

**Effectiveness of Cognitive Therapy for Counselling
Problem Gamblers**

Submission to the IPART Review

November, 2003

**by members of the Gambling Treatment Clinic
at the University of Sydney**

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Effectiveness of Treatments for Problem Gambling

Submission of the Gambling Treatment Clinic University of Sydney

Focus of Submission

The review to be conducted by IPART has, as one of its terms of reference: Counselling Programs. Specifically, IPART is to identify “the most effective measures for problem gamblers by examining existing programs in Australia and overseas.”

This submission concerns counselling programs for problem gamblers and their effectiveness.

Background

The data presented and arguments advanced are derived from the work of the Gambling Treatment Clinic (GTC) at the University of Sydney. This clinic is funded by the Casino Community Benefit Fund (CCBF) to provide cognitive therapy for individuals who have been gambling excessively. The aim of the therapy is to enable gamblers to cut back or stop gambling. The clinic also provides supportive counselling in relation to the problems caused by excessive gambling.

Main Points of the Submission

- the cognitive theory of gambling offers an evidence-based alternative to behavioural, addiction and escape explanations of problem gambling;
- cognitive therapy (CT) is an empirically supported therapy (Chambless & Hollon, 1998);
- CT is effective in reducing excessive gambling (Ladouceur, 2001);
- the results obtained by the GTC support the overseas research (results included);
- the characteristics of best practice in problem gambling counselling

Cognitive theory of gambling

The cognitive theory of gambling differs from other theories by assuming that the hope of winning money is central to persistence at gambling. Despite the fact that all forms of gambling are structured to provide participants with an expected loss, and despite the personal experience of losses, the gambler continues because he or she thinks, erroneously, that winning is likely and losses will be recouped (Walker, 1992; Ladouceur & Walker, 1996).

Cognitive theory differs from other theories by emphasising the centrality of erroneous thinking about gambling, the importance of winning money as a motivation, and the excessive loss of money as the source of most gambling problems. The main alternatives to cognitive theory are behaviour theory, the addiction model, and the escape motive. According to behaviour theory, gambling is acquired through processes of reinforcement. Since gambling can be learned in the same way by anyone, a full explanation must include why the majority of people gamble, many people gamble regularly, but only a few (2%, Productivity Commission, 1999) gamble excessively. The core assumption is that gambling does not become excessive for most people because of self control (a learned ability to defer short term rewards in favour of longer long term goals and rewards – Strayhorn, 2002).

The addiction model assumes that the urge to gamble depends on the strength of the arousal induced by gambling stimuli. Thus, for a person who is chronically under aroused and for whom gambling is inherently exciting (ie produces high levels of pleasurable arousal), gambling simulates behaviour relevant to drug taking (Jacobs, 1986). Thus, the hallmarks of excessive drug use (craving, tolerance, withdrawal effects, loss of control) are the same characteristics observed in pathological gamblers (DSM III-R, 1987). Finally, a common assumption made by problem gambling counsellors is that excessive gambling is an escape from unpleasant aspects of the individual's environment or life away from the gambling venue (Walker et al, 2002).

Evidence from a wide range of studies demonstrates the involvement of erroneous thinking in gambling strategies used by individuals (Wagenaar, 1988; Walker, 1992; Toneatto et al., 1997; Ladouceur et al., 1998). Players fail to understand randomness and its implications, believe they have more control over the outcome of the gambling event than is in fact the case, misattribute the causes of wins and losses, become entrapped by the gamblers' fallacy, and behave superstitiously. The erroneous thinking is such that it is reasonable and defensible to persist in gambling despite the evidence to the contrary.

Cognitive Therapy

Cognitive therapy (CT) is frequently used interchangeably with cognitive-behavioural therapy (CBT). Since both the underlying theory and the emphasis in therapy is different for CT and CBT, it is important to be clear about the differences between the therapies and to avoid confusing the effectiveness of one with the other.

Assumptions

- CT If behaviour is caused and controlled by cognitions, then change in cognitions (content and/or process) will lead to a change in behaviour.

- CBT If cognition and behaviour are interdependent and if psychological problems have both cognitive and behavioural components, then successful therapy must address both cognition and behaviour.

Behaviour therapy and cognitive therapy are based on two distinct and disparate theories of behavioural control. Behaviour therapy is based on learning theory which assumes that behaviour is acquired, maintained and changed through processes of conditioning and reinforcement. Cognitive therapy is based on cognitive theory which assumes that behaviour is controlled cognitively through plans, strategies, problem solving, judgement, assessment of risk and the like.

Those who are schooled in and accept one of these approaches may not be aware that a quite different interpretation of the term "cognitive-behavioural" exists. However, it is sufficient to demonstrate the coexistence of two separate schools of thought by pointing to the assumptions and claims of adherents to each.

CBT

According to CBT, psychological problems have both cognitive and behavioural components. Phobias, for example, involve both a set of beliefs about the phobic object and its potentials and a range of avoidance behaviours. In the treatment of phobias, for example, CBT might advocate both cognitive restructuring and a graded approach to desensitisation. According to Enright (1997),

The cognitive behaviour therapist and patient work together to identify specific patterns of thinking and behaviour that underpin the patient's difficulties. Treatment continues between sessions with homework assignments both to monitor and challenge specific thinking patterns and to implement behavioural change."

Enright makes his position clear by listing separately the cognitive methods and behavioural methods that are frequently used in CBT. The cognitive list contains entries such as decisional balance whereas the behavioural list includes modelling, role-playing and reinforcement. Similarly, Goisman (1997) describes CBT as "a set of treatment methods based on cognitive theory and behavioural principles.

CT

CT is a set of procedures which aim to modify the cognitions of the individual. The assumption is that since it is cognitions that control the behaviour, the best way (but not the only way) to modify behaviour involves modifying the thinking that underlies the behaviour. Rachman (1996) stated that cognitive therapy has supplied the content of therapy (what must be modified and how it can be modified).

CT for Problem Gambling

Characteristics of the Therapeutic Relationship

One of the most important characteristics of the therapeutic relationship is to establish rapport with the gambler. This basic skill is central to many therapeutic approaches. The counsellor usually establishes rapport through warmth, genuineness, and understanding.

Although, the display these qualities is important, the counsellor ideally will also display competence and mastery. Arguably, the likelihood of clients completing therapy is not only a function of harmonious accord between therapist and client, but also a function of how confident the client is in obtaining a positive outcome.

The therapist working from a rational, coherent, straightforward model of gambling is better placed to display competence and mastery, and therefore more likely to engender and obtain confidence in obtaining a positive outcome. The cognitive model of gambling is the most a rational, coherent, straightforward account currently available (and thus it is not surprising that it is the most effective).

Many counsellors however, do not favour the cognitive account gambling. More specifically, they reject the central postulate that cognitions about winning are central to the understanding and treatment of problem gambling, despite abundant empirical support for this claim. The rejection of the cognitive account is however explainable. Firstly, some counsellors are inexperienced with cognitive formulations of gambling. This can be highly discouraging. It is human nature to endorse things with a high degree of familiarity and to eschew things that seem unfamiliar. Secondly, popular accounts of gambling usually suggest that the problem must be “deeper than money”, because surely if it were about money, the problem gambler would have stopped a long time ago. This popular formulation is highly appealing, although incorrect. Thirdly, some problem gamblers themselves are often exposed to “deeper than money” accounts and reliably offer such accounts of their own gambling. This also encourages the adoption of less than ideal models of gambling, whose weakness are gradually exposed, leading to comparatively decreased treatment completion and treatment effectiveness.

Ironically, there are instances where favoring the cognitive account of gambling can lead to negative outcomes. As stated above, proffering understanding is important for establishing the therapeutic relationship. Clients often want to ventilate and feel understood. Often they report that money is not a motivating factor to gamble. The therapist role is to allow for this to occur in a non-threatening environment, and demonstrate the ability to see the world through the eyes of the client. Thus, initially it is more important to demonstrate a willingness to accept the gamblers account, rather than challenge it, in order to build the therapeutic relationship. Later, that the gamblers account is confronted and challenged, as is supposed to occur with cognitive therapy.

History Taking

History taking is a vital component of the therapeutic process. During this process the counsellor has the opportunity obtain information that is critical for treatment planning and service delivery. Unfortunately, no guidelines are available that show how to take a history of the gambling that optimally supplements the cognitive formulation of problem.

Traditional history taking usually involves that detailing of facts such as, family history of gambling, recent life events that have impacted on the gambling, and present

circumstances. However, such history taking is not directly motivated by a cognitive theory of gambling. According to cognitive theory, early and ongoing life experiences lead to the formation and maintenance of relatively stable cognitive structures in an individual which provide the framework for the consistency and regularity of interpretations of particular situations. The history taking process provides a unique opportunity to demonstrate the claim that cognitions about winning are central to motivating the gambling. Through guided questioning, the gambler is confronted with their own history of thinking as related to gambling, a history that highlights the centrality of cognitions about winning.

Elements in the Structure of Cognitive Therapy

The cognitive theory of gambling essentially assumes that the hope of winning money is central to persistence at gambling. Despite the personal experience of losses, the gambler continues because he or she thinks, erroneously, that winning is likely and losses will be recouped. The central aim is to guide the gambler towards an accurate appraisal of their chances of winning. This process is didactic, accomplished by educating the gambler and engaging them in the process of self-discovery.

Initially, the client is provided with information about the nature of cognitive therapy and is presented with a rationale both early in treatment and throughout the treatment. Emphasis is placed on the importance of the link between cognitions and gambling. The counsellor can use the history taking to reinforce the link between cognitions, particularly about winning, and gambling. For example, gamblers often assume that outcomes on the pokies are subject to some degree of predictability. However, this belief in itself has a developmental history. No gambler is born with this belief rather it is acquired in relation to certain experiences. Guiding the gambler through the various steps towards such an acquisition provides them with important insight into this process, and into themselves.

Having established that cognitions about winning are linked to the persistence of gambling, the counsellor next aids the gambler to verbalize their “theory of winning”. The cognitive model assumes that all gamblers have at some point elaborated a theory for winning, or gaining an edge in their preferred form of gambling. Once again, the theory of winning that all gamblers hold has a developmental history. Exploration of this history can be very insightful.

Having guided the gambler to articulate their theory personal of winning, the counsellor next employs Socratic questioning to expose the faulty assumptions in relation to the theory of winning held by the gambler. Socratic questioning is essentially a series of questions designed by the counsellor that lead the gambler towards a confrontation with inconsistencies in their beliefs. For example, Socratic questioning can be used to confront the gamblers report that winning is not a motivation. A skilled counsellor is thus able to employ Socratic techniques, to demonstrate that cognitions about winning are the central motive.

Having established that certain beliefs are inconsistent, the counsellor then assists the gambler in correcting their beliefs. This is usually achieved with a variety of concrete examples, logical exercises, and visual images. For example, gamblers (and people in general) often have difficulty in fully appreciating the concept of randomness. The world around us is highly ordered, systematic and predictable. Our daily routine is filled with events that reinforce schemas relating to the lawfulness in nature. The world of gambling however, operates in accordance with the principles of randomness. Despite the fact that the word random is a part of the gamblers lexicon, it is often the case that schemas correlating to the concept of randomness are either lacking or undeveloped. It is also the case the such knowledge is best delivered not just conceptually, but visually. Since humans are highly visual creatures, we tend to relate well to visual imagery. There are variety of techniques and examples that allow gamblers to “picture randomness”, in order to encourage a greater understanding of the concept.

Lapses do occur however, despite the fact that new information is made available to gamblers relating to the real chances of winning. Consolidation of the new information becomes the primary aim of future sessions. There are several techniques available to facilitate such consolidation. For example, it is often useful to invoke a distinction between “knowing” and “believing”, to help the gambler understand their lapses in terms of cognitive theory. Although the acquisition of information is rapid, the assimilation of such information into schematic structures proceeds at a much slower rate. This theoretical distinction thus allows for continued endorsement of the cognitive model, with the need to defer to non-financial motives to explain the gambling lapses. However, it is tempting to defer to non-financial motives to explain the continuance of gambling. There are very few guidelines and resources available to counsellors that assist them with the difficult task of negotiating the nuances gamblers present each session, often at variance with the cognitive account of gambling. The gambler is having to replace their original gambling related schemas, that offered consistency and regularity of interpretations of particular situations, with new ones. This task is can be unsettling and very confronting to the gambler. It is human nature to want to retain old views, especially ones that are highly personal and meaningful.

Having introduced the cognitive account of gambling and having assisted the gambler through doubts about the validity of such an account creates new a new worldview for the gambler. Equipped with new insights, the gambler feels empowered and begins to experience a greater degree of control relating to the choices they make about gambling.

Effectiveness of cognitive therapy for problem gambling

Although there are several reports of the effectiveness of CBT for the treatment of problem gambling (Toneatto & Sobell, 1990), there has only been one controlled trial of CT published at this time (Ladouceur, Sylvain, Boutin, Lachance, Doucet, Leblond & Jacques, 2001). Ladouceur et al. evaluated the effectiveness of cognitive therapy which focused primarily on the meaning and implications of randomness. Sixty-six problem gamblers, were compared to a wait-list control condition. The measures of problem

gambling included the South Oaks Gambling Screen, the number of DSM-IV criteria for pathological gambling met by participants, the frequency of gambling perceived ability to control gambling, and the desire to gamble. Follow-up evaluations were conducted six and twelve months after completion of treatment. The results can be seen in table 2.

Table 2

Effectiveness of CT for problem gambling (Ladouceur et al, 2001)

Aspect measured	Pre-treatment	6-month follow-up	One year follow-up
DSM-IV	7.6	0.6	1.5
SOGS	11.4	2.4	3.4
Perceived control	24.6	85.8	81.2
Desire to gamble	4.8	1.1	1.6
hours of gambling	227	74	31
expenditure (\$)	409	89	51

Of the 35 individuals who completed the one year follow-up, all 35 scored less than 4 on the DSM-IV criteria of pathological gambling.

Effectiveness of the University of Sydney GTC program

Two studies have been conducted: (a) a controlled trial in which 38 problem gamblers were randomly allocated to six sessions of CT or six sessions of supportive therapy based on a profile of the reasons given by the individual for gambling; (b) a before and after comparison of CT treatment to completion (client drops out or client and counsellor agree that treatment is complete).

Controlled Trial

The participants in the study received the Structured Clinical Interview for Problem Gambling (SCIP) developed by the University of Sydney. The SCIP yields a reliable measure of the number of DSM-IV criteria that apply to the gambler. Additionally, the SCIP provides measures of time spent gambling, gambling expenditure, and level of gambling based debt. Two Clinical Psychologists provided both therapies to randomly allocated clients. SCIP follow-ups were completed at 6 months, one year and two years after treatment. Table 3 shows the comparison of results.

Table 3

Effectiveness of CT for problem gambling (GTC Study 1)

	Cognitive Therapy		Comparison Therapy	
	Pre-treatment	2-year FU	Pre-treatment	2-year FU
Sample size	10	10	10	10
DSM-IV	5.5	1.5	5.3	3.5

Sessions/week	3.0	0.8	2.6	1.4
Expenditure/week	\$443	\$52	\$315	\$233

Despite the small numbers, there is sufficient change to suggest that cognitive therapy is more effective two years after treatment than was supportive therapy.

Before and After Study

The participants were allocated to one of three Clinical Psychologists trained in CT methods. The Clinical Psychologists conducted SCIP interviews prior to the commencement of treatment. Treatment continued until the client and counsellor agreed that treatment was complete or until the client dropped out of treatment. Table 4 shows the effectiveness of therapy by comparing pre-treatment levels of gambling with follow-up evaluations at 6 months, one year and two years. The clients are 37 consecutive referrals that met the DSM-IV criteria for pathological gambling. Follow-up evaluations are conducted by trained Psychologists, not by the counsellor who carried out the CT treatment.

Table 4

Effectiveness of CT for problem gambling in a before and after study (GTC)

Aspect measured	Cognitive Therapy			
	Pre-treatment	6-month FU	One-year FU	Two-year FU
N assessed	37	37	29	16
DSM-IV	5.84	1.41	0.90	1.38
DSM-IV=0	0	21	20	9

Thus, 56% of gamblers with a DSM-IV assessment of five or more at the pre-treatment evaluation meet none of the criteria for pathological gambling two years after the completion of treatment. Furthermore, fifteen of the sixteen gamblers scored four or less at the two year evaluation. This result is consistent with that obtained by Ladouceur.

Characteristics of best practice in problem gambling counselling

The Gambling Treatment Clinic at the University of Sydney embodies a number of characteristics that have proved valuable in providing a treatment service for problem gamblers who wish to cut back or stop gambling.

- Employment of Clinical Psychologists as problem gambling counsellors

Since many individuals with gambling problems also have other clinical problems, it is essential to assess the nature of those problems and to determine whether the gambling is the primary problem or secondary. Accurate clinical diagnosis depends

on supervised training of the kind provided in postgraduate Clinical Psychology programs.

- Assessment of problem gambling by structured clinical interview

The DSM-IV criteria form the recognised standard for assessment of gambling problems. DSM-IV was developed on the assumption that the criteria for different clinical problems would be assessed by clinical interview. In order to make diagnosis more reliable, structured clinical interviews (SCIDs) were developed for DSM-IV categories. The SCIP is an extended SCID for the criteria for pathological gambling, designed to ensure between interviewer reliability. Without the use of a SCID or the SCIP, it is difficult to ensure that pre-testing and post-treatment testing are comparable.

- Counsellor knowledge

CT for problem gambling assumes that the counsellors have excellent knowledge of different forms of gambling, expertise in gambling strategies, knowledge of the gambling industry, and experience in applying CT techniques appropriate to each form of gambling. The GTC provides a weekly training seminar in areas necessary for effective cognitive therapy.

- Evaluation by structured clinical interviews for two years after the completion of treatment

Since gamblers who have received treatment may not have access to funds for gambling until many months have passed, it is considered necessary to show that treatment effectiveness is maintained for two years after therapy has been completed. In a review of treatment effectiveness for problem gambling, Walker (1992) showed that there is a high probability of relapse from the 6 month assessment to the two year assessment.

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