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Leisure substitution and problem gambling: Report of a proof of concept group intervention

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INTRODUCTION

Problem gambling is characterised by high relapse rates post-treatment, with reports of up to 75 per cent published (Hodgins, Currie, El-Guebaly, & Diskin, 2007). Moreover, problem gamblers typically engage in few social activities apart from gambling (Bergh & Kuhlhorn, 1994), and often consider gambling the only pleasurable activity in which they participate (Petry, 2005). This may be due to the lack/loss of interest in other activities and/or their perception that gambling is the most appealing form of entertainment (Jackson, Thomas, Thomason, Crisp, Smith, Ho & Borrell, 1997; Petry, 2005; Wood & Griffiths, 2007). Consequently, upon cessation of gambling, individuals are often left with a considerable amount of unstructured time, inadequate social skills, and feelings of emptiness (Hodgins, 2001; Hodgins & El-Guebaly, 2000; Walters, 1994). Recovering gamblers have described themselves as having a 'void' or 'massive hole' when they attempt to cease their gambling (Wood & Griffiths, 2007).

Some may be so consumed by gambling that they lose touch with the process of socialising (Symond, 2003). For these individuals, re-learning how to make friends can be very difficult, and their self-confidence may need to be boosted before they can face a non-gambling life on their own. Indeed, major relapses have been found to commonly occur when the gambler is alone, while relapses (or lapses) in social situations often tend to be more minor in nature (Hodgins & el-Guebaly, 2004). Further, social isolation has been found to be a risk factor for lower health and reduced mental wellbeing, whilst supportive social networks have been shown through decades of research to promote positive outcomes in the treatment of chronic conditions including mental health disorders (Karelina & DeVries, 2011; Cohen, 1988). Hence, merely removing or cutting back on gambling is often inadequate if one struggles to deal with the space that is left behind.

For these reasons, the Re(making) Meaning project proposed the provision of a structured re-engagement program where volunteers, who have no experience with problem gambling, support individuals struggling to find suitable leisure substitutes. As problem gamblers often gamble to escape from personal problems (Blaszczynski & Nower, 2002; Ledgerwood & Petry, 2006; Wood & Griffiths, 2007), having a structured and supportive program, it was believed, could help minimise the risk of relapsing in situations of vulnerability, such as experiencing stress, exposure to gambling cues, and/or ambivalence towards personal goals (Anderson, Dobbie, & Reith, 2009; Tavares, Zilberman, & el-

Guebaly, 2003). Without such support at hand, recoverers may paradoxically be tempted to use gambling as a way to 'escape from (the withdrawal effects from non-) gambling' (Wood & Griffiths, 2007). Conversely, having personal support structures can also help to ground recoverers during moments of exaggerated optimism about winning, which sometimes precede major relapses (Hodgins & el-Guebaly, 2004).

Accordingly, activity scheduling could help to ensure that recoverers are engaged in the establishment of productive habits, and that they are provided with opportunities to practice social skills including building a new social network outside of the gambling context (Petry, 2005; Walters, 1994). Activity scheduling interventions also involve teaching participants to monitor their mood and daily activities, as well as identifying ways to enhance pleasant activities to promote positive interactions with their environments (Cuijpers, van Straten, & Warmerdam, 2007). Despite these deceptively simple techniques, this approach has been found to be effective in the treatment of depression as well as a range of other disorders, and is generally considered easy to apply (Cuijpers, et al., 2007; Hopko, Robertson, & Lejuez, 2006; Lejuez, Hopko, & Hopko, 2001).

As problem gambling is highly co-morbid with other psychiatric conditions (Clarke, 2006; Morasco, Weinstock, Ledgerwood, & Petry, 2007, Lorains, Cowlishaw & Thomas, 2011), activity scheduling interventions are likely to help prevent problem gambling relapses directly as well as indirectly. Dowling, Jackson and Thomas (2008) suggest that a therapeutic –remedial approach, a direct and in-depth method for learning better lifestyle options, is an appropriate treatment for individuals with specific leisure-related behavioural problems, such as problematic gambling. This approach examines leisure attitudes, self-concept, coping skills, and support systems as a treatment for the target and adjunct conditions. Improving both may help in the treatment of problem gambling. Some important objectives of the therapeutic -remedial approach in leisure counselling are 1) identification of leisure-related behavioural problems and their causes; 2) identification of the desired changes in leisure attitudes and behaviour to alleviate the behavioural problems; 3) development of an individualized program of recreational activities that will facilitate the integration of participating in leisure activities in a community setting, 4) initiation of involvement in activities, with supervision; and 5) development of community contacts that will enable the client to participate in community activities without supervision. This approach was reflected in the design of the (Re) Making Meaning intervention, by creating an intentional and structured social and recreational system of engagement for 'at risk' individuals to re-integrate themselves into the community. The program was assisted by volunteers with no

experience with problem gambling recruited to encourage, motivate and support participants on their recovery journey. This approach to peer support had been trialled by Chrysalis Insight Inc in an earlier unevaluated project (Byrne, 2009).

The (Re)Making Meaning Project was also based on the concept of 'The Third Place' as articulated by Oldenberg (1999, 2001) who argued that 'daily life, in order to be relaxed and fulfilling, must find its balance in three realms of experience. One is domestic, a second is gainful or productive, and the third is inclusively sociable, offering both the basis of community and celebration.' Consequently, the project used identified Third Places with the aim of offering the recovering problem gambler real social experiences.

The aim of the project was to run a proof of concept leisure substitution strategy, examining the feasibility of whether leisure substitution may be an appropriate adjunct to individual counselling for the treatment of problem gambling, with a longer term aim of embedding it in mainstream service delivery. For this project, a partnership group of support workers, trainers, clinicians, and project workers accompanied thirty participants (and their support volunteers) through a nine-month journey of (re)connection to meaningful/purposeful social networks.

METHOD

Participants

Participants were recruited from EACH Social & Community Health in eastern Melbourne, which also hosted the Gamblers Help counselling services that provided counselling to participants prior to their enrolment and/or during the project. Counsellors were given a one page explanation about the project that they handed to the clients approaching the end of a period of planned counselling, or who had recently completed counselling. Those opting to particpate contacted the project worker to register their interest and were asked to sign a partnership agreement and complete a demographic questionnaire.

The (Re)Making Meaning Program

The (Re)Making Meaning project was coordinated by one of the authors (GB) and was funded by the Victorian Department of Justice (DOJ) under its 2009-2011 Problem Gambling Innovations Grants Program. The data collected was part of an evaluation of the Innovation Grants program for the DOJ conducted by three of the authors (AJ, KF, and DC). Along with

the clients, there was a group of 18 volunteer support people. The role of the volunteers was to offer friendship, and to be prepared to take the initiative in circumstances where the participants appeared socially awkward and reticent. Volunteers were recruited through the local media, a local government service volunteer placement service, and existing volunteers of Chrysalis Insight Inc. The support persons were not mentors or counsellors, simply members of the community who did not have a gambling problem.

An introduction to the (Re)Making Meaning project ran over two days at the beginning of the project. The two days offered the first opportunity for the 48 people who had not previously met (30 participants and 18 support people) to get to know each other and to experience activities (recreational & educational) which were designed to build teamwork and confidence in all participants. This experience was considered crucial for embedding the change work begun in counselling.

Clinicians were present as a safety measure. Subsequent events were then scheduled initially every week and then every two weeks as participants were more able to attend a fortnightly rotation. Events included activities such as a bar-b-que, meditation session, singing, learning computer skills, communication workshops, goal setting skills, laughing at stress and French jive lessons. In addition to these activities an internet forum was set up for client and volunteer participants. Internet forum members made regular times during the non-event week to talk with each other and organise informal gatherings. Most participants also received weekly CBT-oriented individual counselling sessions.

Measures

Participants completed baseline measures at the start up weekend, then at six and 12 months. Current and previous help seeking information was collected along with demographic information, while alcohol and substance abuse information was collected at baseline. The following standardised measures were used at all time points, except for the Problem Gambling Severity Index (PGSI) which, as a twelve-month measure, was only administered at baseline.

Gambling Activity Measurement Tool (GAMT) measured the frequency of gambling sessions, time spent in sessions and the amount of money lost from the primary gambling activity. This measure also asked if this amount was a typical fortnight for the client and if not, what would be a typical fortnight in terms of sessions, hours and dollars spent.

Problem Gambling Severity Index (PGSI; Ferris & Wynne, 2001) is a subset of the Canadian Problem Gambling Inventory. The PGSI consists of nine questions which assess the domains of problem gambling behaviours and adverse consequences. Participants are classified as being a non-problem gambler or non-gambler, a low risk gambler, a moderate risk gambler, or a problem gambler.

Kessler 6 (K6; Furukawa, Kessler, Slade, & Andrews, 2003) is a quantifier of non specific psychological distress. The K6 has demonstrated excellent internal consistency and reliability (Cronbach's α =0.89), Each of the six items on the questionnaire are rated by the respondent on a five-point scale where the total score is the unweighted sum of responses, which range from "None of the time" at zero to "All of the time being" at four. Thus, the range of responses is 0 – 24.

Work and Social Adjustment Scale (WSAS; Marks, 1986; Mundt, Marks, Shear, & Greist, 2002) is a self-report scale of functional impairment. A WSAS score above 20 appears to suggest moderately severe or worse psychopathology. Scores between 10 and 20 are associated with significant functional impairment but less severe clinical symptomatology. Scores below 10 appear to be associated with subclinical populations.

Temptations for Gambling Questionnaire (TGQ; Holub, Hodgins, & Peden, 2005) is a 21-item self report scale which measures the strength of urges to gamble in a variety of potentially high-risk situations. The scale is comprised of four factors: Negative Affect; Positive Mood/Impulsivity; Seeking Wins or Money, and; Social Factors. Example items include 'seeing others gamble' and 'feeling sad'. For each situation, participants rate their perceived level of temptation on a 5-point scale ranging from (0) *not at all tempted* to (5) *extremely tempted.* The TGQ has been found to have good reliability (α = .80 to .91), and high test-retest reliability coefficients (α = .90 to .92). *Rosenberg Self-Esteem Scale (RSE*; Rosenberg, 1989) is a self-report questionnaire comprising 10 items that are used to generate a global self-esteem score. The RSE displays high internal consistency (α = .82) with reasonable item-total correlations (r > .50) (35).

Dejong Giervald Loneliness Scale (de Jong Giervald & van Tilburg, 1999) is an 11-item scale based on a cognitive theoretical approach to loneliness. Characteristic of this

approach is the emphasis on the discrepancy between what one wants in terms of interpersonal affection and intimacy, and what one has; the greater the discrepancy, the greater the loneliness. Scale reliability has been reported in the range (α = 0.80 to 0.90) (Shaver & Brennan, 1991).

Social Capital was measured by three dichotomised items from the Victorian Communities Social Capital Indicators Set (Department of Victorian Communities, 2007). The items included (1) can you get help from family and friends when you need it? (2) Do you feel valued by society? (3) Do you like living in your local community?

RESULTS

Thirty participants completed the baseline measures, 20 completed the 6 month survey, and 16 completed the 12 month measurement. For the baseline sample, the mean PGSI score was 16.4 (range 0-27), and the median was 18. The majority of participants were female aged 51-60 years, with all but two currently receiving counselling for problem gambling (Table 1).

Six participants officially quit the project. Three participants expressed after the introductory weekend that they had inaccurately appraised the nature of the project or their readiness to participate in it. Two participants attended regularly for the first six weeks, decided they had enough outside engagements and activities and that they did not need this program. The sixth participant was unable to cope with group activities due to suffering various psychological issues including social phobia. For unknown reasons, four participants did not complete the 6 month survey and eight did not complete the 12 month survey.

Participants who completed at least one follow up survey (n=21) were compared to those who only completed baseline measures (n=9). There were no differences on demographic measures, however, those who did not complete follow up measures had lower scores on the PGSI (Mean 12.4 compared with Mean 18.1; F=2.26, t (26) =2.35, p=0.026) and the WSAS (Mean 13.9 compared with Mean 25.4; F=0.13, t (26) =2.14, p=0.023). These results indicate that people who left the program were less severe in terms of problem gambling and its impacts, at program commencement than those who continued with the program.

<insert table 1 here>

<insert table 2 here>

A repeated measures t-test was used to asses change from baseline to six months (Table 2) and between six months and twelve months. For all psychological measures (temptation to gamble, self-esteem, anxiety, and loneliness) there was a significant improvement from baseline to six months. At 12 months there was a reduction in scores on the Temptation to Gamble Scale (mean change 13.6 units; $t(14)=2.53$, $p=.024$), suggesting that participants were less tempted to gamble at twelve months than six months. The other scales suggested that improvement observed at six months was maintained.

Six of the sixteen participants for whom there was baseline and 12-month data, had gambled in the previous fortnight, with one participant labelling this a relapse. Table 3 indicates that eight participants were gambling at entry to the program and on completion of the program. It needs to be noted, however, that the program, in keeping with the harm minimisation philosophy of the host organisation, did not require participants to be abstinent.

<insert table 3 here>

Two participants were gambling at baseline but not at twelve months, whilst another two reported not gambling at baseline, but were at 12 months. The two participants who were gambling at 12 months but not at baseline reported that they had *"reduced or quit (their) gambling over six months ago and have been able to maintain these changes"*. Of the four participants who were gambling at both times, there was a reduction in hours and money lost, except in one case (where the participant identified the event as a "relapse").

Social capital, represented by individual's connectedness to their local community, was measured by three dichotomous questions. At the end of the program there were more people who reported that they liked living in their community, believed they could get help from friends, family or neighbours and felt valued by society than at baseline (Table 4).

<insert table 4 here>

Qualitative Evaluation

Clients were contacted at the end of the project, and interviewed using a semi-structured interview format where the following main questions were asked: What was your

experience of the program? How useful was the program? What did you learn? Name something that worked well and name something that didn't work well? The bracketed statements are the missing words based on the surmised meanings by the authors when the recorded comments were incomplete.

The dominant theme taken from these conversations was of a general sense of increased self-development and confidence for the clients. Participants spoke of feeling that they had more: courage, self-esteem, and hope; having better connections with their communities, and a feeling of more purpose in their lives. Importantly, clients indicated that these feelings of empowerment were translated into feelings of greater control regarding their gambling. The following quotes indicate the level of change that some of the clients experienced.

"I joined a bush walking club, started studying again, completed an HR diploma, rejoined my church after a number of years and bought an investment unit ... I've really made a lot of changes".

"Addiction is so powerful ... [the program] helps with my addictions ... helps with relapse ... I don't beat myself up or [believe] that I'm a worthless person".

These sentiments were echoed by volunteer support personnel in their interviews. They reported seeing a lot of change in the participants, most notably in terms of them becoming more forthcoming, confident and integrated in society. For example:

"[I've seen a] change in attitude ... a lot were fearful ... now they come to you with their arms out".

"It was a joy to witness the group speaking with conviction and sincerity about their journey….and the obvious benefits gained in self esteem and self-worth were reflected in their body language and physical appearance…"

Participants indicated that the social aspect of the program was both enjoyable and important to their success. Some indicated they had joined groups outside the program and re-connected with parts of their lives that had been neglected. What was taken from these discussions is that clients developed new interests that could be explored together in a safe, positive environment. This had an effect of broadening their experiences, most importantly in a non-gambling context. Participants reported having something to look forward to which helped them manage their leisure time rather than thinking about or entertaining themselves with gambling.

"[I could] plan for it instead of going out gambling on Saturday ... we went to the program"

"Social activities were as good as the educational activities ... a bit of both [was good] ... [we were] looking forward to see[ing] each other ... you know you were amongst friends [in this group]"

DISCUSSION

Responses at six months and 12 months on all subscales of the Temptations for Gambling Questionnaire (Negative Affect, Positive Mood, Money Chasing and Social Factors); Work and Social Adjustment Scale; Rosenberg Self Esteem Scale; the Kessler 6; and the Dejong Giervald Loneliness Scale showed significant improvement compared to baseline. Social capital items also indicated that at the end of the program more participants felt connected to their community. It is important to note that the greatest increase was in participants' perceptions that they could get help from friends, families or neighbours if they needed it. This sort of tangible or instrumental social support has been demonstrated as being crucial for the maintenance of therapeutic gains, and for relapse prevention in unsupported individuals, post treatment for problematic gambling (Battersby et al, 2010; Hodgins & el-Guebaly, 2004).

There was a substantial decrease in time spent gambling, although there was a modest increase in gambling losses as a group overall, primarily due to *one* person who lost a significant amount at the end of the program and reported this as a relapse. The improvements indicate that this therapeutic program was able to strengthen the participants' self-belief in changing problematic gambling behaviours and to reduce harms associated with that problematic behaviour. Results also indicate that the program was able to address social isolation using a modified peer support program design in a group context.

The study demonstrated the utility of an intervention that is not strictly speaking, a peer support intervention, but a different mix of non-peer volunteers and peers who shared the condition delivering a leisure substitution intervention. Peer support, in the context of mental health, has been defined as social and emotional support, frequently coupled with instrumental support that is mutually offered or provided by persons having a mental health condition to others sharing a similar mental health condition to bring about a desired social or personal change (Solomon, 2004). Davidson et al (2006) argued that peer support programs lie somewhere in between the two ends of a continuum between professional psychotherapy, which is entered into intentionally, and friendship which occurs naturally. The (Re)Making

Meaning program offered a form of quasi-professional intervention, with its 'professional' peer facilitator and non-client volunteers, rather than simply mutual support. In this way it differed from the 'pure' peer support as represented by Gamblers Anonymous (GA), offered as a stand-alone self-help intervention, or as an adjunct to professional counselling Ferentzy & Skinner, 2003; Petry, 2004, 2005; Ferentzy, Skinner & Antze, 2006).

The present study showed that the sharing of a common problem with someone who could appreciate the power of urges and the pull towards gambling, characteristic of 'pure' peer support (Smith & Jackson, 2008) was not a necessary condition for achieving significant change. The (Re)Making Meaning program, with its focus on normalising non-gambling leisure rather than focusing on urge reduction, operated with a program ethos of non-identification of the problem gamblers and the non-problem gambler volunteers.

Previous research has suggested that problem gamblers, although generally socially isolated, are members of social contexts where gambling is considered a normal recreation activity (Trevorrow & Moore, 1998). The leisure substitution approach seems to have normalised non-gambling for the problem gambler participants in the group, providing them with opportunities to practice social skills with non-gamblers as well as the opportunity to build new social networks outside of the gambling context. As activity scheduling interventions also involve teaching participants to monitor their mood in the context of daily activities, the program provided an opportunity for associating positive mood with non-gambling social activity.

As suggested by Dowling, Jackson and Thomas (2008), this targeted approach to leisure substitution as an adjunct to professional counselling and as a mechanism for maintenance of therapeutic gains, was successful. Specifically, participants engaging in leisure activities in a community setting under supervision, and in gatherings in non-supervised community settings, enabled clients to maintain their initial psychological gains achieved at six months in a variety of supportive 'Third Places'.

A limitation of the study was that we could not specify how much change was due to the program or to the individual counselling that the problem gambler participants had experienced or were experiencing. In addition, despite the substantial psychological improvement shown by the clients, total gambling losses remained relatively static. We suggest that future replications of this treatment will need to monitor these issues. These apparently conflicting results: a static behavioural pattern whilst achieving significant psychological change may actually imply that clients are in the process of change, where the observed improvements indicate greater *perceived* personal control of gambling. Further, the

disconnect between the psychological effects of the intervention and actual behavioural change may suggest a possible treatment time lag, whereby the tools for behavioural change are present, but full translation of these into actual behaviour change, at least in relation to gambling expenditure, is yet to occur.

In the future, it would be useful to assess the intervention more systematically, rather than constrained by a program evaluation methodology. Ideally, the effects of this intervention should be compared at the least, against a similar group that received counselling but no (Re)making meaning intervention, or indeed, the (Re)Making meaning intervention as a stand- alone intervention, compared with a counselling only group and a matched waitlist control .

References

Anderson, S., Dobbie, F., & Reith, G. (2009). *Recovery from problem gambling: a qualitative study*. Glasgow: Scottish Centre for Social Research.

Battersby, M., Pols, R., Oakes, J., Smith, D., McLaughlin, K., & Baigent, M. (2010). *The definition and predictors of relapse in problem gambling: Final Report*. Melbourne: Gambling Research Australia.

Bergh, J. C., & Kuhlhorn, E. (1994). Social, Psychological and Physical Consequences of Pathological Gambling in Sweden. *Journal of Gambling Studies, 10*, 275-285.

Blaszczynski, A., & Nower, L. (2002). A pathways model of problem and pathological gambling. *Addiction, 97*(5), 487-499.

Byrne, G. (2009). The Free Yourself Program. The back-to-basics approach in dealing with Poker Machine addiction. 64-65

Clarke, D. (2006). Impulsivity as a mediator in the relationship between depression and problem gambling. *Personality and Individual Differences, 40*(1), 5-15. doi: DOI 10.1016/j.paid.2005.05.008

Cohen, S. (1988). Psychosocial models of the role of social support in the etiology of physical disease. *Health Psychology*, 7,3, 269-297.

Cuijpers, P., van Straten, A., & Warmerdam, L. (2007). Behavioral activation treatments of depression: A meta-analysis. *Clinical Psychology Review, 27*(3), 318-326. doi: DOI 10.1016/j.cpr.2006.11.001

Davidson, L., Chinman, M., Sells, D. & Rowe, M (2006), 'Peer support among adults with serious mental illness: A report from the field', *Schizophrenia Bulletin*, 32, 443 - 450.

de Jong Giervald, J., & van Tilburg, T. G. (1999). Manual of the loneliness scale (D. o. S. R. Methodology, Trans.). Amsterdam: University of Amersterdam.

Department of Victorian Communities. (2007). *Indicators of community strength at the local government area level in Victoria 2006*. Melbourne: Department for Victorian Communities.

Dowling, N., Jackson, A. C., & Thomas, S. A. (2008). Behavioural interventions in the treatment of pathologicl gambling: A review of activity scheduling and desensitisation. *International Journal of Behavioral Consultation and Therapy, 4*(2), 172 - 187.

Ferris, J., & Wynne, H. J. (2001). The Canadian Problem Gambling Index. Ottawa: Canadian Centre on Substance Abuse.

Furukawa, T. A., Kessler, R. C., Slade, T., & Andrews, G. (2003). The performance of the K6 and K10 screening scales for psychological distress in the Australian National Survey of Mental Health and Well-Being. *Psychological Medicine, 33*(2), 357-362. doi: Doi 10.1017/S0033291702006700

Hodgins, D. C. (2001). Processes of changing gambling behavior. *Addictive Behaviors, 26*(1), 121-128.

Hodgins, D. C., Currie, S. R., El-Guebaly, N., & Diskin, K. M. (2007). Does providing extended relapse prevention bibliotherapy to problem gamblers improve outcome? *Journal of Gambling Studies, 23*(1), 41-54. doi: DOI 10.1007/s10899-006-9045-1

Hodgins, D. C., & El-Guebaly, N. (2000). Natural and treatment-assisted recovery from gambling problems: a comparison of resolved and active gamblers. *Addiction, 95*(5), 777-789.

Hodgins, D. C., & el-Guebaly, N. (2004). Retrospective and prospective reports of precipitants to relapse in pathological gambling. *Journal of Consulting and Clinical Psychology, 72*(1), 72-80. doi: Doi 10.1037/0022-006x.72.1.72

Holtgraves, T. (2009). Evaluating the Problem Gambling Severity Index. *Journal of Gambling Studies, 25,* 105-120.

Holub, A., Hodgins, D. C., & Peden, N. E. (2005). Development of the temptations for gambling questionnaire: A measure of temptation in recently quit gamblers. *Addiction Research & Theory, 13*(2), 179-191. doi: Doi 10.1080/16066350412331314902

Hopko, D. R., Robertson, S. M. C., & Lejuez, C. W. (2006). Behavioral activation for anxiety disorders. *The Behaviour Analyst Today, 7*(2), 212 - 233.

Jackson, A. C., Thomas, S. A., Thomason, N., Crisp, B. R., Smith, S., Ho, W., & Borrell, J. (1997). Analysis of Clients presenting to Problem Gambling Services from July 1 1996 to June 30 1997: Client and Services Analysis Report No. 2. Melbourne: Victorian Department of Services.

Karelina, K. & DeVries, A.C. (2011). Modeling social influences on human health, *Psychosomatic Medicine,* 73, 1, 67-74

Ledgerwood, D. M., & Petry, N. M. (2006). What do we know about relapse in pathological gambling? *Clinical Psychology Review, 26*(2), 216-228. doi: DOI 10.1016/j.cpr.2005.11.008

Lejuez, C. W., Hopko, D. R., & Hopko, S. D. (2001). A brief behavioral activation treatment for depression - Treatment manual. *Behavior Modification, 25*(2), 255-286.

Lorains, FK, Cowlishaw, S, Thomas, S. (2011). Prevalence of co-morbid disorders in problem and pathological gambling. *Addiction,* 106, 490-498

Marks, I. M. (1986). *Behavioral Psychotherapy*. Bristol: John Wright.

Morasco, B. J., Weinstock, J., Ledgerwood, D. M., & Petry, N. M. (2007). Psychological factors that promote and inhibit pathological gambling. *Cognitive and Behavioral Practice, 14*(2), 208-217.

Mundt, J. C., Marks, I. M., Shear, M. K., & Greist, J. H. (2002). The Work and Social Adjustment Scale: a simple measure of impairment in functioning. *British Journal of Psychiatry, 180*, 461-464.

Oldenburg, R. (1999). *The great good place: Cafes, coffee shops, bookstores, bars, hair salons, and other hangouts at the heart of a community.* NY*:* Marlowe & Co.

Oldenburg, R. (2001). *Celebrating the third place: inspiring stories about the "great good places" at the heart of our communities.* NY: Marlowe & Co.

Petry, N. M (2004), 'Recovery without professional interventions', In NM Petry (Ed.) *Pathological gambling: Etiology, co morbidity, and treatment*. Washington, DC, American Psychological Association

Petry, N. M. (2005). Gamblers anonymous and cognitive-behavioral therapies for pathological gamblers. *Journal of Gambling Studies, 21*(1), 27-33. doi: DOI 10.1007/s10899-004-1919-5

Prochaska, J. O., & Diclemente, C. C. (1983). Stages and Processes of Self-Change of Smoking: Toward an Integrative Model of Change. *Journal of Consulting and Clinical Psychology, 51*(3), 390-395.

Rosenberg, M. (1989). *Society and the Adolescent Self-Image*. Middletown: Wesleyan University Press.

Shaver, P.R. & Brennan, K.A. (1991). Measures of depression and loneliness. In J.P. Robinson, P.R. Shaver & L.S. Wrightsman (Eds), *Measures of Personality and Social Psychological Attitudes.* San Diego: Academic Press.

Smith, S.A. & Jackson, A.C. (2008). *Evaluation of Gambler's Help Northern Peer Connection Program pilot 2: Final report,* Melbourne: Problem Gambling Research and Treatment Centre, University of Melbourne

Solomon, P. (2004), Peer support/peer provided services underlying processes, benefits, and critical ingredients. *Psychiatric Rehabilitation Journal,* 27, 392 - 401.

Stinchfield, R., Winters, K. C., Botzet, A., Jerstad, S., & Breyer, J. (2007). Development and Psychometric Evaluation of the Gambling Treatment Outcome Monitoring System (GAMTOMS). *Psychology of Addictive Behaviors*, *21*(2), 174-184. doi: Doi 10.1037/0893-164x.21.2.174

Symond, P. (2003). *How to Stop Gambling*: Bantam Doubleday Dell.

Tavares, H., Zilberman, M. L., & el-Guebaly, N. (2003). Are there cognitive and behavioural approaches specific to the treatment of pathological gambling? *Canadian Journal of Psychiatry-Revue Canadienne De Psychiatrie, 48*(1), 22-27.

Trevorrow, K., & Moore, S. (1998). The assoication between loneliness, social isolation and women's electronic gaming machine gambling. *Journal of Gambling Studies, 14*(3), 263-284.

Walters, G. D. (1994). The Gambling Lifestyle: II. Treatment. *Journal of Gambling Studies, 10*(3), 219-235.

Wood, R. T. A., & Griffiths, M. D. (2007). A qualitative investigation of problem gambling as an escape-based coping strategy. *Psychology and Psychotherapy-Theory Research and Practice, 80*, 107-125. doi: Doi 10.1348/147608306x107881

Table 1.

Demographic Data (N=30)

	n	Percent (%)
Gender		
male	9	30.0
female	21	70.0
Age		
25-30	1	3.3
31-40	2	6.7
41-50	4	13.3
51-60	16	53.3
>60	7	23.3
Relationship status		
single	8	26.7
married or partnered	8	26.7
divorced or separated	9	30.0
widowed	1	3.3
Missing	4	13.3
Working		
yes	18	60.0
full-time	15	50.0
part-time	3	10.0
Provided support person		
yes	8	26.7
In counselling at commencement of the program		
yes	28	93.3
no	2	6.7
Other gambling support (n=24) (multiple responses possible)		
General Counselling (not Gambler's Help)	7	18.9
Gambler's Anonymous	4	10.8
Other Peer Support (support from others experiencing the same problem)	5	13.5
Self Help Materials (internet, books, pamphlets)	8	21.6
Gambler's Help Line	13	35.1

Table 2.

Comparison of scores at baseline and six months (N=20)

		Baseline		6 months		Change		Repeated measures t-test		
	n	M	SD	M	SD	M	SD	t	df	sig
Temptation to gamble (0-105)	20	62.50	28.15	36.55	26.02	25.95	26.19	4.431	19	.000
Negative affect (0-45)	20	28.40	11.88	16.20	11.56	12.20	11.34	4.811	19	.002
Positive mood (0-25)	20	13.25	6.93	8.10	6.32	5.15	6.39	3.603	19	.002
Money chasing (0-20)	20	11.90	6.73	6.55	5.39	5.35	6.63	3.610	19	.002
Social factors (0-15)	20	8.95	4.47	5.70	4.21	3.25	3.77	3.857	19	.001
WSAS (0-40)	18	25.33	11.97	12.83	13.24	12.50	13.13	4.039	17	.001
Rosenberg Self esteem (0-30)	17	12.94	5.73	18.00	6.41	-5.06	5.27	-3.955	16	.001
K6 (6-30)	17	18.29	4.28	12.24	5.47	6.06	4.58	5.460	16	.000
Loneliness (1-11)	19	8.63	2.85	6.05	3.81	2.58	3.27	3.436	18	.003

Table 3.

Current gambling at baseline and 12 months for the participants who completed the 12-month questionnaire (N=16)

Baseline				12 months			
Currently gambling	Hours	Sessions	Net loss $	Currently gambling	Hours	Sessions	Net loss $
no	.	.	.	no	.	.	.
no	.	.	.	no	.	.	.
no	.	.	.	no	.	.	.
no	.	.	.	no	.	.	.
no	.	.	.	no	.	.	.
no	.	.	.	no	.	.	.
no	.	.	.	no	.	.	.
no	.	.	.	no	.	.	.
no	.	.	.	yes	2	3	50
no	.	.	.	yes	.	4	200
yes	6	2	500	no	.	.	.
yes	8	3	1500	no	.	.	.
yes	8	4	400	yes	5	2	200
yes	24	4	.	yes	5	2	200
yes	6	1	150	yes	5	5	2300
yes	.	4	300	yes	3	1	20

Table 4

Participants who responded ‘yes’ to the social capital items at baseline and 9 month follow up (N=15).

Social Capital item	Baseline yes	9 months yes
Can you get help from friends, family or neighbours when you need it?	8	14
Do you feel valued by society?	8	11
Do you like living in your local community	9	14