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Outcome of treatment seeking rural gamblers attending a nurse-led cognitive-behaviour therapy service: A pilot study

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ABSTRACT

Objectives: Little is known about the differences between urban and rural gamblers in Australia, in terms of comorbidity and treatment outcome. Health disparities exist between urban and rural areas in terms of accessibility, availability, and acceptability of treatment programs for problem gamblers. However, evidence supporting cognitive-behaviour therapy as the main treatment for problem gamblers is strong. This pilot study aimed to assess the outcome of a Cognitive-Behavioural Therapy (CBT) treatment program offered to urban and rural treatment-seeking gamblers.

Methods: People who presented for treatment at a nurse-led Cognitive-Behavioural Therapy (CBT) gambling treatment service were invited to take part in this study. A standardised clinical assessment and treatment service was provided to all participants. A series of validated questionnaires were given to all participants at (a) assessment, (b) discharge, (c) at a one-month, and (d) at a 3-month follow-up visit.

Results: Differences emerged between urban and rural treatment-seeking gamblers. While overall treatment outcomes were much the same at three months after treatment, rural gamblers appeared to respond more rapidly and to have sustained improvements over time. **Conclusion:** This study suggests that rural problem gamblers experience different levels of co-morbid anxiety and depression from their urban counterparts, but once in treatment appear to respond quicker. ACBT approach was found to be effective in treating rural gamblers and outcomes were maintained. Ensuring better availability and access to such treatment in rural areas is important. Nurses are in a position as the majority health professional in rural areas to provide such help.

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1. Introduction

There are inequities in health and a health divide between urban and rural areas, reflecting the social determinants of health. There are also less health services available and outcomes after treatment are lower in rural than urban areas [1]. This is also true for people experiencing problems with gambling in rural areas where gambling is often linked to sociodemographic variables such as poverty, poor housing, and unemployment [2]. With recent improvement in mobile and internet technologies in rural settings in Australia, there are more opportunities for people to access gambling services [3]. However, little has been reported on the success of such treatment [4]. Increased access to technology also introduces more gambling in the form of online casinos, bingo and lotteries which is rated by participants as more addictive than offline gambling and may lead to more gambling problems in rural areas [5].

Problem gambling affects approximately 2% of Australians with an estimated international prevalence between 0.5 and 9.0% [6–9]. While a great deal of research has taken place to attempt to understand the impact of gambling on the individual, their families and the wider community, far less research has been conducted into the specific issue of rural gamblers. Given the increase in opportunities for rural residents to gamble using smart technologies and mobile gaming, more research is needed.

A wide range of treatments are available to help combat gambling problems. However, despite a growing history of such treatments, there is little clear empirical evidence to support any particular approach. Cognitive-Behavioural Therapy (CBT) and psycho-pharmacological therapies are two treatment options that have shown some significant results in terms of reducing problem gambling behaviour [10–12]. Two approaches to CBT have been shown to be effective: exposure therapy with response prevention [13]; and cognitive restructuring to gambling specific erroneous beliefs [14].

In many gambling studies, therapists from various disciplines offer treatment to problem gamblers. For example, in two studies of exposure therapy the therapists were mental health social workers, mental health nurses, clinical psychologists and counsellors [15,16]. While little has been reported on nurses treating problem gamblers, there are a number of examples as to how they may be able to help with other conditions including mental health [17] and addictions [18] in rural settings. It was noted, rural mental health nurses were required to occupy broader and more complex roles often treating patients outside of their scope of practice such as gambling [19]. In addition a number of studies have noted a severe lack of mental health nurses in rural areas despite a demand for their services [20,21].

This study was designed to evaluate the routine clinical outcomes from a nurse-led and nursing delivered CBT treatment program for problem gamblers in South Australia [22]. There have been few studies examining specific differences between rural and urban treatment outcomes of gamblers. This study provides a clear indication of the potential problems facing rural gamblers and how such issues can be addressed. The inclusion of nurses in such treatment

especially in rural areas may be one way to address this as they typically represent the largest rural health professional group.

2. Materials and methods

2.1. Participants

A convenience sampling method was used to recruit participants from an out-patient gambling treatment service attached to a large teaching hospital in Adelaide, South Australia [22]. As a result, all participants were seeking treatment for problem gambling. In order to be included in the study, participants needed to give consent for the assessment and treatment outcome data to be collected and used for research purposes. As this was a naturalistic clinic population there were no exclusion criteria.

2.2. Procedures

Ethics approval for the study was granted by Flinders Medical Centre and Flinders University joint ethics committee. All participants were initially assessed and demographic data was recorded. They were invited to complete several measures, as described in Section 2.4. Having been determined as suitable for the treatment program, participants were offered between 6 and 12 sessions with a Masters prepared CB therapist using a guided treatment manual [23].

2.3. Interventions

Therapists were all nurses with Masters level qualifications who had been trained as CBT therapists [24]. A standardised treatment was used, that has been described in detail elsewhere [22,23,25,26]. In essence, all clients completed four steps: 1) stimulus control methods to bring about immediate control of gambling; 2) imaginal and live exposure with response prevention to gambling specific triggers; 3) cognitive restructuring and behavioural experiments to further support the urge reduction obtained through exposure; and 4) standard client focussed relapse prevention.

2.4. Measurements

Participants were asked to complete a series of measures at the initial assessment, at discharge, at a 1 month follow-up session (1MFU) and at a 3 month follow-up session (3MFU). Data was also collected at a 6-month and 12-month follow-up session, but has not been included in this report due to the low number of rural participants attending the follow-up sessions.

The measures used included an anxiety inventory, a depression inventory, a work and social adjustment questionnaire, a simple gambling severity tool and an assessment of their suitability for CBT therapy. This assessment included an overview of their main gambling problem, psychiatric assessment, mental state examination and a risk assessment.

The *Beck Anxiety Inventory (BAI)* is a 20-item measure of state anxiety that has been shown to be valid and reliable

[27–29]. The Beck Depression Inventory (BDI) is a 20-item measure of current depression that has been shown to be valid and reliable in clinical populations [30–32]. The Work & Social Adjustment Scale (WSAS) is a 5-item measure of disability associated with a clinical problem (work, social leisure, private leisure, home management and relationships). This measure has been shown to be valid and reliable in a number of clinical populations including gambling [33–38]. Finally all participants completed a specific statement of their *gambling problem* measured on a scale from zero (no problem) to eight (severe problem). This measure of an individual's problems has been used in a number of clinical settings although has never been formally tested for reliability or validity [39,40]. In addition all gamblers completed the Victorian Gambling Screen, a simple 15 item measure of at risk and problem gambling as well as a Diagnostic and Statistical Manual for Mental Diseases [41] diagnosis of pathological gambling. This tool has been extensively validated in the general population [42–44], clinical practice [45] and with adolescents [46].

2.5. Statistical analysis

The data was analysed using the SPSS version 22. Group differences on demographic were analysed using 'chi squared test and fishers exact test'. Changes over time on all continuous measures were determine using one way ANOVA and paired t-tests. Within and between group analyses were performed.

3. Results

3.1. Gambler characteristics

There were more female gamblers in the rural than the urban sample (rural = 64.0% vs. urban = 57.0%; NS) and rural gamblers were generally younger than urban gamblers (rural < 35 years = 50.0% vs. urban < 35 years = 25.7%; NS). Rural gamblers played less on Electronic Gaming Machines (EGMs) i.e. slot machines than urban gamblers (rural 92.0% vs. urban 79.0% vs.; $\chi^2(4, n = 136) = 388.20, P < 0.001$). A similar percentage of rural and urban gamblers failed to complete the treatment program. However, once rural gamblers had commenced treatment they were more likely than urban gamblers to return for post-treatment follow-up (rural 50.00% vs. urban 28.7%; NS). The general characteristics of urban and rural gamblers are presented in Table 1.

3.2. Gambling severity

There were no differences between urban and rural gamblers on any gambling measure. Rural and urban gamblers experienced similar improvement over time, up to 3 months after completing treatment. However, rural gamblers spent more hours gambling in any given month than urban gamblers (rural 79 h vs. urban 64 h; $U(137) = 372.00, NS$).

3.3. Work & social adjustment scale (WSAS)

Rural gamblers showed a larger positive change than urban gamblers in relation to work and social adjustment during the active period of treatment, although this difference diminished at follow-up (Fig. 1). When comparing each of the five items of the WSAS, there were no significant differences between rural and urban gamblers. However, at the initial assessment rural gamblers experienced more problems than urban gamblers in their work and social adjustment in particular their social leisure (rural: $M = 6.00$ vs. urban: $M = 4.28$; NS). This may reflect the nature of rural social behaviour where the local pub or hotel is often the main source of socialising, as well as the main gambling outlet.

3.4. Beck anxiety inventory (BAI)

There were similar changes in anxiety between rural and urban gamblers during the active period of treatment. While not statistically significant, rural gamblers had greater improvements in their levels of anxiety post-treatment (Fig. 2). When comparing rural and urban gamblers, in terms of risk of anxiety, there were slightly more rural gamblers in the mild/moderate anxiety category than urban gamblers (rural 54% vs. urban 47%; NS). There were no differences at the assessment stage between rural and urban gamblers in relation to the sub-clinical and severe anxiety categories.

Female rural gamblers were significantly more anxious than male rural gamblers at the assessment stage, while experiencing similar levels of anxiety to all urban gamblers ($t(12) = 4.96, P < .001$). There was a significant difference between changes in anxiety over time, with female rural gamblers showing greater improvement than male rural gamblers at 1-month follow-up, which was maintained at three months ($\chi^2(1, n = 16) = 8.50, P < 0.01$).

3.5. Beck depression inventory (BDI)

Both rural and urban gamblers showed a similar improvement in terms of depression post-treatment. Rural gamblers began with slightly higher depression levels than urban gamblers, but these levels improved more slowly over time (Fig. 3). Male rural gamblers were significantly more depressed than female rural gamblers at assessment and were similar to all urban gamblers ($t(13) = 7.28, P < 0.001$).

Table 1 – General characteristics of urban/rural gamblers (weighted by gender).

			Male		Female	
			n	(%)	n	(%)
Urban	<35	Gaming machines	12	(75.00)	8	(80.00)
		Other	4	(25.00)	2	(20.00)
	>36	Gaming machines	18	(90.00)	78	(97.50)
		Other	2	(10.00)	2	(2.50)
Rural	<35	Gaming machines	1	(50.00)	6	(60.00)
		Other	1	(50.00)	4	(40.00)
	>36	Gaming machines	3	(100.00)	8	(100.00)
		Other	0	(0.00)	0	(0.00)

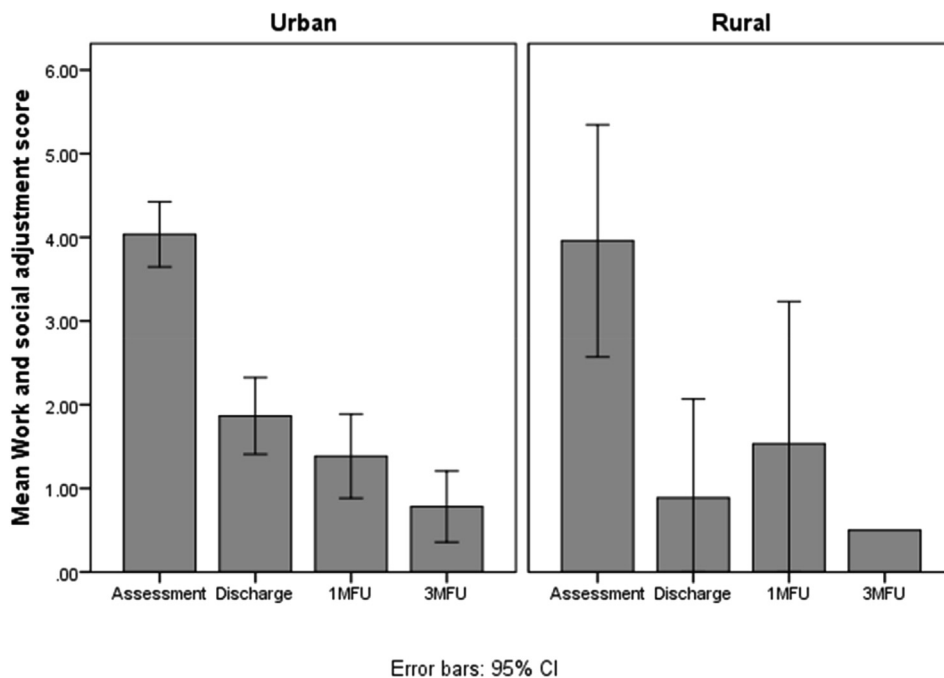


Fig. 1 – Changes in work & social adjustment.

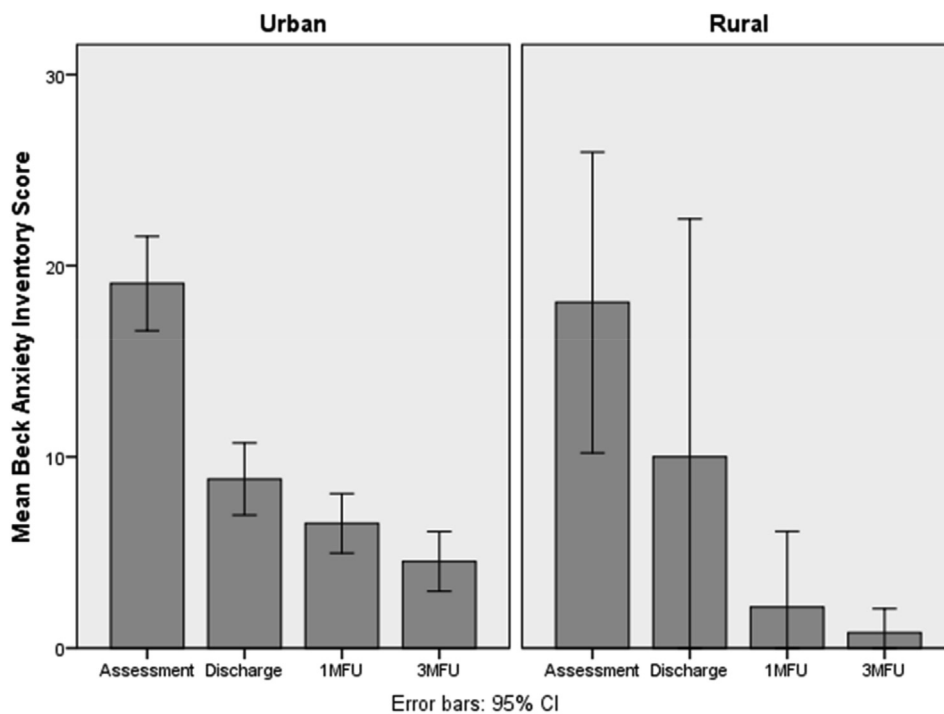


Fig. 2 – Changes in Beck anxiety inventory (BAI).

4. Discussion

4.1. Sample of rural treatment-seeking gamblers

This paper offers some initial insight into the impact of gambling on people living in rural areas. It appears, in this

small sample, that treatment-seeking rural gamblers are more likely to be female, younger and to play EGMs. This data was drawn from a routine clinic population and so those reported are not a representative sample. In fact they are clearly a skewed group. There is evidence that males gamble more and are at greater risk of developing problems than females in both rural and urban areas [47]. It is possible that rural females

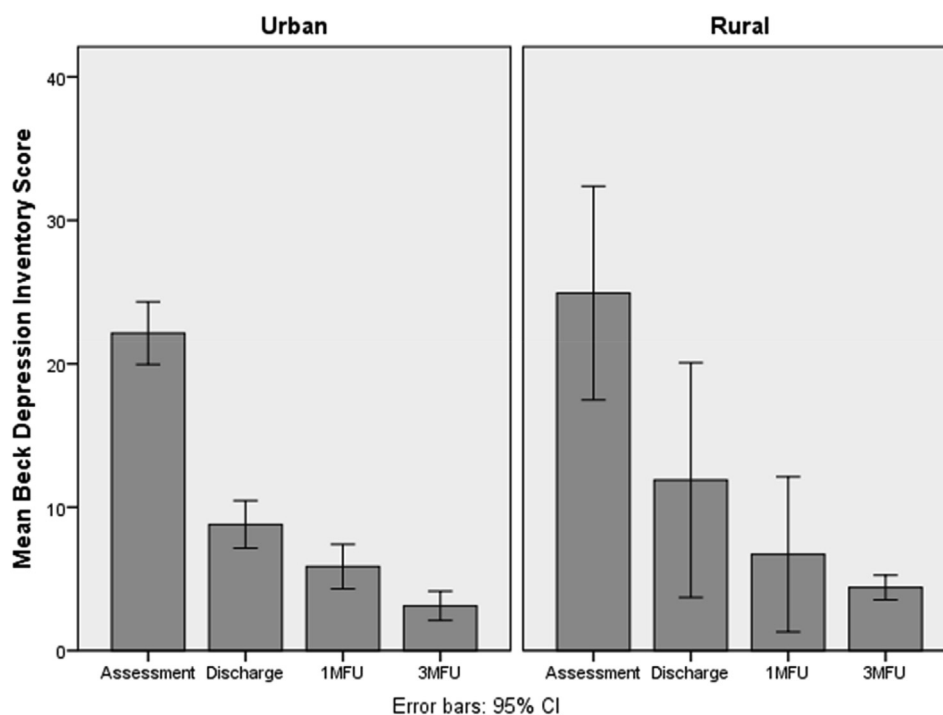


Fig. 3 – Changes in Beck depression inventory (BDI).

are more inclined to seek help than their male counterparts and that, in rural areas; this is further compounded by the fact that less help is available [48]. This dynamic may be reflected in the sample. It may also be relevant that treatment seeking rural gamblers had to travel to a metropolitan area for treatment, and this may have been easier for younger people and for rural women rather than rural men.

4.2. Rural versus urban treatment-seeking gamblers

Rural gamblers presented with more severe gambling problems than urban gamblers, and they experienced higher levels of psychological distress and lower work and social adjustment than urban gamblers. Female rural gamblers experienced higher levels of anxiety and male rural gamblers experienced higher levels of depression. Once in treatment, rural gamblers experienced rapid and sustainable improvements compared with urban gamblers. While female rural gamblers experienced higher levels of anxiety pre-treatment, the improvements that they made during treatment were similar to male rural gamblers at the 3-month follow-up. This was also the case with male rural gamblers who experienced higher levels of depression, but improved in a similar manner to female rural gamblers. It is possible that, although there were considerable barriers to treatment in rural areas, once a rural gambler has accepted that he or she needs treatment and decided to travel in order to receive such treatment, they can achieve sustained improvements to their mental health.

4.3. Need for gambling screening in rural areas

Future research is needed to determine whether early detection of anxiety or depression in rural residents may

help reduce the need for someone to gamble or help to identify when their gambling has becoming a problem. Simple assessments of alcohol and other behavioural addictions are already in place in rural Australian primary care services [49]. The introduction of brief gambling screening items may help to reduce the burden of gambling problems in rural settings. Such tools have been developed and need to be adopted more widely [35]. With nurses representing the majority health worker in Australian rural areas, having knowledge of and some clinical skills in helping gamblers may reduce the long term impact of the problem. Nurses encounter rural residents with anxiety, depression and suicidal ideation and determining if gambling is contributing to this would potentially be beneficial.

4.4. Effectiveness and accessibility of CBT gambling treatment

This paper reports the use of a combined behavioural and cognitive approach to helping problem gamblers [16,22,50,51]. While such treatment is shown to be effective, accessibility to such services remains an issue. Attempts have been made to increase availability through tele-health [15], internet treatment [3] and, residential care [26], although more locally based training and provision is still needed. Recent developments in the United Kingdom (UK), using a stepped care approach to primary health care, may help provide better rural care [52]. This nurse-led clinic operated under similar protocols to the UK model and further trial sites are underway in Australia based on this approach with a proposed specific adaption of the program for use in rural areas [53].

4.5. Limitations of the study

This was a non-randomised naturalistic study reporting data on self-selecting treatment seeking gamblers. Clearly many factors may have accounted for the changes observed. In order to ensure that these findings are replicable, more research is required using larger sample sizes that are matched by rural and urban populations, as well as by demographic variables. While the approach to treatment was consistent across all participants, alternative methods of delivery were not tested and co-joint therapies were not accounted for, including medication use. Again, this would need to be controlled for in future research.

Conflict of interest statement

The authors declare no conflict of interest.

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REFERENCES

- [1] Marmot M, Allen J, Bell R, Bloomer E, Goldblatt P. WHO European review of social determinants of health and the health divide. *Lancet* 2012;380(9846):1011–29.
- [2] Tolchard B. The impact of gambling on rural communities worldwide: a narrative literature review. *J Rural Ment Health* 2015;39(2):90.
- [3] Gainsbury S, Blaszczynski A. A systematic review of internet-based therapy for the treatment of addictions. *Clin Psychol Rev* 2011;31(3):490–8.
- [4] Wood RT, Wood SA. An evaluation of two United Kingdom online support forums designed to help people with gambling issues. *J Gambl Issues* 2009;5–30.
- [5] McCormack A, Griffiths MD. Motivating and inhibiting factors in online gambling behaviour: a grounded theory study. *Int J Ment Health Addict* 2012;10(1):39–53.
- [6] Black DW, McCormick B, Losch ME, Shaw M, Lutz G, Allen J. Prevalence of problem gambling in Iowa: revisiting Shaffer's adaptation hypothesis. *Ann Clin Psychiatry Off J Am Acad Clin Psychiatrists* 2012;24(4):279.
- [7] Bonke J, Borregaard K. The prevalence of problematic gambling behaviour: a Scandinavian comparison. *Scand J Public Health* 2009;37(6):654–60.
- [8] Devlin ME, Walton D. The prevalence of problem gambling in New Zealand as measured by the PGSI: adjusting prevalence estimates using meta-analysis. *Int Gambl Stud* 2012;12(2):177–97.
- [9] Jonsson J. An overview of prevalence surveys of problem and pathological gambling in the Nordic countries. *J Gambl Issues* 2006:31–8.
- [10] Gooding P, Tarrier N. A systematic review and meta-analysis of cognitive-behavioural interventions to reduce problem gambling: hedging our bets? *Behav Res Ther* 2009;47(7):592–607.
- [11] Pallesen S, Mitsem M, Kvale G, Johnsen BH, Molde H. Outcome of psychological treatments of pathological gambling: a review and meta-analysis. *Addiction* 2005;100(10):1412–22.
- [12] Pallesen S, Molde H, Arnestad HM, Laberg JC, Skutle A, Iversen E, Støylen IJ, et al. Outcome of pharmacological treatments of pathological gambling: a review and meta-analysis. *J Clin Psychopharmacol* 2007;27(4):357–64.
- [13] Battersby M, Oakes J, Tolchard B, Forbes A, Pols R. Cognitive behavioral therapy for problem gamblers. In: *In the pursuit of winning*; 2008. p. 179–97.
- [14] Ladouceur R, Lachance S. *Overcoming pathological gambling: therapist guide*. New York: Oxford University Press; 2007.
- [15] Oakes J, Battersby MW, Pols RG, Cromarty P. Exposure therapy for problem gambling via videoconferencing: a case report. *J Gambl Stud* 2008;24(1):107–18.
- [16] Riley B, Smith D, Oakes J. Exposure therapy for problem gambling in rural communities: a program model and early outcomes. *Aust J Rural Health* 2011;19(3):142–6.
- [17] Gamm L, Castillo G, Pittman S. Access to quality health services in rural areas-primary care: a literature review. In: Gamm LD, Hutchinson LL, Dabney BJ, Dorsey AM, editors. *Rural healthy people*; 2010.
- [18] Ling S, Curtis J, Brighton R, Dunlop A. An examination of barriers to nurse practitioner endorsement in senior rural drug and alcohol nurses in New South Wales. *Collegian* 2013;20(2):79–86.
- [19] Drury V, Francis K, Dulhunty G. The lived experience of rural mental health nurses. *Online J Rural Nurs Health Care* 2012;5(1):17–27.
- [20] Thomas D, MacDowell M, Glasser M. Rural mental health workforce needs assessment – a national survey. *Rural Remote Health* 2012;12(4):2176.
- [21] Newhouse RP. Exploring nursing issues in rural hospitals. *J Nurs Adm* 2005;35(7–8):350–8.
- [22] Tolchard B, Battersby M. Cognitive behaviour therapy for problem gamblers: a clinical outcomes evaluation. *Behav Change* 2013;30(1):12–23.
- [23] Tolchard B. *The problem with gambling: helping you to help yourself – a workbook for people experiencing difficulties with gambling and how to overcome it*. Adelaide, Australia: Centre for Anxiety & Related Disorders, Flinders Medical Centre; 1998.
- [24] Allen KW, Tolchard B, Battersby M. Behavioral psychotherapy training for nurses in Australia: a pilot program. *Aust NZ J Ment Health Nurs* 2000.
- [25] Tolchard B. Early identification and the risk factors associated with problem gambling: implications for clinical practice. The University of Essex; 2009.
- [26] Tolchard B, Battersby M. Evaluation of the intensive therapy service for problem gamblers an in-patient program. *Australas Psychiatry* 2000;34(S1):A67.
- [27] Beck AT, Epstein N, Brown G, Steer RA. An inventory for measuring clinical anxiety: psychometric properties. *J Consult Clin Psychol* 1988;56(6):893.
- [28] de Lima Osório F, Crippa JAS, Loureiro SR. Further psychometric study of the Beck Anxiety Inventory including factorial analysis and social anxiety disorder screening. *Int J Psychiatry Clin Pract* 2011;15(4):255–62.
- [29] Fydrich T, Dowdall D, Chambless DL. Reliability and validity of the Beck anxiety inventory. *J Anxiety Disord* 1992;6(1):55–61.
- [30] Aalto A-M, Elovainio M, Kivimäki M, Uutela A, Pirkola S. The Beck depression inventory and general health questionnaire as measures of depression in the general population: a validation study using the composite international diagnostic interview as the gold standard. *Psychiatry Res* 2012;197(1):163–71.
- [31] Beck AT, Steer RA, Carbin MG. Psychometric properties of the Beck depression inventory: twenty-five years of evaluation. *Clin Psychol Rev* 1988;8(1):77–100.

- [32] Beck AT, Ward CH, Mendelson M, Mock J, Erbaugh J. An inventory for measuring depression. *Arch Gen Psychiatry* 1961;4(6):561.
- [33] Cella M, Sharpe M, Chalder T. Measuring disability in patients with chronic fatigue syndrome: reliability and validity of the work and social adjustment scale. *J Psychosom Res* 2011;71(3):124–8.
- [34] Jansson-Fröjmark M. The work and social adjustment scale as a measure of dysfunction in chronic insomnia: reliability and validity. *Behav Cognit Psychotherapy* 2013:1–13.
- [35] Mataix-Cols D, Cowley AJ, Hankins M, Schneider A, Bachofen M, Kenwright M, et al. Reliability and validity of the work and social adjustment scale in phobic disorders. *Compr Psychiatry* 2005;46(3):223–8.
- [36] Mundt JC, Marks IM, Shear MK, Greist JM. The work and social adjustment scale: a simple measure of impairment in functioning. *Br J Psychiatry* 2002;180(5):461–4.
- [37] Tchanturia K, Hambrook D, Curtis H, Jones T, Lounes N, Fenn K, et al. Work and social adjustment in patients with anorexia nervosa. *Compr Psychiatry* 2013;54(1):41–5.
- [38] Tolchard B. Reliability and validity of the work and social adjustment scale in treatment seeking problem gamblers. *Measurement* 2016 [in review].
- [39] Battersby M, Tolchard B. The effect of treatment of pathological gamblers referred to a behavioural psychotherapy unit: II – outcome of three kinds of behavioural intervention. *Towards* 2000:219–27.
- [40] Marks IM, Hallam R, Connolly J, Philpott R. Nursing in behavioural psychotherapy: an advanced clinical role for nurses. *Royal College of Nursing of the United Kingdom*; 1977.
- [41] American Psychiatric Association. *Diagnostic and statistical manual of mental disorders (DSM-5®)*. American Psychiatric Pub; 2013.
- [42] Ben-Tovim D, Esterman A, Tolchard B, Battersby M. The Victorian gambling screen. Melbourne: Gambling Research Panel; 2001.
- [43] Thomas S, Jackson A, Blaszczynski A. Measuring problem gambling – evaluation of the Victorian gambling screen. 2003.
- [44] Wenzel M, McMillen J, Marshall D, Ahmed E. Validation of the Victorian gambling screen. Melbourne: Gambling Research Panel; 2004.
- [45] Tolchard B, Battersby M. The Victorian gambling screen: reliability and validation in a clinical population. *J Gambli Stud* 2010;26(4):623–38.
- [46] Tolchard B, Delfabbro P. The Victorian gambling screen: validity and reliability in an adolescent population. *Int J Ment Health Addict* 2013:1–12.
- [47] Hing N, Russell A, Tolchard B, Nower L. A comparative study of men and women gamblers in Victoria. 2014.
- [48] Ledgerwood DM, Orr ES, Kaploun KA, Milosevic A, Frisch GR, Rupcich N, et al. Executive function in pathological gamblers and healthy controls. *J Gambli Stud* 2012;28(1):89–103.
- [49] Navarro HJ, Shakeshaft A, Doran CM, Petrie DJ. The potential cost-effectiveness of general practitioner delivered brief intervention for alcohol misuse: evidence from rural Australia. *Addict Behav* 2011;36(12):1191–8.
- [50] Tolchard B, Battersby M. Nurse behavioural psychotherapy and pathological gambling: an Australian perspective. *J Psychiatric Ment Health Nurs* 2001;7(4):335–42.
- [51] Smith D, Harvey P, Battersby M, Pols R, Oakes J, Baigent M. Treatment outcomes and predictors of drop out for problem gamblers in South Australia: a cohort study. *Aust N Z J Psychiatry* 2010;44(10):911–20.
- [52] Clark DM. Implementing NICE guidelines for the psychological treatment of depression and anxiety disorders: the IAPT experience. *Int Rev Psychiatry* 2011;23(4):318–27.
- [53] Stuhlmiller C, Tolchard B. Introducing the New England 4G framework of guided self-health for people in rural areas with physical and psychological conditions. *Aust J Rural Health* 2012;20(5):285–6.