Chapter 11
Cognitive Behavioral Therapy for Problem Gamblers

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The cognitive behavioral therapy (CBT) approach used within the unit for the treatment of problem gambling is based on the same principles used to treat clients with anxiety disorders and depression. This approach is based on the work of Isaac Marks (Marks, 1986) and was introduced by Battersby (Tolchard and Battersby, 2000) to South Australia in 1996. The service is part of the Break Even network funded by the South Australian government Department of Families and Communities and is integrated with the Mental Health Sciences postgraduate courses in cognitive–behavioral therapy for health professionals at Flinders University, Adelaide, Australia.

This chapter provides an outline of the theoretical framework, assessment process, specific treatment methods, and measurement of treatment outcomes of the Flinders Therapy Service for Problem Gamblers. A case example and outcome data are provided to demonstrate the treatment model and its effectiveness. An overview of treatment outcomes for problem gambling assessing different modalities is discussed.

Cognitive therapy is used initially to dispute irrational beliefs related to gambling, and to help recognize and modify the negative automatic thought processes that clients may have that can cause and maintain psychological distress. The behavioral approach aims to extinguish the client's urge to gamble. This treatment enables mastery over and elimination of the urge to gamble, which facilitates recovery both in gambling behavior and functional recovery in the person's life. Once mastery of the urge to gamble has occurred, secondary control measures become unnecessary. The treatment process is described in this chapter, with the main focus being on gaming machine addiction. This approach can be used for other forms of gambling such as horse race betting, casino games, and sports betting.

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M. Zangeneh, A. Blaszczynski, N. Turner (eds.), *In the Pursuit of Winning.*

Overview of the Literature on Problem Gambling Treatment Outcomes

There are many approaches for the treatment of problem gambling. Reviews of the treatment of problem gambling have noted few randomized control trials, with the majority using cognitive and behavioral techniques. The lack of theoretical understanding of the etiology of problem gambling limits the ability to establish effective treatment programs. Relapse rates in the best programs are high. There is a need to define the therapist skills and knowledge that are needed for the effective treatment of gambling problems (Abbott, Volberg, Bellringer, & Reith, 2004).

Although there is an extensive literature on the treatment of pathological gambling, there are only a few studies that meet level IV evidence criteria. Two extensive reviews, one by Pallesen (Pallesen, Mitsem, Kvale, Johnsen, & Molde, 2005) and the recent Cochrane review (Oakley-Browne, Adams, & Mobberley, 2005), report that there have been only four randomized control trials (RCTs) of psychological treatments for pathological gambling. In the Cochrane Review, (Oakley-Browne et al., 2005) it was concluded that experimental interventions using behavioral and cognitive therapy were more efficacious than controls in the short term. Pallesen et al. were less restrictive than the Cochrane Review and reviewed some 37 papers. Both groups of authors concluded that behavioral interventions (imaginal desensitization) and cognitive–behavioral interventions were effective in the short term for the treatment of problem gambling. Pallesen et al. were more positive and considered that pathological gambling could be treated with favorable outcomes. The authors were critical of the research design and power of all the studies. Our review of the literature agrees with these findings, including:

- Low sample sizes and the failure to specify inclusion and exclusion criteria
- Inconsistent follow-up periods and outcomes
- Failure to use standardized measures for both problem gambling diagnostic criteria and outcome measures
- Outcome measures that vary from “controlled gambling” to abstinence.
- Inadequate long-term outcome data addressing lapse and abstinence
- Explanations as to why treatment is effective or ineffective
- Lack of clear definitions of controlled gambling and gambling relapse
- Inadequate or no measurement of the gambling urge

Much remains to be done in outcomes based treatment research.

The Flinders Therapy Service for Problem Gamblers

South Australia has a population of 1.5 million people, with 1 million living in the capital city Adelaide. Legalization of electronic gaming machines (EGMs) has made more than 12,000 machines available in many hotels, clubs, and the casino. South

Australia has a prevalence of 2 % to 3 % pathological gamblers (Delfabbro, 2005). The Flinders Therapy Service (http://som.flinders.edu.au/FUSA/CCTU/CARD%20Index.htm) works closely with many of the other state-funded agencies of the Break Even Network that provide gambling rehabilitation (e.g., counseling and assistance with financial problems) and refer clients to the therapy service. Clients self-refer or are referred from other agencies, community, general practice, and mental health services. Since its establishment, in 1996 the unit has received more than 1000 referrals, increasing to an average of 200 new clients annually. For clients unable to attend face-to-face interviews, phone contact or videoconferencing is used to provide treatment and follow-up. Close affiliation with Flinders University enables students of the Mental Health Sciences courses to develop clinical competency in both the assessment and treatment of problem gambling and comorbid mental health disorders.

The Service Model

The service is staffed by a psychiatrist and therapists with a range of professional backgrounds including psychology, nursing, and social work. All therapists have both mental health and masters level qualifications in cognitive behavior therapy. Clients are provided with a screening interview that includes a detailed cognitive–behavioral analysis of their gambling. Clients who present with problem gambling (almost all have a diagnosis of pathological gambling as per the DSM-IV), and who are able to define their gambling problems in a problem statement and define end of treatment goals, are suitable for admission into the treatment program. Clients are assessed for any comorbid mental health problems such as alcohol dependence, anxiety disorders, and depression and treated appropriately.

The client is offered either a group or individual treatment program. The group program runs for 12 weeks. Approximately eight clients are allocated to each group that meets for 2 hours once a week. One-to-one treatment is offered to clients who prefer individual treatment, cannot attend a group session, or require more intensive therapist input. Individual treatment is conducted with 1-hour sessions weekly for up to 12 weeks. A 2-week in-patient program is offered to those who do not improve after a trial of an outpatient program or live in rural areas and do not have access to specialist therapy services, have complex comorbid conditions or suicidality, or lack housing and social supports.

When clients complete treatment they are offered a follow-up program to enable maintenance of their treatment gains and to continue to develop their relapse prevention strategies. Follow-up is conducted in a group format or individual sessions as required. Once clients feel confident that they have gained control over their gambling and have appropriate relapse prevention strategies in place, they often decline the offer of regular follow-up sessions but often agree to have outcome measures collected by phone at 3- to 6-month intervals.

Clients admitted to the inpatient program receive a multidisciplinary team approach, including a psychiatrist, cognitive behavioral therapist, pharmacist,

nursing staff, social worker, and occupational therapist. If the client has a significant alcohol, benzodiazepine, or illicit drug dependence he or she undergoes withdrawal before commencing a treatment program. Comorbid conditions are managed as appropriate. Throughout the admission, clients are required to repeat a variety of behavioral tasks up to four times daily and use cognitive worksheets to document their negative thoughts throughout the day. Clients are discharged to outpatient follow-up. Their significant partner or relative is included to provide support and to participate in control of the client's finances.

Etiological Theories of Problem Gambling Underpinning the Treatment Model

Social Learning Theory

Social learning is the concept that individuals tend to copy and repeat behaviors they observe when the behaviors are followed by reinforcement. Bandura's "self efficacy" theory states that vicarious experiences are the typical way that human beings change and modeling can have as much impact as the direct experience. Voluntary behavior change depends on individual perceptions of how one has the ability to perform the behavior. This is clearly true for gambling behaviors, as such individuals who observe others gambling may be more likely to gamble themselves. Gambling wins are discussed rather than gambling losses among family and friends. This provides a strong source of positive reinforcement for gambling behaviors.

Conditioning

Within a gambling setting there are many stimuli making the environment rewarding because of the excitement, arousal, and tension they create in the individual. These stimuli include pre-race and race sequences at the racetrack, flashing lights of a gaming machine, and the placing of a bet. The basic proposition is that gambling behavior is maintained by the winning and losing sequences within this operant conditioning paradigm with a variable interval schedule of reinforcement. The psychology of the near miss on a gaming machine has the ability to manipulate the gambler through the reinforcement of the gambling urge, a psychophysiological response with arousal features similar to anxiety.

There are clearly unconditioned and conditioned responses as well as operant learning that occur in this complex setting of stimuli (Griffiths & Parke, 2002). It has been demonstrated that the many structural characteristics of gaming machines have the potential to induce excessive gambling regardless of the gambler's biological and psychological makeup. Some of these structural characteristics are capable of

providing psychologically rewarding experiences even in situations when the gambler is losing money (Griffiths, 1999). Some gambling activities have small event frequencies as they can be played only once or twice a week. Biweekly lottery draws are an example of this frequency. Gambling on gaming machines provides few limitations on repeating the gambling behavior as they can be played frequently and continuously. This structure allows for the systematic shaping of responses due to classical and operant-learning mechanisms that are highly efficient in generating repeated behavior by participants. This factor, combined with the result of the gamble, whether a win or a loss, and the actual time until winnings are received takes advantage of the psychological principles of operant conditioning (Griffiths 1999). The intermittent and unpredictable nature of the reward provides variable ratio (intermittent) reinforcement, a powerful method to increase the psychophysiological gambling urge.

Cognitive Theory

The development and maintenance of gambling problems can be equally well explained by an information-processing hypothesis whereby the gambling behavior is driven by erroneous perceptions with regard to various types of outcome expectancies. The cognitive approach has become an increasingly popular explanation for gambling problems, with its proponents interested in how perceptions and attributions can account for the continued engagement in self-harming behaviors (Ladouceur, Sylvian, Boutin, & Doucet, 2002). Cognitive theory thus provides a mediation model whereby both basic and complex emotional responses and behavior are principally governed by the perceptions, interpretations, and expectations that occur in any given context. Therefore, in cognitive therapy clients are required to develop an increasingly sophisticated understanding of their thoughts and belief structures as pertinent to gambling and other life situations. It is very rare to find clients with gambling problems who function adaptively in all other areas of life. Indeed, typically the gambling problem has emerged in the context of an inability to manage one or more areas of life. These problem areas tend to remain, and will often have worsened as the gambling problem becomes entrenched. Clearly therefore it is important to include a theory that might also explain and provide a means to address the range of dysfunctional behaviors with which problem gambling clients present.

In summary, social learning theory provides a model to explain why people begin gambling and achieve early reinforcement. Conditioning (behavioral) models explain the ongoing and increasing gambling behavior based on reinforcement of the urge to gamble. External triggers (money, advertisements, visual and auditory cues) as well as internal triggers (sadness loneliness, boredom, and anger) become conditioned stimuli that induce the urge to gamble that is relieved only by gambling. Cognitive theory, while not disputing the role of classical and operant conditioning processes, is focused more toward an explanation that describes gambling behaviors as developing due to the formation

of inaccurate expectancies (e.g., about the likelihood of wins and losses, about one's ability to predict or control the outcome of a wager), and importantly through faulty assumptions about self-efficacy that are activated in gambling and other contexts (e.g., a priori assumptions that an individuals may apply about their capacity for self-control when gambling, or indeed low-efficacy assumptions applied in relation to the capacity to effectively manage various aversive situations).

Treatment Theory

The treatment model is based on the assumption that psycho-physiological gambling responses can be learned and can therefore be unlearned or extinguished. The principal process of extinguishing such responses is called habituation. Wolpe proposed that fear reduction could usually occur by the simultaneous presentation of anxiety-provoking stimuli and stimuli evoking a response antagonistic to anxiety (relaxation), provided the antagonistic response was the stronger of the two. To ensure that this occurred, the anxiety-provoking stimuli were presented in a graded way, in a hierarchy. Wolpe taught clients relaxation and then encouraged them to continue with a step-by-step approach along a hierarchy of their fearful triggers. During this time, they maintained relaxation in order to inhibit the fear response. Exposure to the stimuli was initially conducted in the live situation but was changed to imaginal exposure because it offered an easier approach for the client. This process of combining exposure with relaxation was called "systemic desensitisation." Wolpe believed that systematic desensitisation was responsible for the reduction of fear. A rapid form of exposure is called "flooding" or, in imagination, is called "implosion." Clients are encouraged to imagine themselves in their most frightening situations.

McConaghy (1980) argued that once pathological gambling behavior is established the central nervous system has built up a neuronal pattern beginning with the initial triggers provoking arousal to the completion of the act. If the person did not follow through with this behavior, a noxious state of tension would develop. The high levels of arousal experienced when triggered would produce a higher level of compulsive drive if not completed. Therefore attempts to avoid gambling produce feelings of tension, irritability, and depression. The trigger also elicits a total preoccupation to gamble. These sensations and preoccupations continue until the person is finally compelled to complete the gambling task by placing a bet. Once a bet has been placed, the person experiences a reduction in both physical and autonomic arousal as well as the arousal of his or her varying emotional states. This experience then acts as a negative reinforcer. By second-order conditioning the person has learned that the act of gambling reduced the tension and levels of discomfort experienced before placing the bet (McConaghy, 1980).

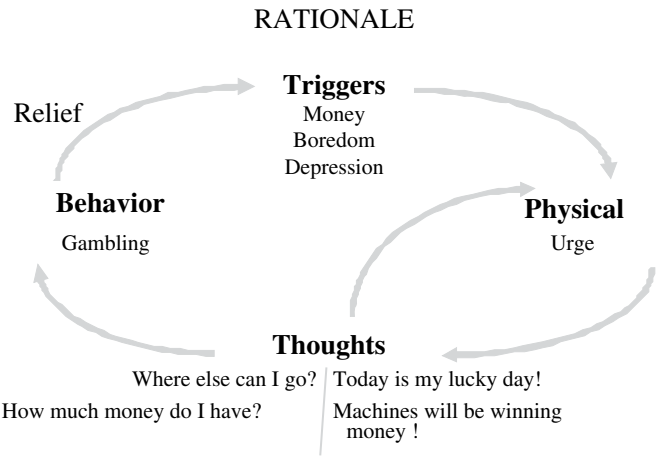

Fig. 11.1 Three-systems model of gambling urge creation

Exposure Rationale

Building on the work of Wolpe, Marks, and others (see Marks [1987], pp. 458–459) recognized that many behavioral treatments reduced anxiety through a process of continual exposure to the stimulus that is evoking the anxiety. Lang (1994) developed the "three systems model" of anxiety incorporating physiological, behavioral, and cognitive functioning. The model proposes that these three systems work generally in the same direction in response to triggers or cues that have been conditioned to anxiety. Treatment can focus on either or both the cognitive or behavioral component of the three systems. Empirical research for anxiety disorders has determined that the best outcomes are achieved when exposure is (1) graded, (2) repeated daily, (3) prolonged in each session until habituation occurs, and (4) focused, that is, distraction is minimized (Marks, 1987). In the same way, the treatment model developed by the Flinders service is based on the same three components of the gambling urge, which can be unlearned or deconditioned using exposure (see Fig. 11.1 for an example of the three-systems model for problem gambling).

Cognitive Therapy Rationale

While the exposure rationale provides a useful explanation to account for how a range of stimuli develop the properties of conditioned stimuli that have urge-provoking qualities, this rationale is of less use when attempting to explain many of the complex variations that can be observed with regard to individual differences in gambling behavior. Clearly not all persons exposed to the same gambling-related classical and operant conditioning contingencies will develop problem gambling

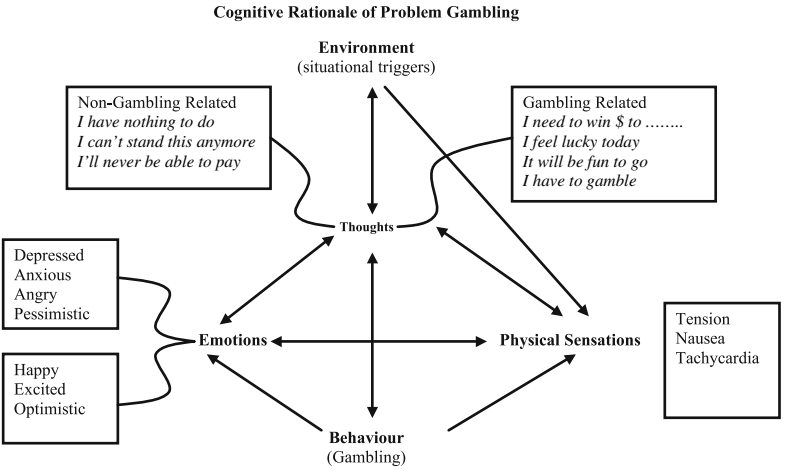

Fig. 11.2 Cognitive rationale of problem gambling

behaviors. It is here that a cognitive therapy rationale enables us to introduce the mediation model whereby the primary factor that determines the occurrence of gambling behavior is not "exposure to a trigger," but rather how the subject processes a wide range of information in any given situation. Figure 11.2 shows how the cognitive therapy rationale does accommodate classical conditioning in terms of the physical characteristics of the "urge," but indicates that the main process accounting for the performance of gambling behavior in any given context is centered on the expectations and beliefs of the individual.

Cognitive Behavior Therapy

A major emphasis in therapy is on the gambling urge being extinguished. The urge has to be extinguished, or clients are at an increased risk of a relapse. Using the behavioral (exposure) component of the three systems model, clients are asked to resist the gambling urge and expose themselves to the urge until it habituates (i.e., prolong the exposure). This model is based on the exposure and response prevention approach used for obsessive–compulsive disorder (Marks, 1987). Before being introduced to the exposure model, clients are assessed for the presence of erroneous beliefs regarding the likelihood of winning and their ability to influence the outcome. Where this is a problem, the client is taught to use a thought diary and then to challenge the erroneous beliefs in real-life situations. The client is encouraged to commence an exposure program as soon as possible.

The client will then no longer need to rely on avoidance strategies to prevent him or her from gambling. This means that at the completion of successful treatment, the client has mastery over the urge to gamble and can return to a normal lifestyle without modifying factors and avoidance strategies needing to be in place. Other

techniques are also incorporated into treatment including cognitive therapy addressing both erroneous beliefs related to gambling and depressed thoughts, which lead to a depressed mood. Problem-solving strategies and relapse prevention techniques are also taught as necessary in individual cases.

Cognitive behavioral psychotherapy includes:

- *Education*: The first step of therapy is to provide as much information about the client's condition as possible and to help the client understand when his or her experiences; feelings, and thoughts may be aggravating or alternatively helping the problem. To promote motivation to engage in treatment, clients must have a basic understanding of how their gambling problem may be helped using the therapy process, and this educational component must be extended to the client's family or others with whom they share a close relationship including work colleagues.
- *Coaching/guiding*: Within the cognitive behavioral psychotherapy framework, clients are empowered and allowed the opportunity to resolve their own problems without being told by a therapist what to do or not do. However, a certain amount of coaching or guiding is necessary, especially in the early sessions where the client is most vulnerable.
- *Homework*: One of the most important components of CBT is that clients continue to work on the problems addressed in therapy between sessions. This work is important to reinforce any cognitive or behavioral changes elicited during sessions.
- *Self-help/Self-treatment*: Combining all of the above, the basic principle of CBT is that the therapy is essentially providing a self-help framework for clients. Once they have learned the basic principles and there has been some noticeable change toward resolving the problem, clients are able with minimal support to go on to complete their own recovery.
- *Empowerment*: This whole process is designed to empower the clients. It is through this empowerment that most of the permanent changes will take place. One way to achieve empowerment is through the use of graded exposure, which by reducing the urge leads to greater degrees of control in their gambling. This control is strengthened as the client moves through the stages of exposure. Once this control is achieved, modifying factors and avoidance strategies are no longer required to stop the client from gambling.
- *Empirical*: CBT is based upon sound scientific research findings and is constantly being refined as techniques are modified in light of new research. Each client within therapy should be viewed as a single-case experimental design with outcomes being recorded throughout therapy.
- *Structured*: The client and therapist establish a framework for each session and an agenda is formed and worked on during the session. It is important not to make the agenda too long or too short; the momentum of progress needs to be maintained and this should be balanced at each step by allowing the client sufficient time for practice.
- *Problem focused*: As described, the client tackles problem(s) he or she has identified with the therapist. These problems are then dealt with in order of priority

determined by the client. The therapy process allows for new problems to be dealt with after negotiation between client and therapist.

- *Current*: The problem must be present at the time, or at least be determined to be present if certain avoidant actions of the client are stopped, for example, not visiting hotels, etc.
- *Goal directed*: The goals can be short, medium, or long term. Each week the client agrees to a set of between session goals based on the problem he or she has presented. Within therapy, the client will hopefully achieve the medium-term goals and go on to achieve the long-term goals while in follow-up. Measurement of progress toward achieving goals gives feedback to both the therapist and client, which in turn allows fine-tuning of treatment strategies. Ongoing measurement of progress toward achievement of goals also provides reinforcement of the process and acts as a reward for the client's effort, which in turn encourages the client to continue to work toward the next goal.
- *Client centered*: Within therapy, the emphasis should always be on what the client wishes to achieve. However, there are some constraints when using the CBT approach. These are, first, that the basic principles of therapy should be followed, and second, that the therapy remains client centered in that the work being asked of the client should not be too difficult to achieve. As a rule of thumb, the therapist should not expect a client to do something the therapist would not be prepared to do him- or herself. The client makes the decision as to what to do, not the therapist, yet the therapist must guide the client so that goals are not unrealistic and unachievable.
- *Collaborative*: As with the above comments, all aspects of the therapy process are done in conjunction with client and therapist. It is important that both parties here have ascertained agreement regarding the goals of therapy.

The Clinical Assessment

A course of therapy offered to a client is based on a detailed assessment so that the treatment approaches and skills to be learned are targeted to the individual's needs. A standardized semistructured interview called a cognitive behavioral assessment is used to look closely at the client's gambling behaviors and related problems. In addition, a psychiatric assessment including broad psychosocial issues and the patient's occupational, family, social, and cultural background is conducted. The cognitive behavioral assessment establishes the exact nature of the client's gambling problem. A behavioral analysis (sometimes called a "functional" analysis) is performed on the client's typical gambling pattern and takes into account the behaviors, cognitions, and physical sensations when a client is exposed to a gambling trigger and the consequences of this behavior. This detailed assessment helps to establish the treatment plan for the client. The assessment also identifies comorbid mental health conditions and includes an assessment of risk of harm to self or others.

Benzodiazepines and alcohol may reduce the client's anxiety and urges to gamble temporarily until the client is exposed to another gambling trigger. If the client is

taking these substances, a withdrawal program should be considered before treatment can be commenced, as any new learning processes occurring during therapy while taking benzodiazepines will not be easily recalled when the drug is stopped. The urges to gamble would most likely return, as the habituation process to gambling triggers would not have been completed (Marks, 1987). Once the assessment has been completed and the problem thought to be suitable for CBT, the therapist provides a rationale for the development and treatment of the gambling problem. This is based on the three-systems model of problem gambling development and how this can be eliminated using exposure to gambling triggers, cognitive therapy, and lifestyle modifications.

Setting Up Treatment

In a subsequent session, the therapy program is established by developing an agreed problem statement and end of treatment goals (usually two). In addition, baseline outcome measures are taken (see later) and finally the initial homework tasks are agreed on. The problem and goals approach provides both an outcome measurement and motivational process by determining what the client wants from treatment. There is no mandated abstinence or controlled gambling goal. The problem and goal statements are rated by the client and therapist every 4 weeks, as are the standardized outcome measures.

CBT is based upon the "here and now" and works with the problem currently being exhibited. For example, the problem may be ".... I have an uncontrollable urge to gamble on electronic gaming machines whenever I have money. I gamble at least 5 times a week and up to twice a day at times. This causes avoidance of hotels, not having access to money, relationship and financial problems and depression." Rated 0–8 on how much the problem affected daily activities: 8 = severe interference, 0 = no interference. This example describes a client with a current problem occurring several times per week. In this case, the therapist and client would have an observable problem to work on. An example of an individual goal may be "to be able to sit alone in a favorite gaming venue for a minimum of 1 hour twice a week, put $50.00 in the gaming machine and not gamble. To collect the money from the machine and leave without gambling." Rated 0–8 on current progress toward achieving this goal; 8 = no progress, 0 = complete success.

Treatment Sessions

Exposure

The principle focus of the exposure component is to enable the client to experience habituation to a gambling urge as soon as possible. Clients are encouraged to expose themselves to the situation or object that evokes the gambling urge, and for this to

be repeated on a regular basis for a sufficient duration each time. Changing the behavioral component is an important variable that leads to the modification of the autonomic responses and thereafter eventually thoughts and attitudes about the situation follow. Ideally, these become congruent with the new behavior and physiological responses. When practicing exposure, engagement has to be emotional as well as physical; mere physical presence is not enough. Clients need to be focused on their urge and thoughts. There are a number of ways to minimize the response, including blocking, dissociation, discounting, ignoring, and distraction. The behavioral tasks must be graded sufficiently to ensure the client feels comfortable to fully engage in the task and not have to incorporate the previous blocking or distracting behaviors. Desensitization or flooding in fantasy, therapist accompanied exposure, and relaxation are rarely used.

The initial procedure, called imaginal exposure, is carried out with the therapist guiding the client through a scene. It is usually audiotaped. The client is instructed to imagine a typical gambling scenario. This is a graded experience, and the client is asked to rate his or her urge to gamble at regular intervals while verbalizing the scenario and stay with the urge until habituation occurs. The client gradually completes the scenario until eventually (in imagination) he or she is able to sit in front of their favorite gaming machine ready to press the play button without experiencing the urge.

Cognitive Therapy

For most clients this is introduced at an early stage of treatment. Clients need to understand that therapy will comprise a number of seemingly different yet complementary strategies, and this is explained by making use of the CBT rationale. As in most effective psychotherapy, clients need to be socialized to the model. With cognitive therapy, this involves an introduction to the view that one's behavior and emotions are only partially under the control of environmental factors, and that the more important determinant is how one perceives, interprets, and forms expectations. This introduction is achieved via the examination of various cause–effect situations, making use of a classic thought diary to demonstrate how cognitions are a primary influence of behavior and emotions. Considerable attention is also given to exploring how many thought processes occur quite automatically, but with conscious effort can be recognized and potentially modified. Clients are then taught how to identify and challenge both erroneous beliefs related to gambling and other dysfunctional thought processes that maintain depressed mood and various distressed states. Given this consideration, the cognitive therapy component is often done separately from the exposure tasks, as it would prevent clients from focusing on their desires to gamble.

Once the client has habituated to the urge, clients can then challenge the triggers for their urges to gamble and the negative thought patterns they may experience once the urge has been extinguished. Over the next 4 to 5 weeks, clients habituate to their urge to gamble using a variety of live tasks until their treatment goals are achieved. Clients complete tasks in their own homes at first, then at gambling venues with

an increasing range of cues. These graded tasks slowly increase in difficulty as the client's urge begins to reduce and habituation has occurred. Clients are seen weekly and homework is reviewed and tasks regraded or new tasks agreed are on.

In summary, the main requirements for therapy are:

1. Client and therapist agree to define the problem in terms of observable behavior.
2. The behavior is current and predictable.
3. The client and therapist can agree on clear goals that relate to the client's handicaps.
4. The client understands and agrees to treatment.
5. There are no contraindications (e.g., psychosis, drug dependence, or depression).

Program Outcomes

Standardized Questionnaires

South Oaks Gambling Screen

The South Oaks Gambling Screen (Fig. 11.3) tool is a 20-item questionnaire based on DSM-III criteria for pathological gambling. It may be self-administered or administered by a health professional. Individuals scoring less than 3 are described as non-problem gamblers and those who score between 3 and 4 are potential problem gamblers. A score of 5 or higher is considered to indicate a probable pathological gambler (Lesieur & Blume, 1987).

Work and Social Adjustment (WASA) Scale

This generic measure of disability and handicap is a self-administered scale covering five areas of functioning on a scale of 0 to 40 (Fig. 11.6). The Work and

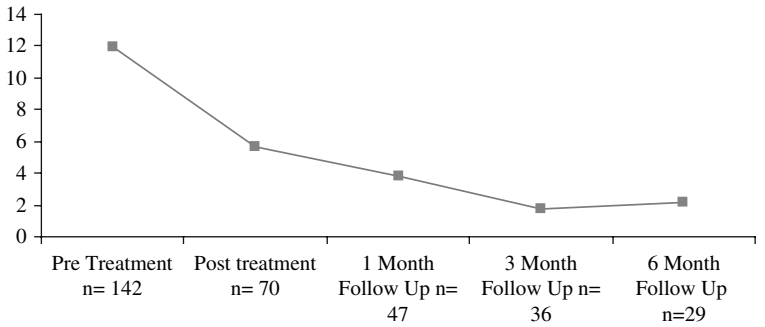

Fig. 11.3 South Oaks Gambling Screen (SOGS). Scores over 5 are considered probable pathological gamblers

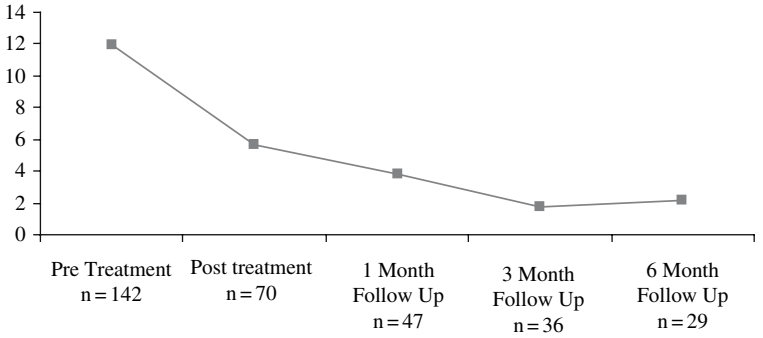

Fig. 11.4 Client-rated problem scores. Scoring of problem statement: Rated on how much the problem affects daily activities: 8 = severe interference, 0 = no interference

Social Adjustment Scale is a tool used to measure the disability and handicap in relation to work, home management, social leisure, private leisure, and family and relationships. It is an appropriate tool for those with both psychological and physical problems, because it describes the impact of problems on many aspects of an individual's life. This questionnaire measures the clients' own perceptions of their problems and how this impacts on their daily lives. It can be used as an indirect measure of success (Mundt, Marks, Shear, & Greist, 2002). The main advantages of this tool are that it is quick to use, applicable to a full range of severity, and has shown to be a sensitive measure over time.

Beck Depression Inventory

The Beck Depression Inventory (BDI) is a self-report questionnaire that provides cutoffs from depression into mild, moderate, and severe and is a validated and reliable measure of change over time. This is a 21-item self-rating scale scoring: 0–10

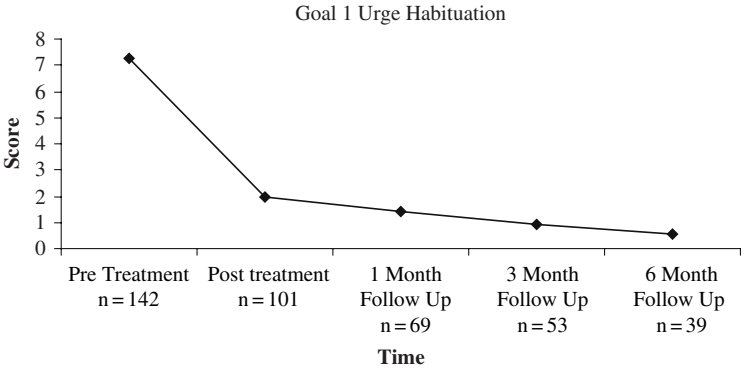

Fig. 11.5 Client-rated end of treatment goal 1. Scoring of goal statement: Rated on progress toward achieving this goal: 8 = no progress, 0 = complete success

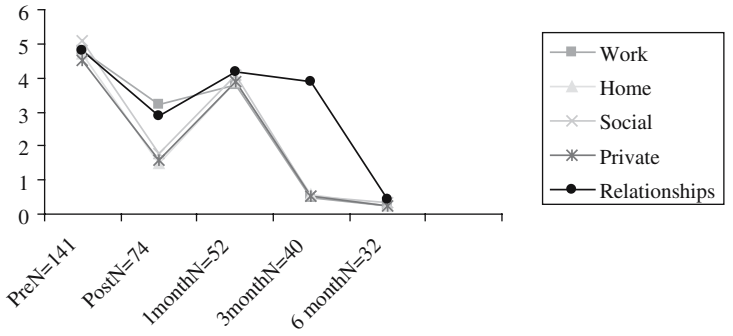

Fig. 11.6 Work and Social Adjustment Scale measure of functional ability and handicap in five areas. There was a similar reduction in the mean scores for both the Beck Depression and Anxiety scores. In all graphs, the drop in the mean score between pretreatment and completion of treatment was statistically significant ($p < 0.001$)

indicates no depression, 11–17 indicates mild depression, 18–23 indicates moderate depression, and 23 and above indicates severe depression (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961).

Beck Anxiety Inventory

The Beck Anxiety Inventory (BAI) is a self-report questionnaire that provides severity cutoffs for anxiety into mild, moderate, and severe and is a validated and reliable measure of change over time. Scoring: 0–21 indicates low anxiety; 22–35 indicates moderate anxiety; 36–over indicates severe anxiety (Beck and Steer, 1990)

Problems and Goals

The aim of the problem and goal statement is for clients to describe as concisely as they are able what they perceive as their main problem and the specific and observable goals they wish to achieve in relation to the problem (Battersby, Ask, Reece, Markwick, & Collins, 2001). Problem statement scoring: rated 0–8 on how much the problem affected her daily activities: 8 = severe interference, 0 = no interference. Goal statement scoring: rated 0–8 on progress toward achieving this goal; 8 = no progress, 0 = complete success.

Client Outcomes

Table 11.1 represents consecutive clients who were registered ($N = 150$), completed treatment ($N = 123$), and were regularly followed-up between 1998 and 2004. The outcomes represent routine follow-up by clinicians and is not a research

Table 11.1 Client Flow Chart

Time Frame	Activity	Population	Percent (%)
Commencement of Program	Clients registered	150	
5–12 weeks later	Treatment completed	123	82
1-month follow-up		104	69
3-month follow-up		72	48
6-month follow-up		54	36

A summary of outcome measures for 150 clients is reported in Figs. 11.3 to 11.6. The numbers reported for each measure do not match with total numbers attending for treatment and follow-up, as not all clients completed all measures.

study. The follow-up process involves clients being encouraged to return for ongoing review but the clinic's resources do not allow clients to be actively pursued for data collection. Of the 123 clients who completed treatment, 54 (44 %) attended 6-month follow-up. In addition, a further 55 were contacted by phone to determine non-gambling outcomes qualitatively. Of the treatment completers (123) at 6-month follow-up, 97 (79 %) were in work, 9 (8 %) had commenced studies, 3 (2 %) had lapsed, and outcomes were unknown for 14 (11 %). Hence of the 69 (56 %) who did not attend for follow-up, the majority had returned to work or study and indicated that follow-up was unnecessary or impractical. There was a similar reduction in the mean scores for both the Beck Depression and Anxiety scores. In all graphs, the drop in the mean score between pre-treatment and completion of treatment was statistically significant ($p < 0.001$).

Case Study: "Melissa"

The following case describes the identification and treatment of a client assessed who was admitted to the psychiatric ward at Flinders Medical Centre following a significant suicide attempt. Melissa was a 40–year-old separated woman living in rental accommodation and employed as a shift worker at a local hotel. She was referred to The Flinders Therapy Service for problem gamblers by a trainee psychiatrist after a serious suicide attempt. This was in response to a significant loss of money due to gambling.

On clinical assessment, Melissa was diagnosed with pathological gambling. She stated her main problem was an uncontrollable urge to gamble whenever she had money. Her gambling history revealed that she gambled at least five times a week and at times up to twice daily on the electronic gambling machines. Melissa's total financial loss to gambling was approximately $70,000. She was gambling up to 70 % of her total income. Melissa was screened for her suitability for CBT to address her problem gambling and depression. She was considered to be suitable and was offered treatment for her pathological gambling after discharge from hospital by one of the therapists at the unit.

Before the commencement of treatment the therapist assisted Melissa to formulate her own individual problem and end of treatment goal. These were rated throughout treatment and at follow-up.

Melissa's gambling problem statement: "When I have money I have an uncontrollable urge to gamble on the electronic gaming machines and eventually gamble. This results in financial and relationship problems, depression, avoidance of carrying money, and time alone." Rated 8 on how much the problem affected her daily activities: 8 = severe interference, 0 = no interference.

Melissa's goal statement: "*To save $75.00 per week and when my bills have been payed I will save this money towards a family caravan holiday at Christmas time*." Rated 8 on progress toward achieving this goal; 8 = no progress, 0 = complete success.

Treatment was initially focused on her depression, using cognitive therapy addressing the negative thought patterns maintaining her depressed mood. It was noted that although her mood had lifted, her urges to gamble remained high. She attended weekly treatment sessions for 8 weeks in a group setting. Treatment involved graded exposure to her urges to gamble, cognitive therapy related to her erroneous beliefs about gambling, and relapse prevention strategies. Melissa completed her individual treatment goals at the end of the 8-week therapy course and was followed up over a 2-year period to ensure her treatment gains were maintained. She then moved to the country, where she bought a property with her new partner.

Results

Melissa's measures at assessment and follow-up over a 2-year period are described in Figs. 11.7, 11.8, and 11.9. The SOGS pretreatment, posttreatment, and 2-year follow-up scores are presented in Fig. 11.7. By mid-treatment Melissa's scores were in the nonclinical range. Melissa's problem and end of treatment goal scores are shown in Fig. 11.8. By mid-treatment her problem statement was rated as 0 out of 8. Her goal was achieved by mid-treatment. The 2-year follow-up showed that the

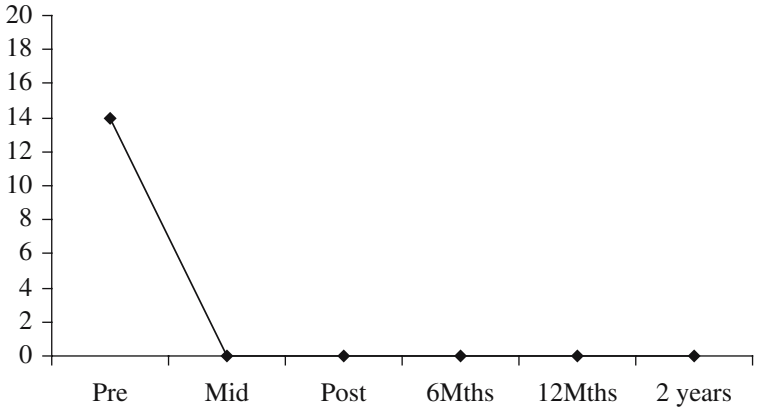

Fig. 11.7 SOGS scores pretreatment and up to 2-year follow-up

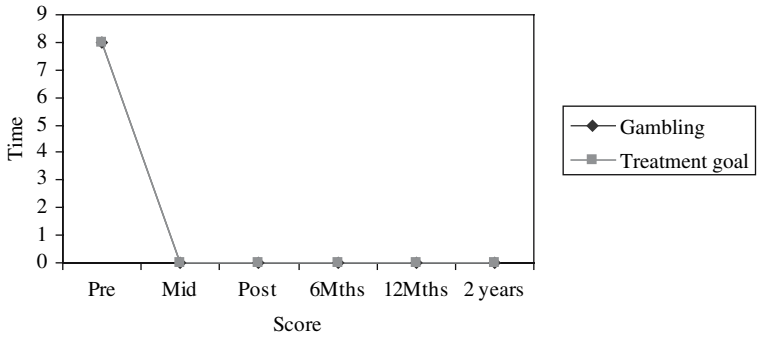

Fig. 11.8 Problem and goal scores pretreatment and up to 2-year follow-up. Beck Depression and Anxiety scores are shown in Fig. 11.9. By 1 month follow–up Melissa's scores were in the nonclinical range. Her depression score increased after a health scare at the 2-year follow-up

goal attainment was maintained. Beck depression and anxiety scores are shown in Fig. 11.9. By 1-month follow-up Melissa's scores were in the nonclinical range. Her depression score increased after a health scare at the 2-year follow-up.

This letter from a client after completing treatment provides a description of their perception of the treatment process.

Dear Jane,

I thought it was important to take the time and write you a few lines. The course around gambling is drawing to a close and I have to say the time has gone so quickly. Approximately 4 months ago, my life was a virtual mess. Although I remained employed and I had people who loved and cared about me I had to come to terms with the fact that I had a gambling problem. Not an easy thing when you're a relatively proud person, who has devoted their entire career to helping the sick, poor, and underprivileged.

From that very moment, I realized I took a "life changing" step toward determining my future path in life. I knew the next step for me was to seek help around my addiction, which is where your program comes into play.

I recall my 1st appointment for assessment was as daunting as it was exhilarating. For the 1st time in such a long time I felt in control of who I am and where I'm going. I think it's important for me to share with you and to let you all know how appreciative I am for the program you provide. As I write this, my mind reflects back to all I have managed to

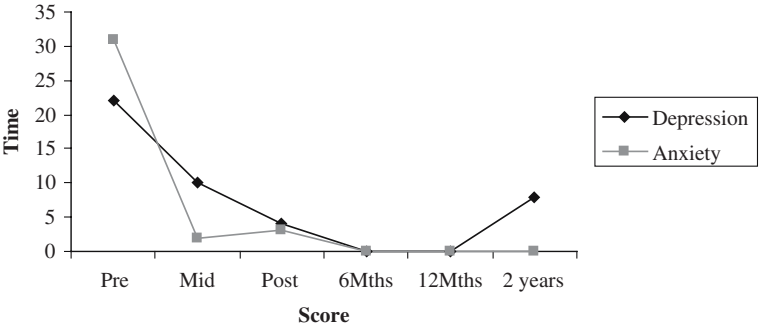

Fig. 11.9 Beck Depression and Anxiety scores over time

learn from your program. I wish to thank all of you for not only the content you provided, but also the manner in which it was conducted. Your program has provided me with tools and principles I can apply in all aspects of my life. Your method, although confronting and at times challenging, enables me to remain "grounded" in what was once this heavy "fog" called life. Thanks to your program and the hard work I have put in, I am actually living as opposed to merely existing.

I know I am not "cured" per say, but I am equipped and armed with powerful skills for the future. I have never subscribed to the adage "practice makes perfect", someone told me long ago "practice makes permanent." If you're taught the wrong thing or technique from the beginning and one continues to practice it, then it will eventually become permanent. In this case, I know if I practice the therapy principles and apply them. Over time it will remain permanent.

Thank you to all of you for assisting me in getting my life back.

Sincerely yours
Xxxxxxxxxxxx