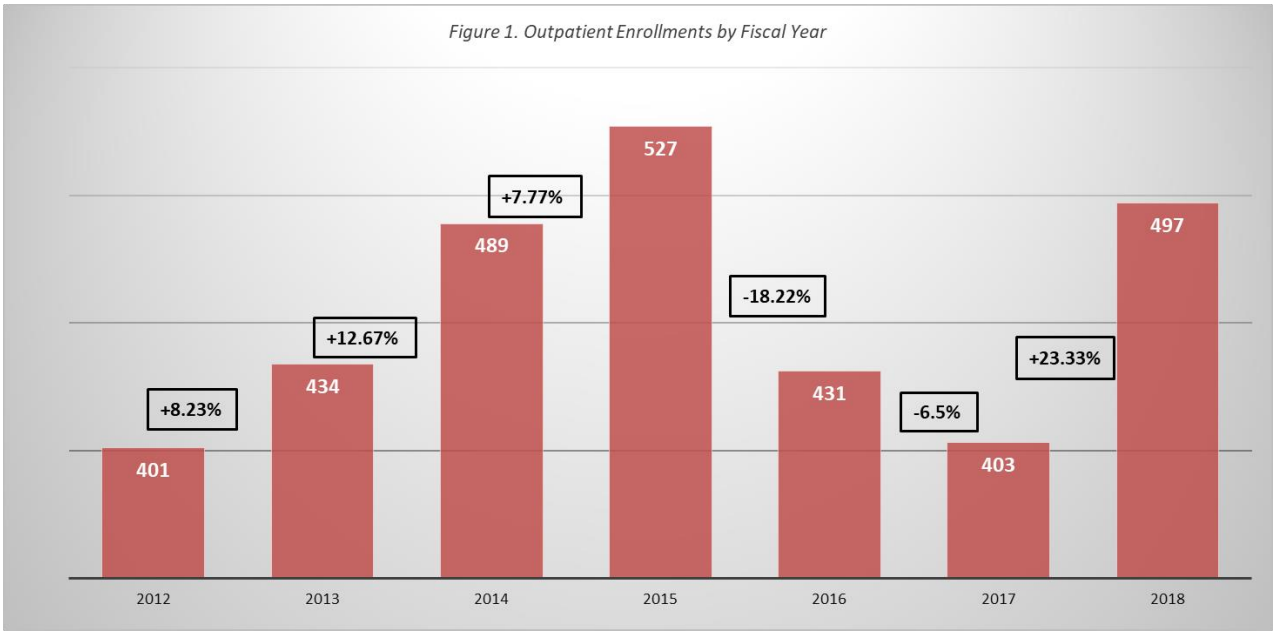
Although participation in treatment appears to help clients abstain from gambling during their actual time in treatment, around half of our participants indicated that they had gambled again a year after entering treatment – an unsurprising rate in the field of addiction studies. As gambling scholars 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% 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 associated with their gambling and with their quality of life.

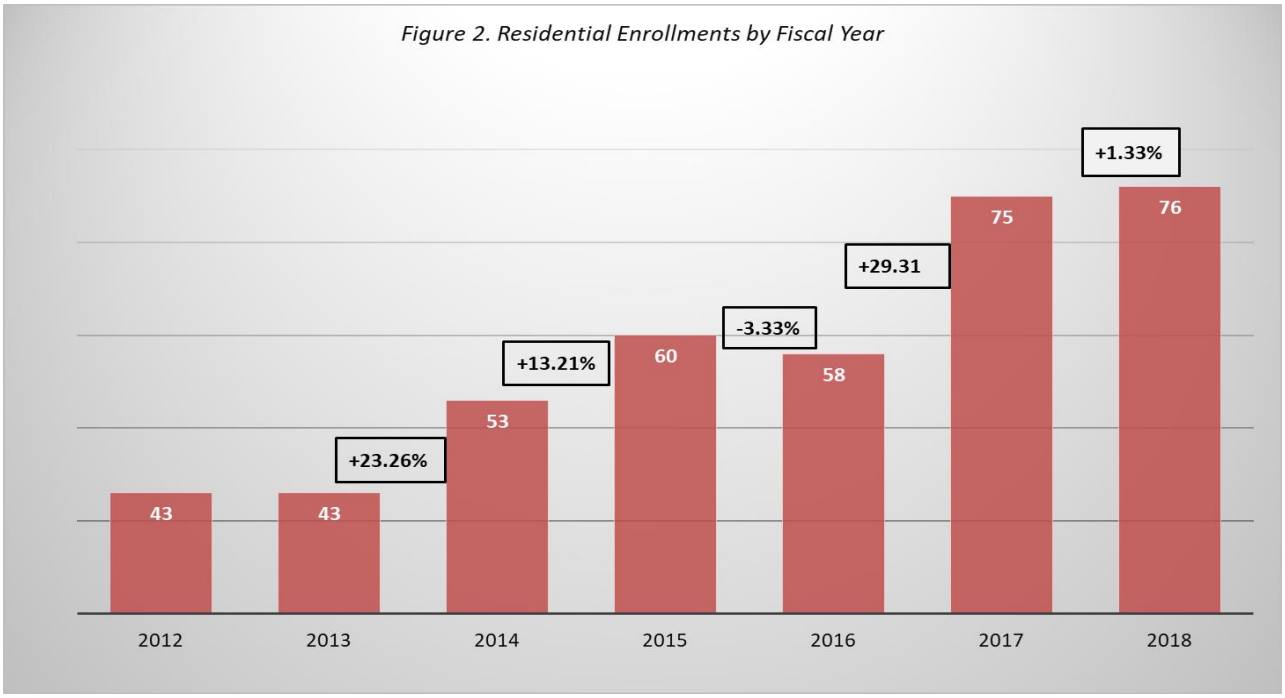
Ultimately, treatment program participants expressed feelings of self-awareness, acceptance, achievement, and hope after the completion of their treatment. Given these clients' often desperate statuses when they arrived at these clinics, these pages reveal dramatic improvements. Participants indicated 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.

TREATMENT SYSTEM QUICK GLANCE

TREATMENT SYSTEM SUMMARY	
Total number of people receiving a **problem gambling evaluation** during fiscal year	528
Outpatient Services	
Number of **gamblers** entering outpatient treatment	425
Average number of sessions per client treatment episode	21.45
Average cost per client treatment episode	$1,312.57
Number of **concerned others** entering outpatient treatment	72
Average number of sessions per client treatment episode	7.69
Average cost per client treatment episode	$704.09
Over the past year, **percent change** in the number of clients (see Figure 1)	+23.33%
Residential Services	
Number of clients entering **residential gambling treatment**	76
Average length of stay in residential treatment	25.77 days
Maximum length of stay in residential treatment	53 days
Average cost per client treatment episode	$2,536.63
Over the past year, **percent change** in the number of clients (see Figure 2)	+1.33
Access	
Average number of days between first contact and first available service	1.10
Average number of days between first contact and treatment entry	2.09
Average number of days between first available date and treatment entry	1.10
Successful Completion of Treatment Program	
Total non-adjusted percent of successfully discharged clients	78%
Percent of successfully discharged clients, adjusted for external factors.	84%
Client Satisfaction	
"I would recommend this agency to a friend or family member."	96%
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."	93%
"I have reduced my problems related to gambling."	93%
"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."	82%
"I do better in school and/or work."	81%
"I have reduced my problems related to gambling."	89%
"I am meeting my goal to stop or control my gambling."	94%

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





EVALUATION METHODS

The data provided in this report come from confidential follow-up interviews of clients who have received treatment or enrolled in one of the seven state-funded problem gambling treatment programs. Our methodological processes were approved by UNLV's Human Subjects Committee (protocol 711298-6). This list details our data collection process:

- 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 gift card to Walmart.
- 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 387 follow-up interviews with problem gamblers at 7 different gambling treatment programs: Bridge Counseling Associates (7), Bristlecone Family Resources (42), the Problem Gambling Center in Las Vegas (165), New Frontier Treatment Center (21), Reno Problem Gambling Center (93), RISE Center for Recovery (14), and Mental Health Counseling and Consulting (MHCC) (26). Additionally, we completed 19 interviews with clients of Pathways Counseling Center. Each of these interviewees participated in treatment at Pathways Counseling Center with the same counselor now providing services for MHCC, so data for these two providers has been combined in the clinic-by-clinic comparisons at the end of this report.

We also conducted 29 follow-up interviews with family members and loved ones of problem gamblers who enrolled in treatment at Pathways Counseling Center (1), Las Vegas Problem Gambling Center (13), and Reno Problem Gambling Center (15). 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, followed by the 90 day interview, and the least success at the 12 month interview point.

TREATMENT SERVICES OUTCOMES

The tables and figures below 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=*.655*)[2], treatment quality and helpfulness (α=*.704*), treatment effectiveness (α=*.904*), and overall ratings of treatment services (α=*.800*). During the interviews, participants were asked to rate their level of agreement with various statements on a five-point Likert scale ranging from Strongly Agree (5) to Strongly Disagree (1). 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.[3] Where appropriate, we provide quotations from treatment participants that represent themes common to the perspective of the participants. These quotations elaborate on the quantitative data and provide a human voice to the experiences of those who completed the treatment program.[4]

At the time of the interview, 62.51% of participants were currently enrolled in a gambling treatment program or still engaging regularly with treatment providers through post-treatment aftercare.

[2] 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.
[3] Categories are developed based on frequency and significance, through a continuous process of coding and interpretation.
[4] The quotations throughout this report represent statements from participants engaging in treatment at all 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. 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 find it helpful the fact that it doesn't cost anything to go because if I have cash on me it goes to the casino, but this, I feel like my family can support me 100%."*

> *"It's just helpful having support. He [the gambler in my life] has already drained me financially so it's nice to know that there is a program to help that you don't have to pay, because you hear about these rehab centers that are thousands and thousands, and so it's nice to know we have this avenue that we can take without it costing any more money."*

> *"I found it most helpful how accessible everybody was and responsive and concerned. They immediately helped right away called me back, made my appointments right away, I'm very impressed by the program, the support I guess. They called me back right away, gave me an appointment, set me up for the next week. It was very fast. I was very impressed by the whole thing, and everybody is so nice."*

> *"They were so willing to help. That stood out, even though I didn't feel like I needed to go, it made it easy to go. I only went because I told my wife I would, and the counselor was helpful... They were totally there for me, willing to work around my schedule, even on short notice, willing to help."*

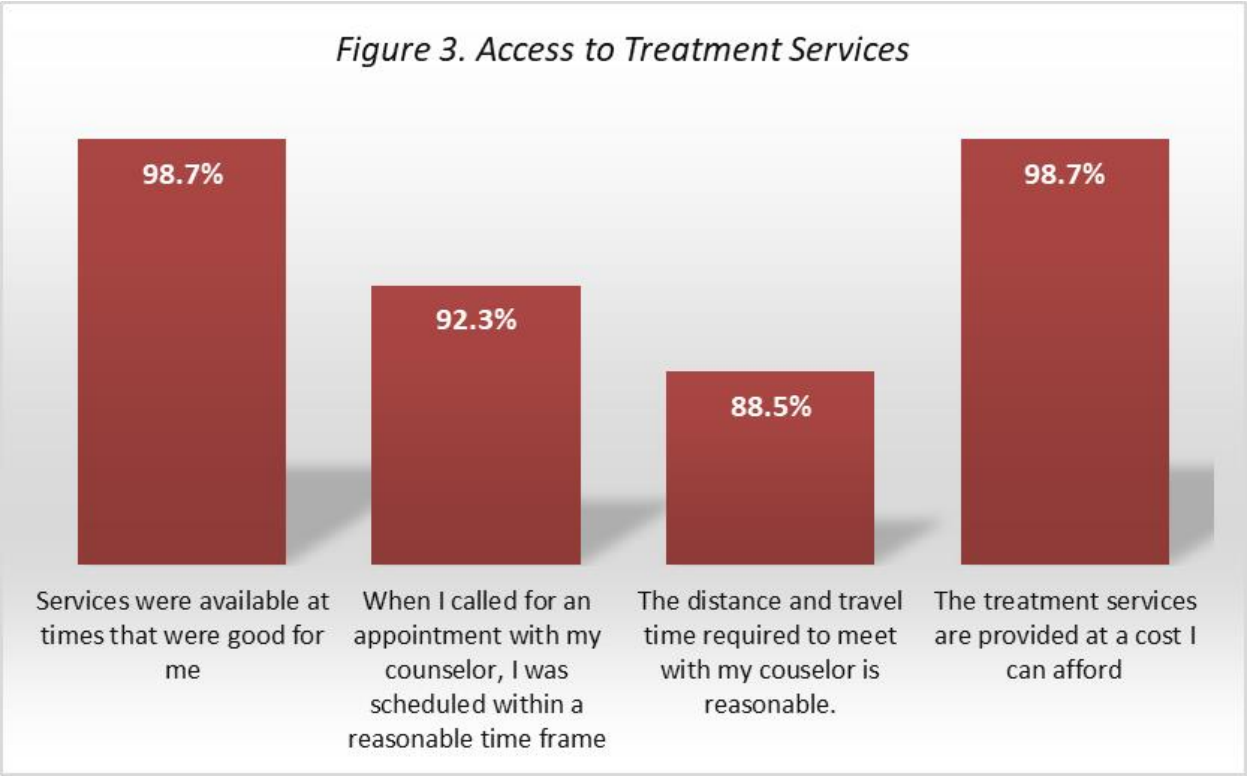
In the interviews, we asked program participants to evaluate five aspects of their access to treatment services. In Table 1 below, we display average scores for these five items. Overall, the mean scores are very high, indicating a strong level of agreement with each of the positively worded statements (average scores are above 4, meaning that the overall average response is between "agree" and "strongly agree").

Table 1. Average Ratings of Access to Services

ACCESS TO SERVICES	**Average Score**
(Cronbach's α = .655)	
1. Services were available at times that were good for me.	4.46
2. When I called for an appointment with my counselor, I was scheduled within a reasonable time frame.	4.57
3. The distance and travel time required to meet with my counselor was reasonable.	4.42
4. The treatment services were provided at a cost I could afford.	4.83

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 2, 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 2. Average Ratings of Treatment Quality and Helpfulness

TREATMENT QUALITY and HELPFULNESS	**Average Score**		
(Cronbach's α = .704)	*30 day*	*90 day*	*12 month*
5. I felt comfortable sharing my problems with my counselor.	4.71		
6. Staff have encouraged me to take responsibility for how I live my life.	4.71		
7. Staff have been sensitive to my cultural background (race, religion, language, etc.).	4.72		
8. Group counseling has been helpful.	4.58	4.62	4.51
9. Individual counseling has been helpful.	4.72	4.68	4.52
10. Family counseling has been helpful.	4.73	4.50	4.75
11. My aftercare plan has been helpful.	4.48	4.51	4.51

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.

> *"Everything about the program I am 100% happy with. I'd have to say that the counselors knew what they were doing, and through the group stuff and listening to everybody and knowing what my trigger was—what the reason was that I did it."*

> *"Everybody is so different in this addiction and what they need, how the counselors can help them in different ways and they can only do that through experience, so you have to try to have someone with a lot of experience with gambling addiction, or addiction in general"*

> *"I can't break it down to just one thing. The education is amazing, the ability to talk to people in the same situation, the counselors are amazing, not just one thing, but a formula that seems to work.*

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, that staff encouraged them to take responsibility for how they lived their lives, that staff were sensitive to their cultural backgrounds, and that group and individual counseling services were helpful.

Figure 4. Treatment Quality

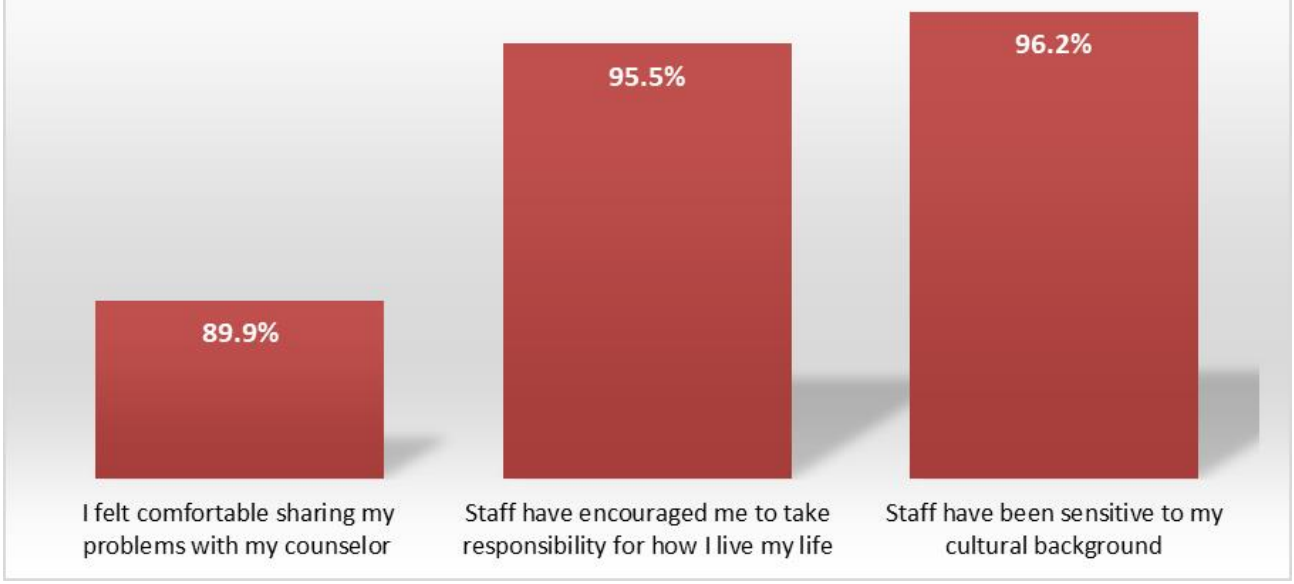
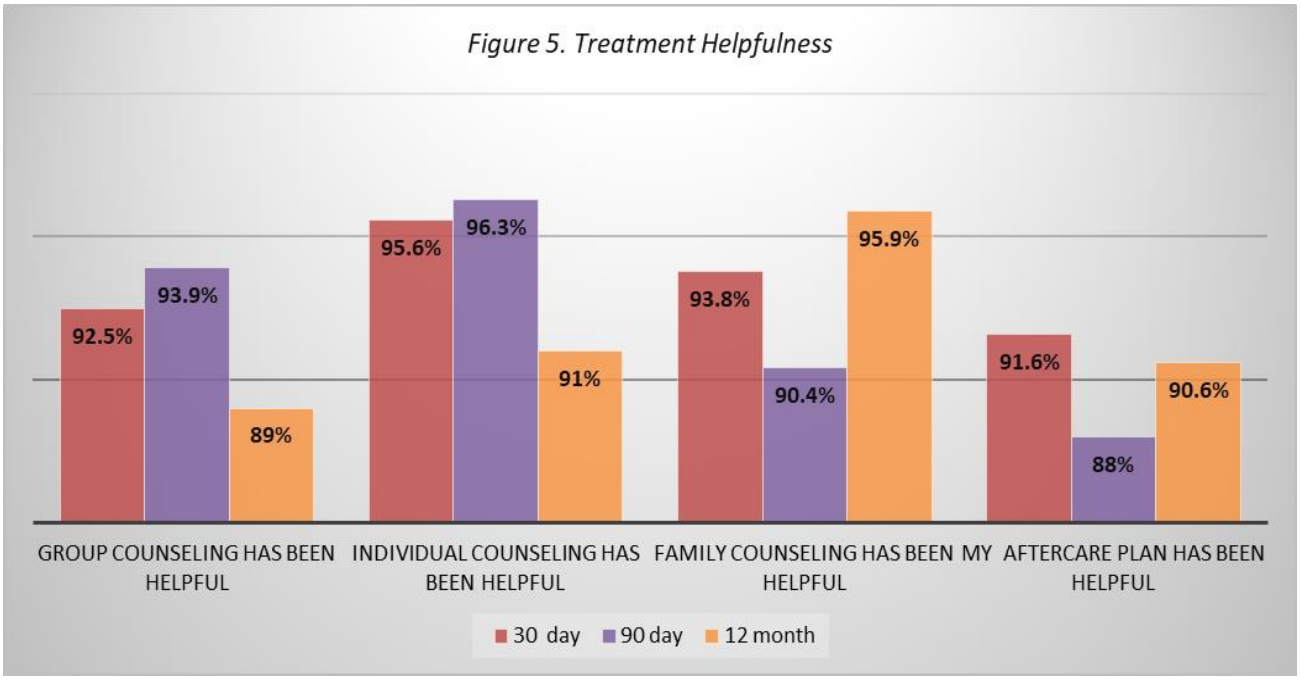


Figure 5. Treatment Helpfulness



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:

> *"The one on one is huge, but the group therapy is big because you're with other individuals who are going through the same thing, like going to a meeting, you're with like-minded people going through the same thing, no judgement, what is said in the room stays in the room, there's trust. People open up as they get more comfortable."*

> *"Just knowing the group how they make us feel, instead of hiding, makes you open to talk, where you can sit there and people have the same type of problems, and it isn't prejudged. We all have our different things, but the same problem of gambling."*

> *"Sharing, being honest about things and talking about some of your truths that in a normal setting you would be judged for or feel sh**ty about, but it's very accepting and you don't feel so isolated, because there are people who have been through a lot worse and show you the proof of the program because they've been through it and still come back to talk to people in the beginning of it. The relationships in the group that you can choose to have are awesome."*

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 welcome, unjudged, supported, and in the hands of experts.

> *"I think the counselors are excellent. I get a lot out of it. I haven't felt this good since 2000."*

> *"My counselor was Olivia and she was fantastic. Really got me to open my eyes and think hard about how I want to live the rest of my life I guess."*

> *"One on one counseling with my counselor, Donna Myers. She's the best, everybody loves her."*

> *"…the counselors, oh my God, do I love my counselors, one on ones and the group, great."*

Relationships with counselors set the foundation for participants' recovery. Several people who had experienced "slips" or relapse expressed knowing 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:

> *"I think just the explanation of kind of the effects, gambling effects on your brain and brain chemistry and talking to my spouse and having the counselor explain what I was going through to her. That was probably the most important things."*

> *"We have support, we call each other, I went to GA before but the IOP tells you what is going on with your brain. The good thing about the IOP is that it is like intensive four times a week, and they have different lectures about why you start and why you can't control. They explain things to you."*

> *"Dr. Hunter's lectures were phenomenal, all about the brain and the disease. It makes you realize how our brain is different than nongamblers because I didn't really understand that before. Also Dr. Stanton, her classroom, just her presence, her instruction and her recommendations and advice, very good, very good."*

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 3 (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 3. Average Ratings of Treatment Effectiveness

TREATMENT EFFECTIVENESS	**Average Score**		
(Cronbach's α = .904)	*30 day*	*90 day*	*12 month*
12. I deal more effectively with daily problems.	4.45	4.40	4.55
13. I am better able to control my life.	4.36	4.32	4.45
14. I am better able to deal with crisis.	4.35	4.35	4.42
15. I am getting along better with my family.	4.41	4.38	4.43
16. I do better in social situations.	4.11	4.23	4.26
17. I do better in school and/or work.	4.27	4.23	4.52
18. My housing situation has improved.	3.95	3.96	4.08
19. My symptoms are not bothering me as much.	4.29	4.20	4.27
20. My financial situation has improved.	4.01	4.16	4.17
21. I spend less time thinking about gambling.	4.42	4.34	4.42
22. I have reduced my problems related to gambling.	4.43	4.42	4.49
23. I have re-established important relationships in my life.	4.16	4.21	4.43

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 illustrate the percentage of clients who positively rated the statements regarding the effectiveness of their treatment.

Figure 6. Treatment Effectiveness

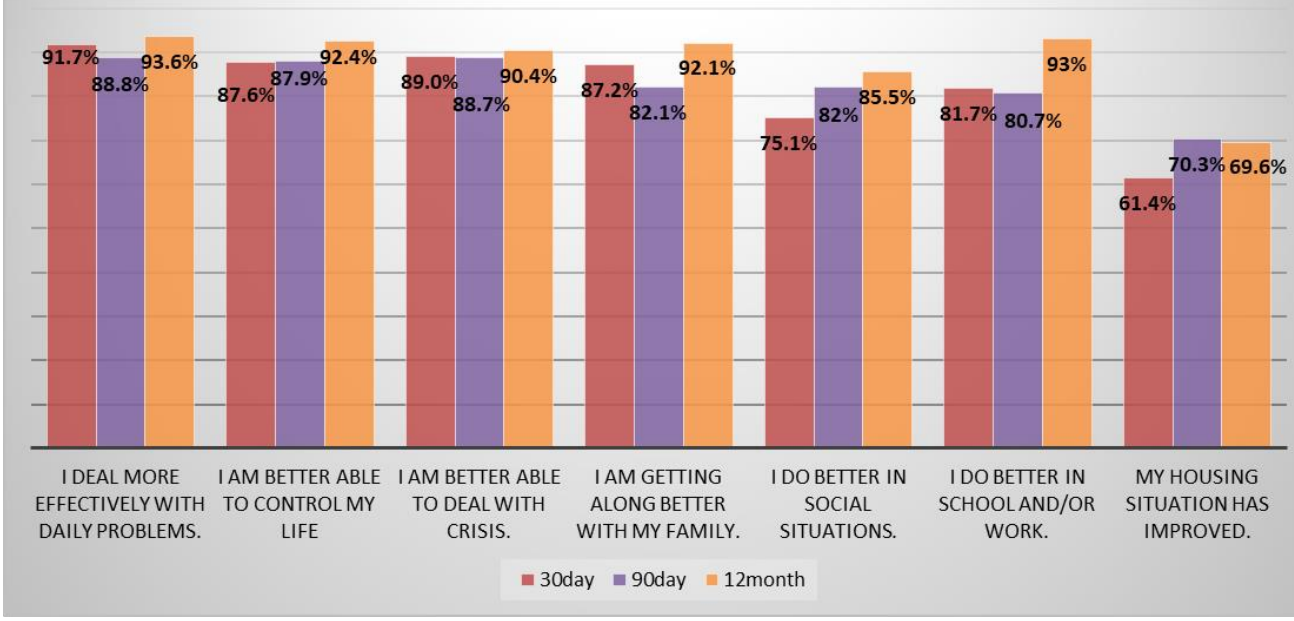
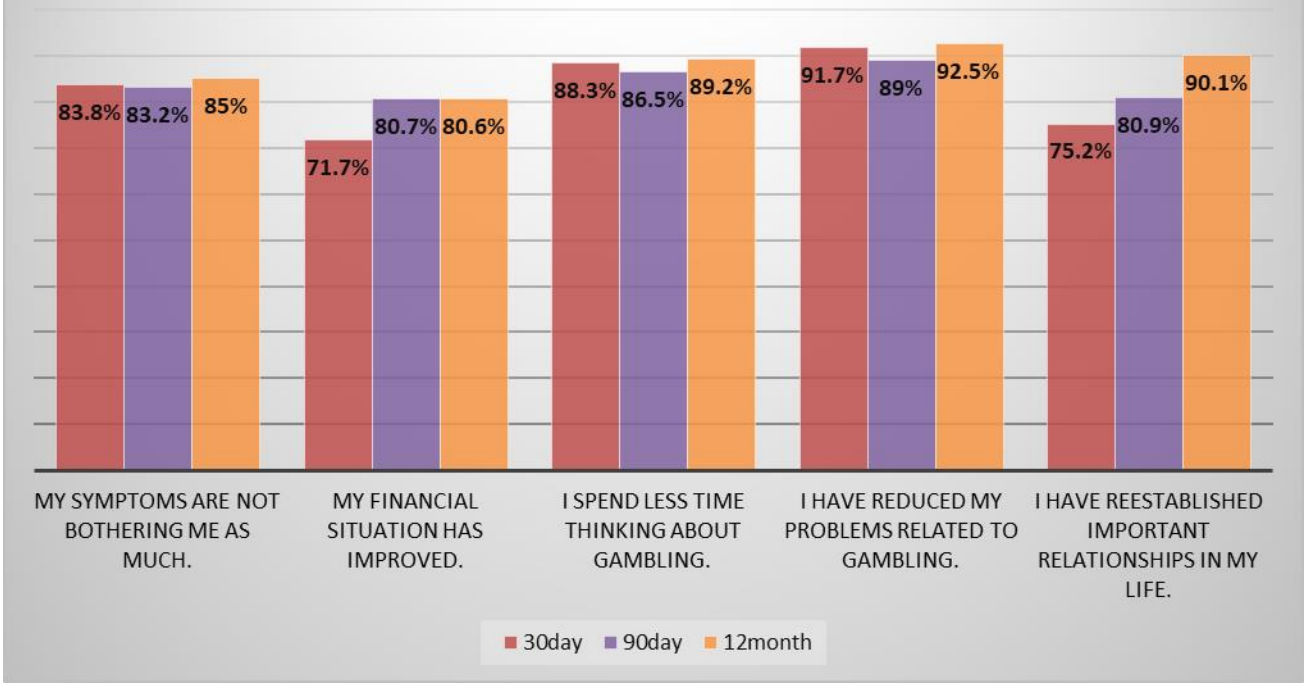


Figure 7. Treatment Effectiveness



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.

> *"I didn't want to gamble and wanted to continue on the road to success. I felt such a relief, and gratitude to have a place to go to, and people there for me. I felt like this was my only help. They were there when I needed them and they took me in. I needed to be accountable to someone and they were there for me."*

> *"When I went there a little over a year ago, I really was at the end of my rope and wasn't sure I would get through my situation. That place gave me hope, and camaraderie and the skills I needed to get through."*

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

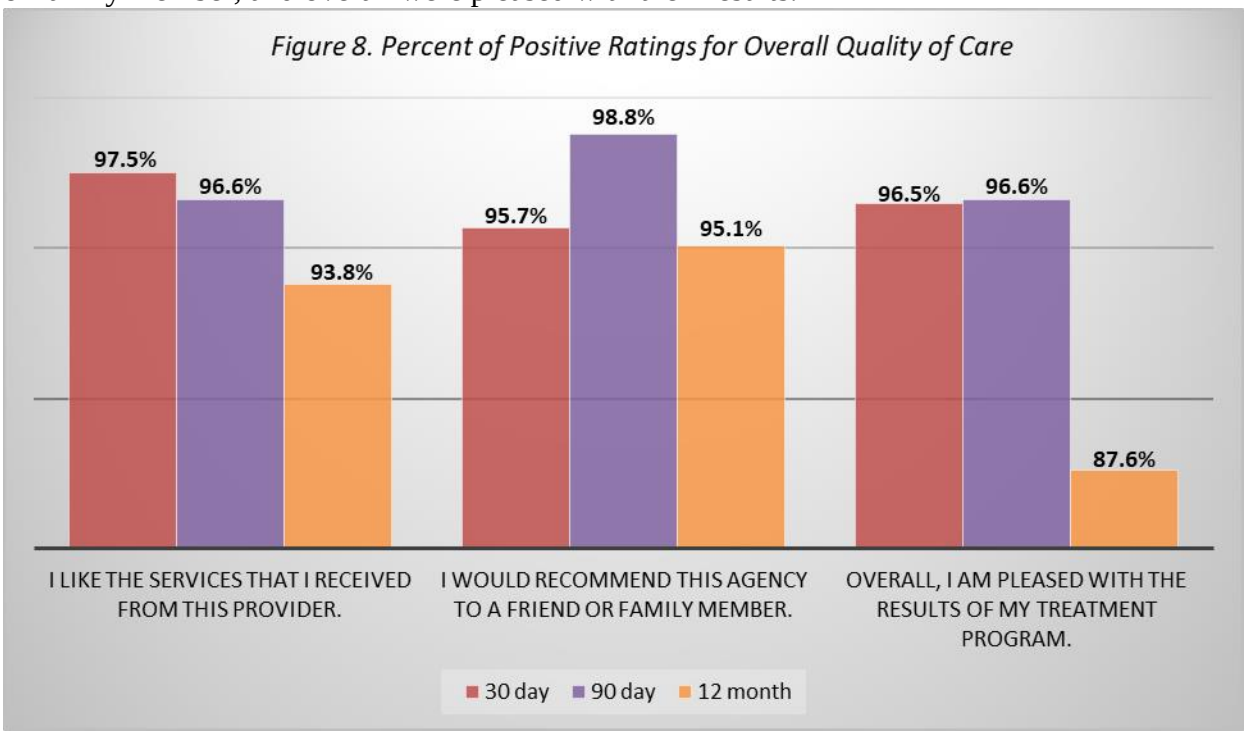
The fourth domain of the treatment evaluation included questions on the overall quality of the treatment. Results in Table 4 suggest that participants are overwhelmingly positive about the overall quality of the program. In fact, the item that asks participants if they would recommend the agency to a friend or a family member was one of the most positively rated items on the questionnaire.

Table 4. Average Ratings of Overall Quality Indicators

OVERALL QUALITY	**Average Score**		
(Cronbach's α = .800)	*30day*	*90 day*	*12 month*
25. I like the services that I received from this service provider.	4.80	4.74	4.65
26. I would recommend this agency to a friend or a family member.	4.78	4.81	4.70
27. Overall, I am pleased with the results of my treatment program.	4.69	4.62	4.57

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 85% of all participants had reduced their gambling since the time when they gambled most heavily. The majority of people we interviewed had not gambled at all since enrolling in their treatment programs. Many people had experienced some "slips" where they gambled once or several times, but 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 the 12 month interview, only 6.1% of participants were not meeting their goals to quit or control their gambling, compared to only 3.1% at 30 days. Among these individuals who were gambling regularly after 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 5 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 $p<.05$).

Table 5. 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.	66.9%	54.8%	50.0%
29. … I had one "slip" where I gambled, then got back on my recovery program.	8.6%	15.9%	10.2%
30. … I've had several "slips" since enrolling in the program and am back on track.	16.6%	20.6%	31.6%
31. … My goal is controlled gambling, and I am gambling and meeting my goal to gamble without problems.	4.9%	3.2%	2.0%
32. … I am not meeting my goal to stop or control my gambling.	3.1%	5.6%	6.1%
33. Thinking back to the period of time when you gambled most heavily, have you reduced your gambling since this time?	87.7%	89.7%	95.9%

Table 6, 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 6. 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.	.394**	.449**	.467*	.238**
I like the services that I received from this service provider.	.232**		.294*	
I would recommend this agency to a friend or a family member.	.250**	.254**	.301**	
Family counseling has been helpful.	.208*	.345**	.395**	.242**
My aftercare plan has been helpful.	.317**	.432**	.414**	.291**
Individual counseling has been helpful.	.191**	.308**	.258**	
Group counseling has been helpful.	.269**	.245**	.384**	.128*
I felt comfortable sharing my problems with my counselor.		.206*	.179*	
Staff encouraged me to take responsibility for how I live my life.	.351**	.256**	.320**	
Staff were sensitive to my cultural background (race, religion, language, etc.).	.274**	.204*	.204*	.170*
The treatment services were provided at a cost I could afford.				
Services were available at times that were good for me.	.196*	.185*	.392**	.234**
The distance and travel time required to meet with my counselor was reasonable.				
When I called for an appointment with my counselor, I was scheduled within a reasonable time frame.	.275**	.257**	.212*	
I was encouraged to use Gamblers Anonymous or GamAnon on a regular basis.				
During my time in treatment, I attended Gamblers Anonymous or GamAnon on a regular basis			.188*	

*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. Darkest shaded cells indicate a strong correlation; lighter shaded cells indicate a moderate strength correlation. Blank cells indicate correlation was not significant.*

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 7 (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 7. Involvement in Community Support Groups

GAMBLERS ANONYMOUS	**Average Scores**
(Cronbach's α = .552)	
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.	4.66
34. During my treatment program, I *have attended* Gamblers Anonymous, etc. on a regular basis.	3.98

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

Table 8 (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 75% 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 8. 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?***	57.7%	52.4%	49.0%
36. Have you found these meetings to be helpful?	83.9%	81.4%	78.7%
37. Do you currently attend any other community peer support meetings?	22.1%	25.4%	32.7%
38. Have you found these other meetings to be helpful?	85.0%	87.5%	91.9%

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.

The quotations below reflect participants' reflections on GA. To summarize, they mostly think GA provides value but not as a replacement for clinical treatment. Criticisms of GA that arose in these interviews include 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.

> *"GA is helpful now, didn't like it then, but it is helpful now after IOP, because at PGC if you have a problem or don't understand you can talk about it, ask questions."*
>
> *"GA sometimes yes, sometimes no, not at all. I'm really at odds with some of the people who think they own GA."*
>
> *"I go to GA four times a week, and I have a sponsor. It's been real helpful for me."*
>
> *"In GA you have sponsor and when you run into problems you can call them up but you try to get a sponsor who can give you the tools to fight the situation."*
>
> *"I think GA should be a fellowship, like most of them are around the country. This fellowship in Reno and Sparks is all about discriminating against people based on color, disability, ethnicity... you know, disgusting. We get someone who is like black, and they are treated differently, and they're treated just like... I wouldn't treat my dog or cat that way. It's about exclusion and if you have the audacity to say something about it you get attacked, verbally assaulted and nobody stands up for you."*

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 (24.3%). Alcohol addiction was the second most common (22%), and methamphetamine addiction was third (11.3%). 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. At the time of their most recent interview, only 4.1% of participants indicated that they continued to have a problem with alcohol addiction. Among the more striking findings was that fewer than 1% of participants reported having a continuing addiction to methamphetamines at the time of their most recent follow-up interview. Reported problematic addictions to nicotine dropped to 18.3% after participants entered treatment for problem gambling. 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 9 suggest that participation in problem gambling treatment appears to help with these broader addictive problems.

Table 9. Percent of Participants Indicating Problems with other Addictions

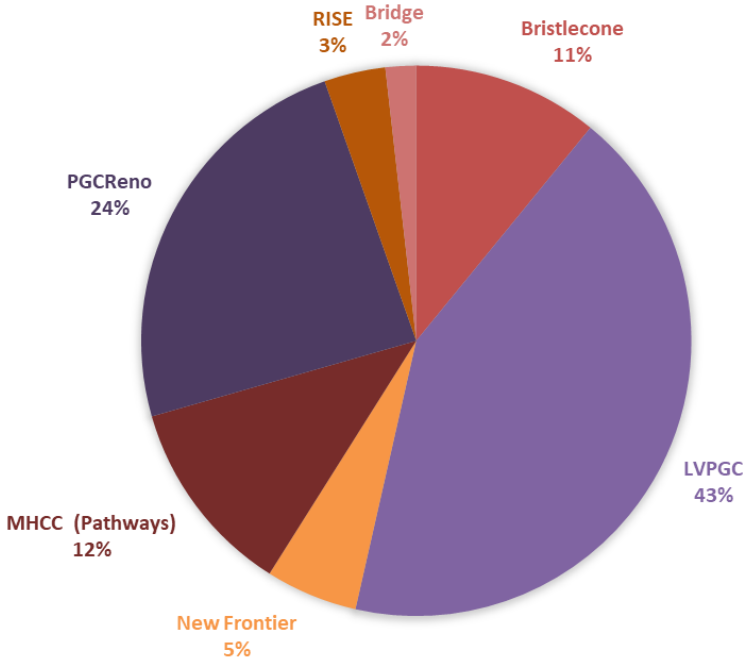
OTHER ADDICTIONS	**% "Yes"**
33. Prior to treatment were there other addictions that were problematic for you?	50.1%
34. Are any addictions currently problematic?	25.8%

CLINIC-BY-CLINIC COMPARISONS

We interviewed treatment participants from seven different state-funded programs: Bristlecone Family Resources, Bridge Counseling Associates, Mental Health Consulting and Counseling (including 12 month follow ups from Pathways Counseling Center), the Problem Gambling Center in Las Vegas, New Frontier Treatment Center, RISE Center for Recovery, and Reno Problem Gambling Center. In this section, we present a comparison of evaluation and outcomes results across the seven programs. It is important to note that these comparisons are descriptive in nature only, and should not be construed as evidence of the comparative quality or effectiveness of any given program. Geographic location, client demographics, primary treatment type provided, and resources vary significantly across these programs. All of these factors should be taken into consideration when comparing results.

Figure 9 presents the breakdown of the sample by clinic. This is a representation of the total participants in the follow up research, not a representation of the percentage of clients each clinic serves comparatively. The largest proportion of interviews come from the Las Vegas Problem Gambling Center (42.6%, *n*=165), with the remainder attending programs at Bristlecone Family Resources (10.9%, *n*=42), New Frontier Treatment Center (5.4%, *n*=21), MHCC (11.6%, *n*=45), Bridge Counseling Associates (1.8%, *n*=7), RISE Center for Recovery (3.6%, *n*=14) and the Reno Problem Gambling Center (24%, *n*=93).

FIGURE 9. PROPORTION OF INTERVIEWS FROM EACH CLINIC



In the next several pages, we present figures demostrating the mean participant scores by clinic and indicate where there are statistically significant differences between a specific clinic and the rest of the sample. Consistent with the rest of the report, higher scores indicate more positive ratings. Items that are listed as statistically significant account for differences in sample size and indicate that the differences in scores between clinics are meaningful. In order to prevent the data from skewing overly positive or negative, only the most recent survey from each client is used in the figures presented below. If a client completed a 30 day, 90 day, and 12 month follow up survey, only the data from the 12 month survey is used, excluding tables where the information was only available in the 30 day survey.

ACCESS TO TREATMENT SERVICES

Figure 10 presents the clinic-by-clinic comparisons for participants' evaluations of access to treatment services. The between-clinic differences in being scheduled within a reasonable time frame are statistically significant.

TREATMENT EFFECTIVENESS

Figure 11 presents comparisons for participants' evaluations of items measuring treatment effectiveness. The between-clinic differences in improved performance in social settings is statistically significant.

TREATMENT QUALITY AND HELPFULNESS

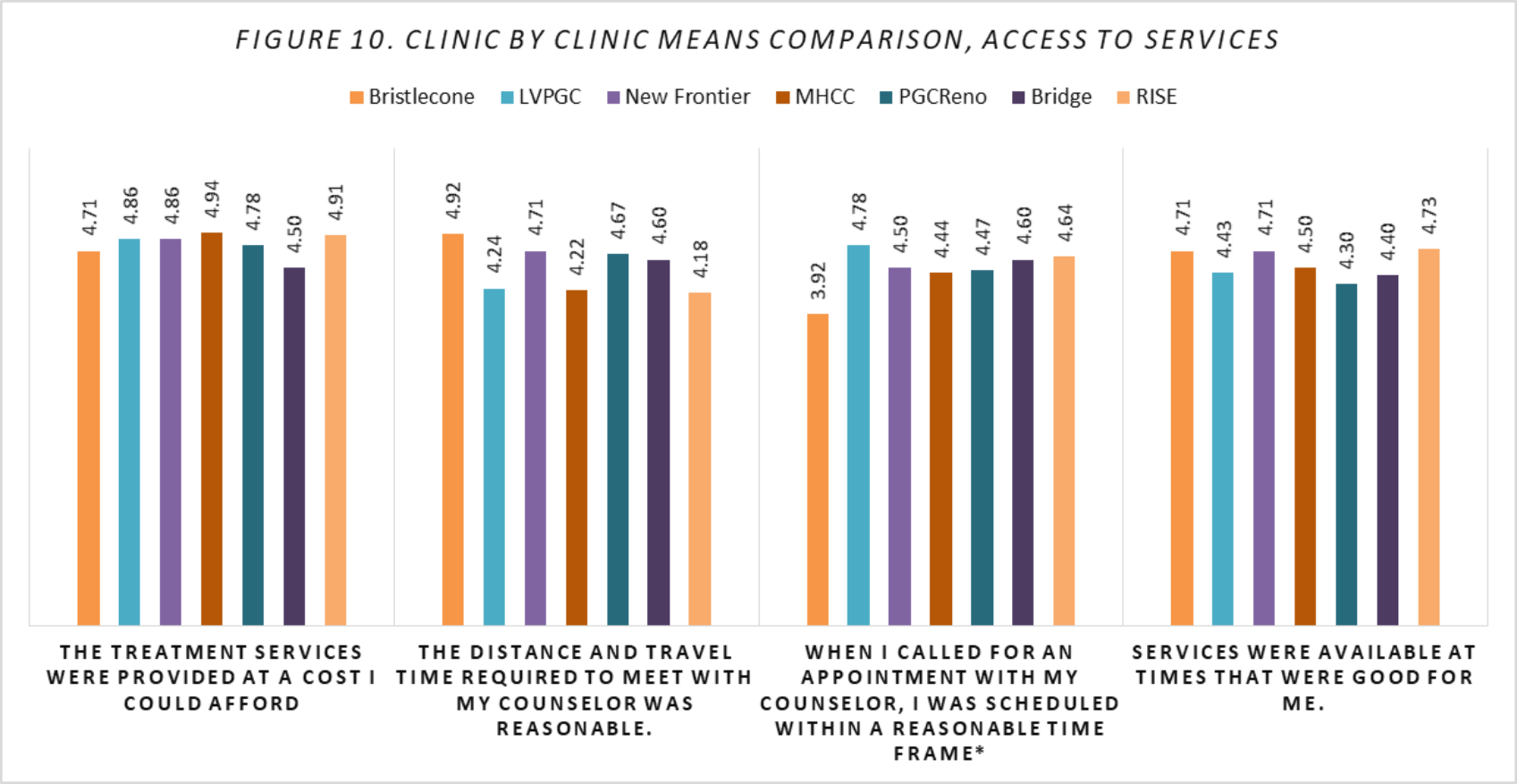
Figures 12 and 13 present participants' evaluations of items measuring treatment quality and helpfulness. The between-clinic differences in evaluation of group therapy is statistically significant

INVOLVEMENT IN GAMBLERS ANONYMOUS

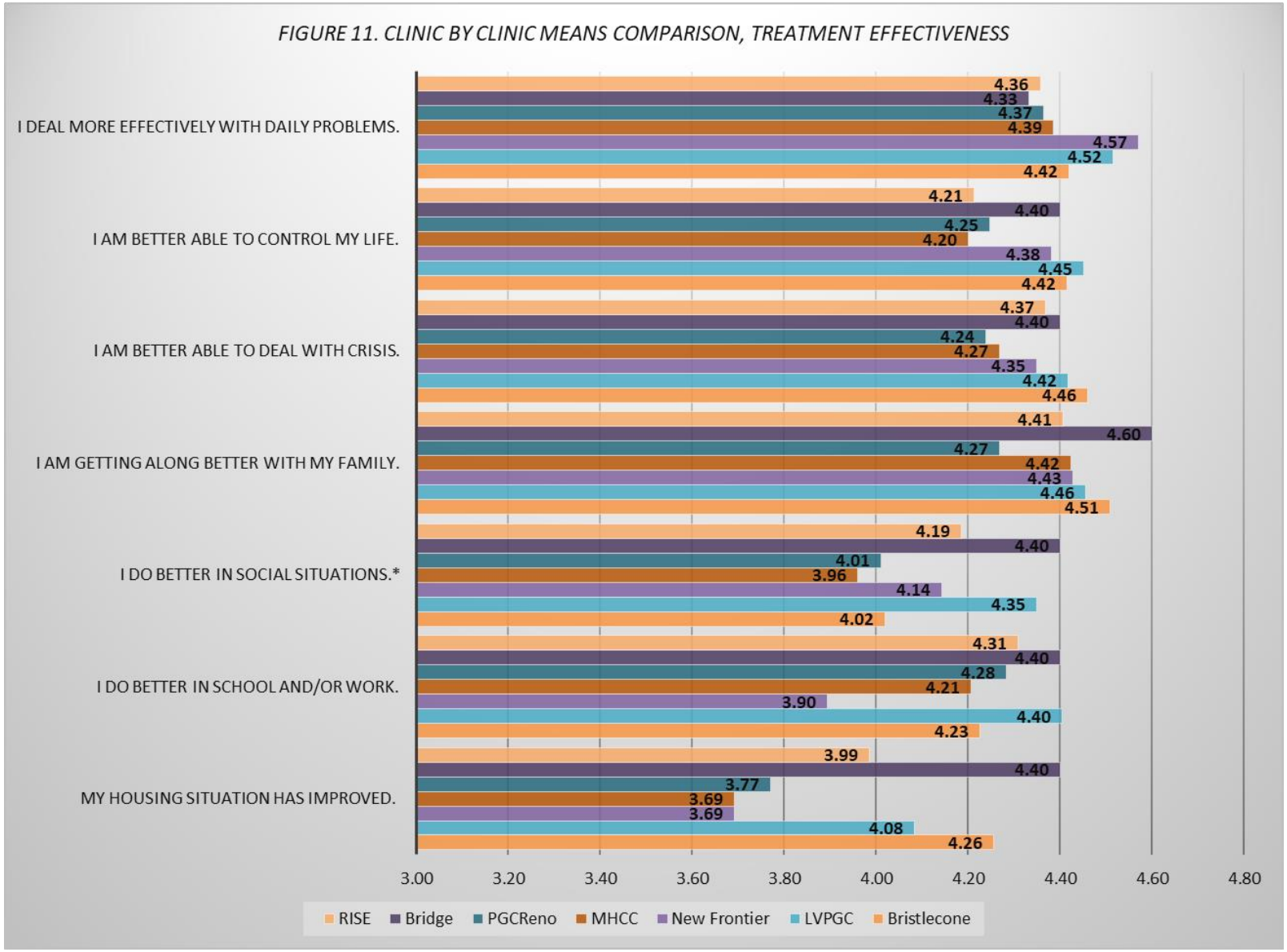
Figure 14 presents clinic-by-clinic comparisons for participants' involvement with Gamblers Anonymous. The between-clinic differences in whether providers recommend Gamblers Anonymous and whether clients attend Gamblers Anonymous were statistically significant.

OVERALL

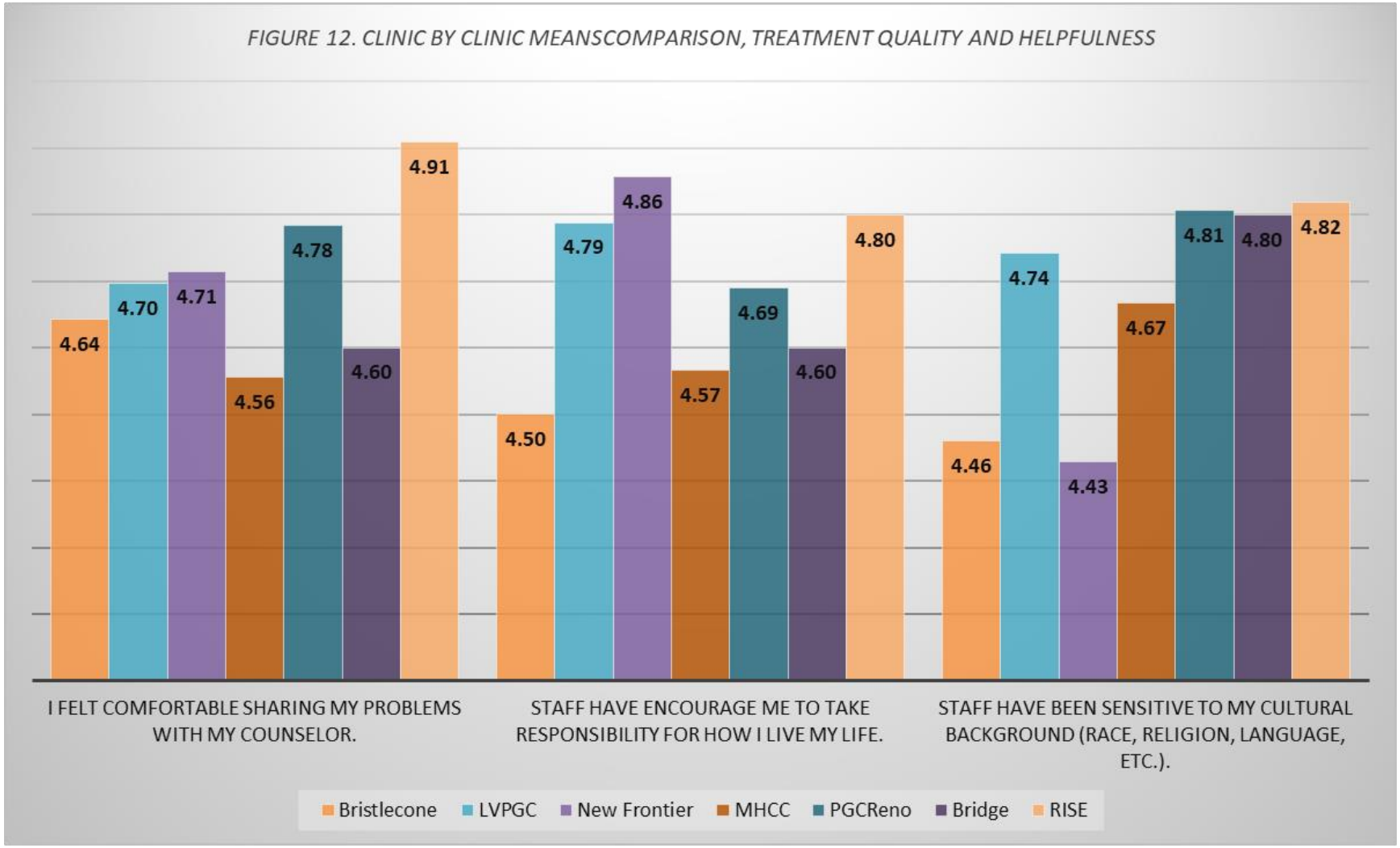
Figure 15 presents the comparison of mean ratings of items measuring overall service quality. The between-clinic differences in whether clients would recommend the program to a friend are statistically significant.



*Note: *Indicates differences between clinics are statistically significant at the p<.05 level.*

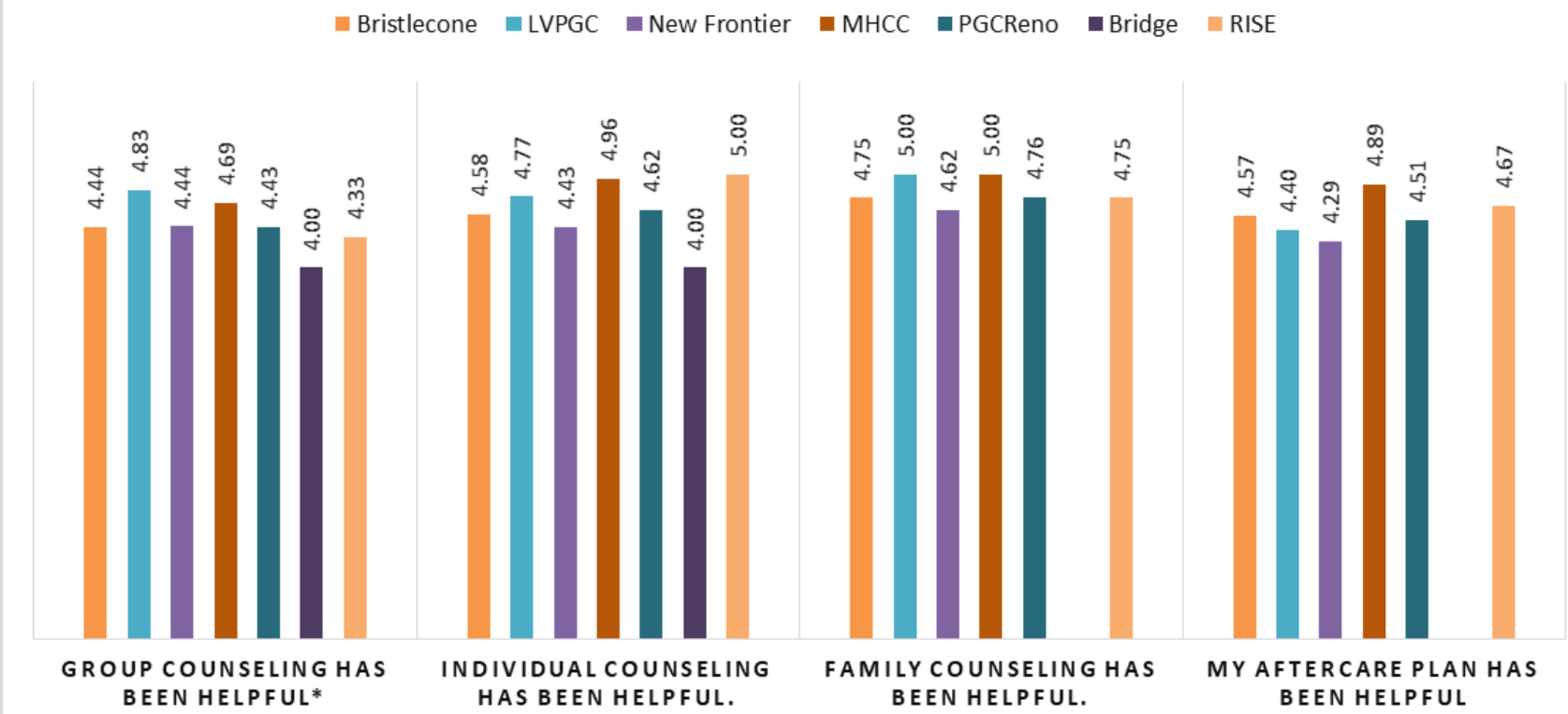


*Note: *Indicates differences between clinics are statistically significant at the p<.05 level.*

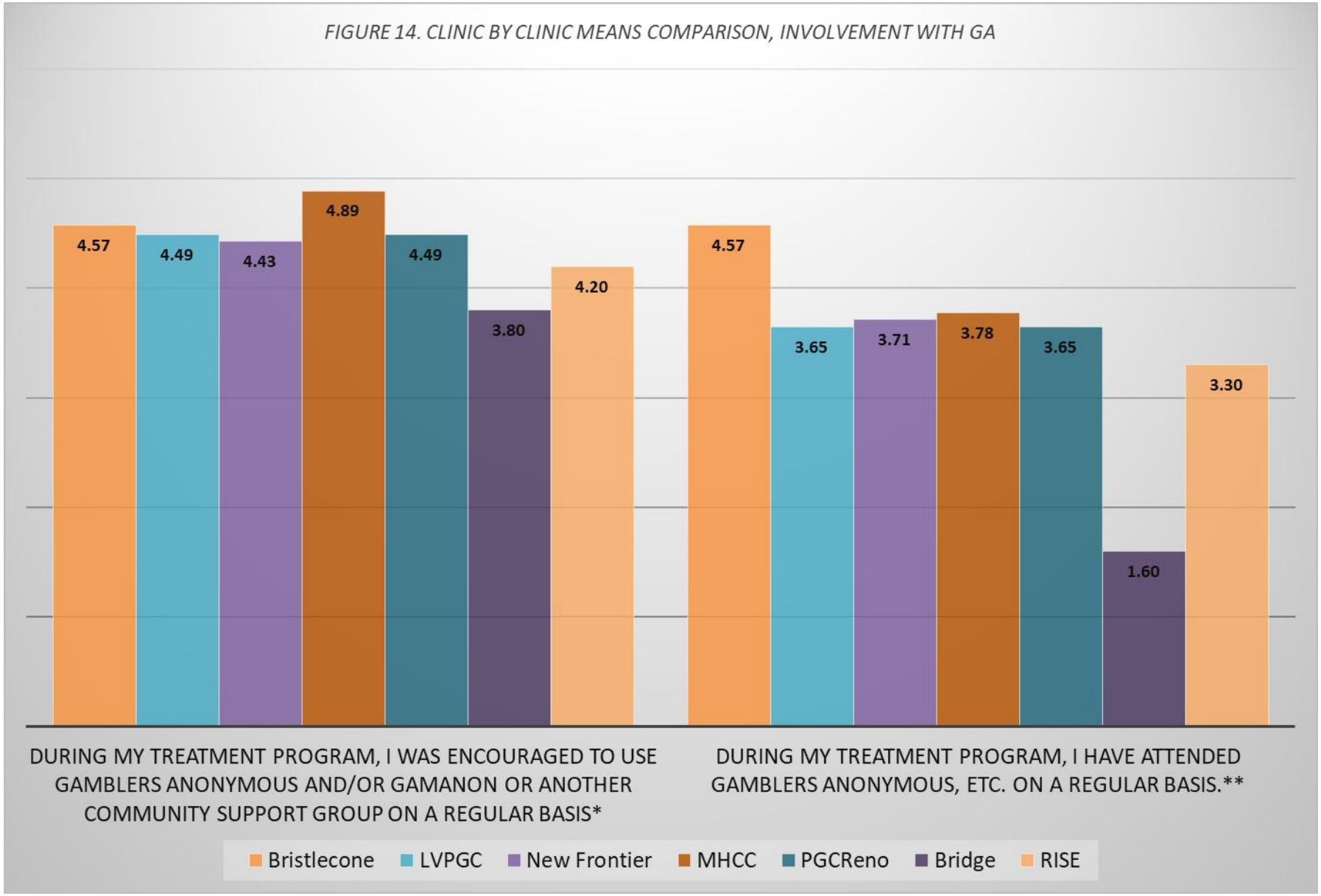


Note: None of the differences between clinics were statistically significant. .

FIGURE 13. CLINIC BY CLINIC MEANS COMPARISON, TREATMENT QUALITY AND HELPFULNESS

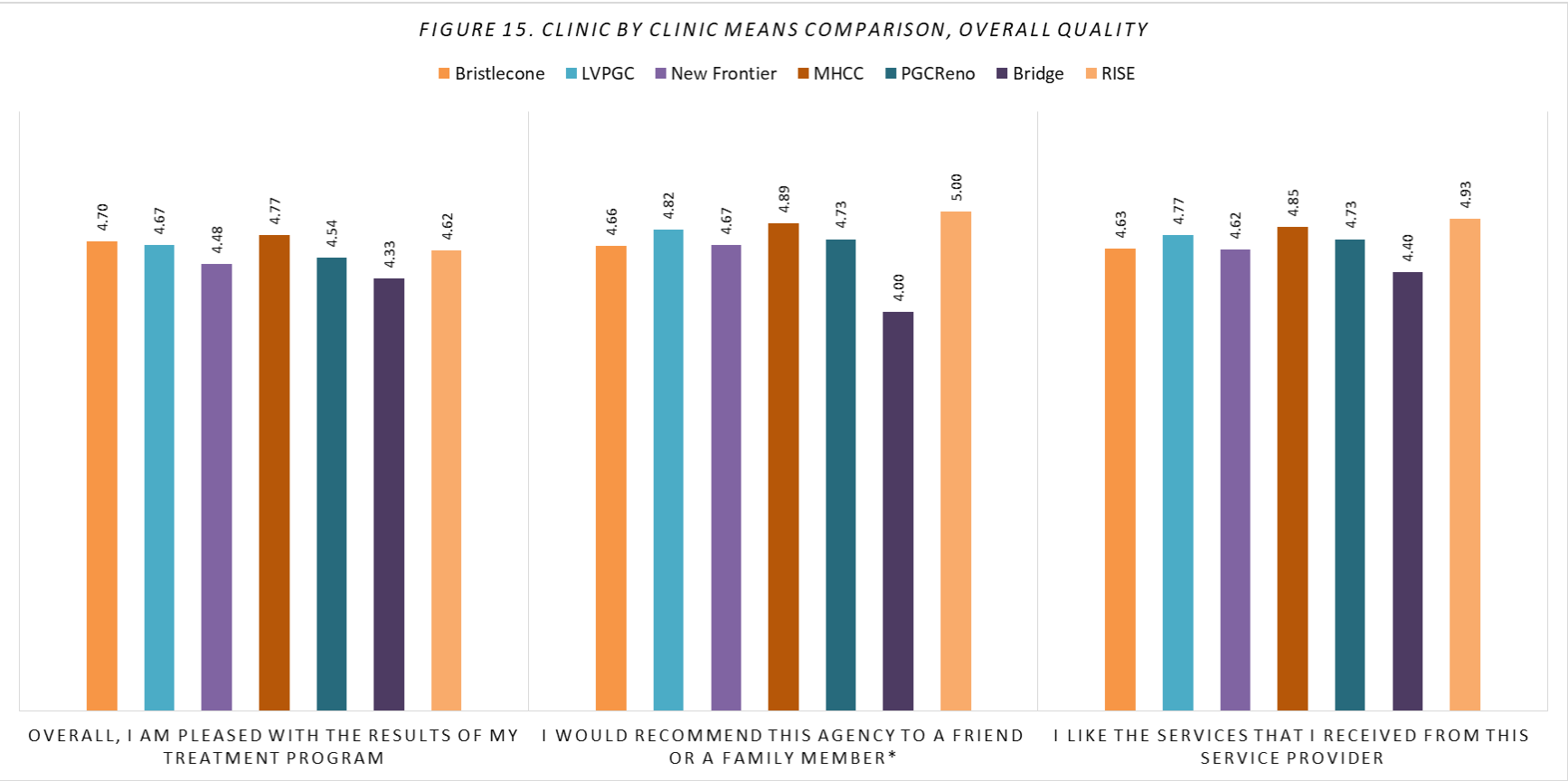


*Note: *Indicates differences between clinics are statistically significant at the p<.05 level.*



*Note: *Indicates differences between clinics are statistically significant at the p<.05 level;** at p<.01.*

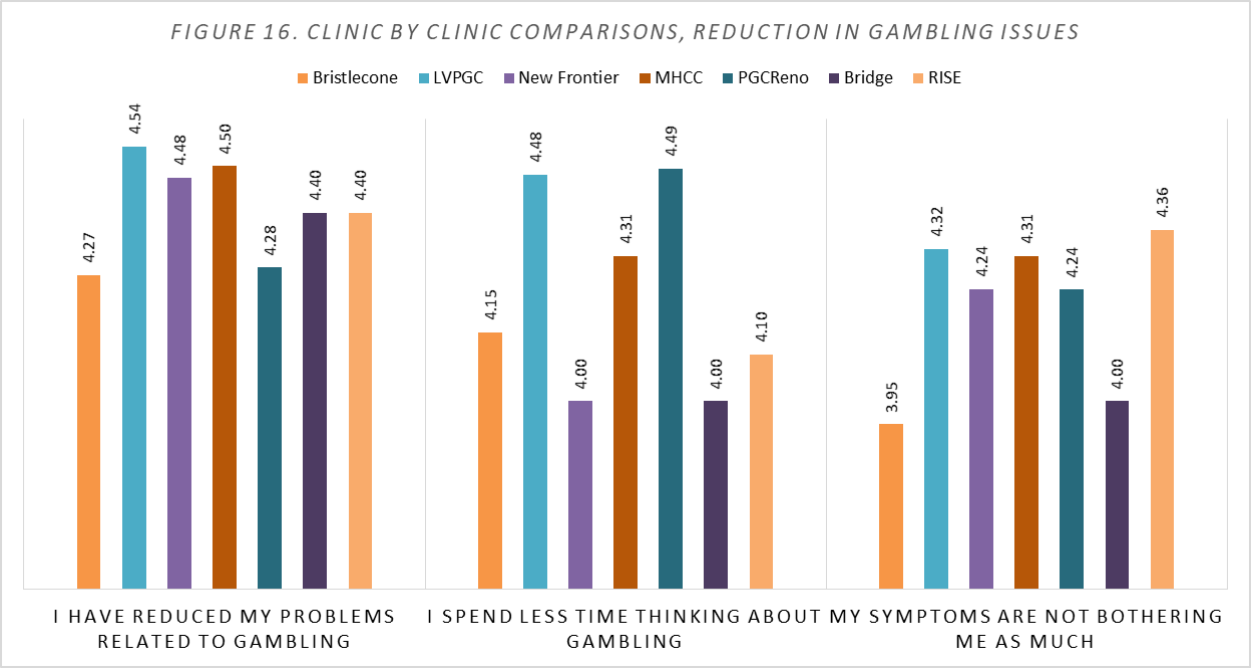
FIGURE 15. CLINIC BY CLINIC MEANS COMPARISON, OVERALL QUALITY



*Note: *Indicates differences between clinics are statistically significant at the p<.05 level.*

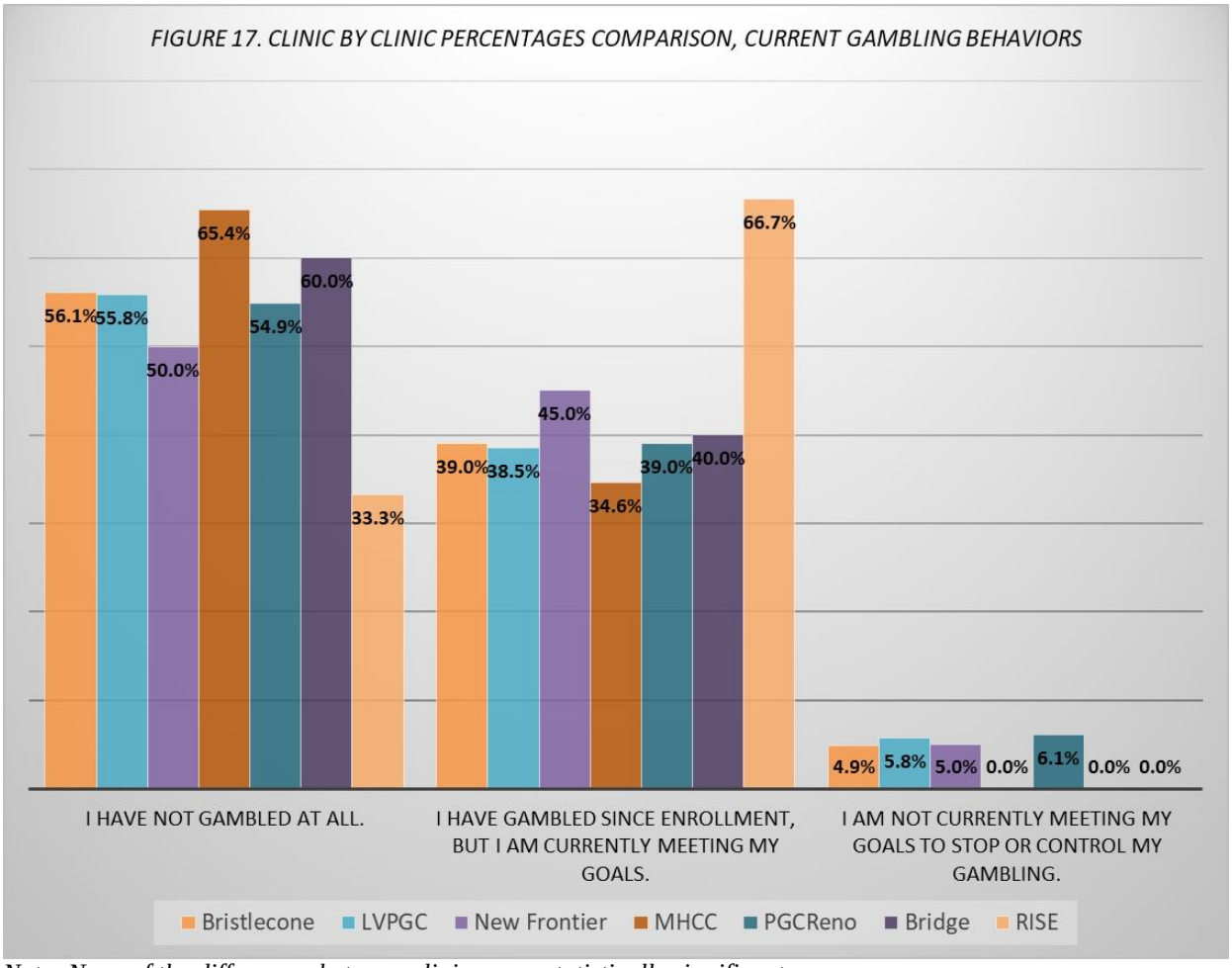
REDUCTION IN GAMBLING BEHAVIORS AND EFFECTS

Figure 16 (below) presents clinic-by-clinic comparisons of means for items measuring reductions in the effects of problem gambling in their lives. Participants from all clinics reported having reduced their problems related to gambling, feeling less bothered by their symptoms, and spending less time thinking about gambling. The between-clinic differences in scores were not statistically significant.



Note: None of the differences between clinics were statistically significant.

Figure 17 (below) presents clinic-by-clinic comparisons in reduction in gambling since enrollment in the treatment program. The first measure shows the percentage of clients from each clinic that have not gambled at all since enrollment in the program. The second measure includes clients that answered that they have had "one slip," "several slips," or that their goal is not abstinence but rather controlled gambling and that they are meeting their goals without problems. The third measure shows the percentage of clients from each clinic that report they are not currently meeting their gambling goals. None of the differences in reduction in gambling behaviors were statistically significant between clinics.



Note: None of the differences between clinics were statistically significant.

CONCERNED OTHERS

"They did such a good job and they've been supportive … It would be good if their program could grow."

The following section presents information from 29 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*=13), Reno Problem Gambling Center (*n*=15), and MHCC (Pathways) (*n*=1).

Tables 10 and 11 (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 10. Concerned Others' Average Ratings of Treatment Effectiveness

TREATMENT EFFECTIVENESS	**Average Scores**
42. I deal more effectively with daily problems.	4.14
43. I am better able to control my life.	4.03
45. I am getting along better with my family.	4.03
46. I do better in social situations.	3.75
47. I do better in school and/or work.	3.96

Table 11. 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.	4.20
36. Staff have encouraged me to take responsibility for how I live my life.	4.00
37. Staff have been sensitive to my cultural background.	4.40
38. Group counseling has been helpful.	4.08
39. Individual counseling has been helpful.	4.48
40. Family counseling has been helpful.	4.58
41. My aftercare plan has been helpful.	4.33

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.

"I'm just thankful that the gambler place is there. It's really helping my partner, and I just pray that he sticks with it, and I think both of us together, with me participating too is helping him, and them. I have great things I feel about the place. It's really helping us."

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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