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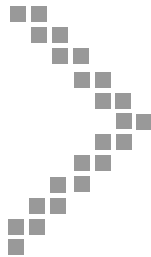
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Single-Session Exposure Therapy for Problem Gambling: A Single-Case Experimental Design

Barry Tolchard

Essex University, United Kingdom

Lyndall Thomas

Tobacco Control Unit, Drug & Alcohol Services SA, South Australia, Australia

Malcolm Battersby

Flinders University, Australia

There is a paucity of treatment-outcome research for problem or pathological gambling. Single-session exposure therapy has been used successfully with a broad range of psychological disorders such as panic disorder and the phobias. This article will describe the use of single-session graded exposure to treat problem gambling with an Electronic Gaming Machine (EGM) gambler. Pretreatment to 6-month follow-up repeated measures showed a significant reduction in client-rated gambling severity, that is, showed a significant reduction in client-rated gambling severity (Gambling Severity Checklist [GSCL]), the Symptom Checklist-90-Revised (SCL-90-R) and the Beck Depression Inventory (BDI). This case demonstrates a novel intervention which is brief, convenient and accessible to the client, and which resulted in gains maintained over the medium-term. This promising single case indicates the need for further research to determine whether positive benefits are realised in larger randomised control designs.

Exposure has been identified as an effective treatment for a range of disorders including phobias, obsessive–compulsive disorder, posttraumatic stress disorder and panic (Cook, Schnurr, & Foa, 2004; Treatment Protocol Program, 2000). Exposure has also been effective in other disorders, for example chronic fatigue syndrome (Deale, Chalder, Marks, & Wessely, 1997). Exposure has been successfully delivered using a wide range of modalities including telephone, bibliotherapy, computer and therapist-aided exposure (Austin, Carlbring, Richards, & Anderson, in press; Botellaet al., 1998; Clark, Kirkby, Daniels, & Marks, 1998; Greist et al., 1998).

This article will describe the use of exposure in a single-session design as described by Ost and colleagues (Ost, 1989). This approach uses the basic principles of exposure within the framework of one session. Within the single session

there are two fundamental goals. First, to define what the client can achieve in urge-provoking situations when confronted with the stimulus, and second, what the therapist expects the client to manage during the session (Ost, 1989). The rationale for treatment is that the client is exposed to the stimulus in a controlled way and by remaining in that situation learns that his/her usual response does not have to occur. The session takes place with the therapist acting as a model and guide to the client. This approach has been shown to be effective in a number of disorders including animal phobias (Ost, 1989), blood–injury phobias (Hellstrom & Ost, 1995) and other specific fears (Ginzberg & Ostow, 1997). To date there has been no published description of the single-session approach being used with problem gamblers.

Problem or pathological gambling was first described in 1980 in the Diagnostic and Statistical Manual of the American Psychiatric Association, in which it was classified as an impulse control disorder (American Psychiatric Association, 1980). It was further refined in subsequent editions of the manual (American Psychiatric Association, 1987; American Psychiatric Association, 1994). The treatment of problem gambling is still in its infancy with few controlled studies (Toneatto & Ladouceur, 2003). In addition to the need for randomised controlled trial evidence of efficacy of existing interventions, there is a need to identify innovative interventions which are brief, accessible and long lasting.

There are many treatments available, ranging from self-help groups (Frank et al., 1988), medication (Hollander et al., 1998; Hollander, Frenkel, Decaria, Trungold, & Stein, 1992), addictions/counselling programs (Blackman, Simone, & Thoms, 1989; Lesieur & Blume, 1991), psychotherapy (Lester, 1980) and cognitive–behaviour therapy (Ladouceur & Walker, 1998). Cognitive–behaviour therapies have involved cognitive restructuring usually combined with behavioural techniques such as problem-solving (Ladouceur, Boisvert, & Dumond, 1994; Sharpe & Tarrier, 1993; Sylvain, Ladouceur, & Boisvert, 1997). Recent studies have reported cognitive restructuring alone with good results in small samples of patients (Toneatto & Millar, 2004).

The most common approach to the treatment of pathological gamblers has been behavioural psychotherapy, using a range of techniques (Barker & Miller, 1968; Koller, 1972; McConaghy, Armstrong, Blaszczynski, &Allcock, 1983; Sylvain et al., 1997), the main method being in vivo exposure. In the first randomised control trial for the treatment of pathological gambling, imaginal relaxation, imaginal desensitisation and two forms of exposure were compared with each another. This study showed that imaginal desensitisation was the most effective (McConaghy, Blaszczynski, & Frankova, 1991). However, several methodological problems existed with this study, including the administration of exposure being prescriptive and standardised rather than being tailored to the individual so that habituation could occur within session and between sessions (Marks, 1987). Despite these problems exposure was still able to show significant positive outcomes. Imaginal desensitisation alone was trialled in a pre–post design with 47 participants receiving prerecorded audiotape instructions to conduct imaginal desensitisation at home. Significant improvements in gambling outcomes were achieved at 2 months (Blaszczynski, Drobny, & Steel, 2005).

A Spanish study compared exposure with cognitive restructuring, and a combination of the two approaches. It was found that exposure alone was superior to cognitive restructuring and combined cognitive restructuring and exposure (Echeburua,

Baez, & Fernandez-Montlalvo, 1996). A South Australian clinic sample has shown exposure therapy to be effective in treating problem gambling (Tolchard & Battersby, 2000). This approach isolated the exposure component of the McConaghy et al. study (1991), eliminating relaxation and using imaginal exposure as part of the grading process. Work with this clinic sample suggested that single-session therapy may be successful for some clients.

The rationale for using exposure with problem gamblers is based on similarities in presentation of problem gamblers to people with anxiety disorders, where the gambling urge has the same elements of arousal as the anxiety response in anxiety disorders. Exposure is based on a theoretical behavioural model that the gambling urge is a conditioned response (Delfabbro & Winefield, 1999a, 1999b; Dickerson, Hinchy, Legg England, Fabre, & Cunningham, 1992). Playing EGMs results in relief of the urge to gamble which then results in negative reinforcement of the gambling urge. Exposure to the urge either in imagination or in the live situation, followed by response prevention until the urge is reduced, results in deconditioning of the stimulus and the gambling urge. The focus of therapy is to target the behavioural component of the presenting problem and in doing so reduce the physiological and cognitive elements. Therapy aims to eliminate the gambling urge using habituation. We describe a case study of single-session therapy conducted with a client attending the gambling treatment service at the Centre for Anxiety and Related Disorders (CARD), Flinders Medical Centre, Adelaide, South Australia.

Method

Subject

The client was a 50-year-old married woman who presented with a 3-year history of pathological gambling. She experienced an excessive urge to gamble triggered by low mood, boredom and relationship problems. She would play until whatever money she had was lost. When playing she smoked heavily and would not leave the machine to go to the toilet or to have a drink. She kept her gambling behaviour a secret and mostly played alone. Her gambling was a form of distraction.

Assessment

The client was assessed as suitable for behavioural psychotherapy using exposure therapy. A structured clinical interview determined that she met the criteria for pathological gambling (American Psychiatric Association, 1994). She was asked to wait for 1 month between the first assessment and the commencement of therapy. During this time she recorded her gambling frequency. The Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), Symptom Checklist-90-Revised (SCL-90-R; Derogatis, 1977), South Oaks Gambling Screen (SOGS; Lesieur & Blume, 1987) and Gambling Severity Checklist (GSCL; Tolchard, 1998) were completed at pre- and posttreatment and at follow-up. The GSCL was devised as a clinical outcome measure by Tolchard (1998) at the Centre for Anxiety and Related Disorders. It consists of five items: global gambling severity, gambling urge, money spent gambling, time spent gambling, and financial problems due to gambling, each rated on a 0–8 scale (8 indicating severe). A score between 0 and 8 is created from the mean of the five items.
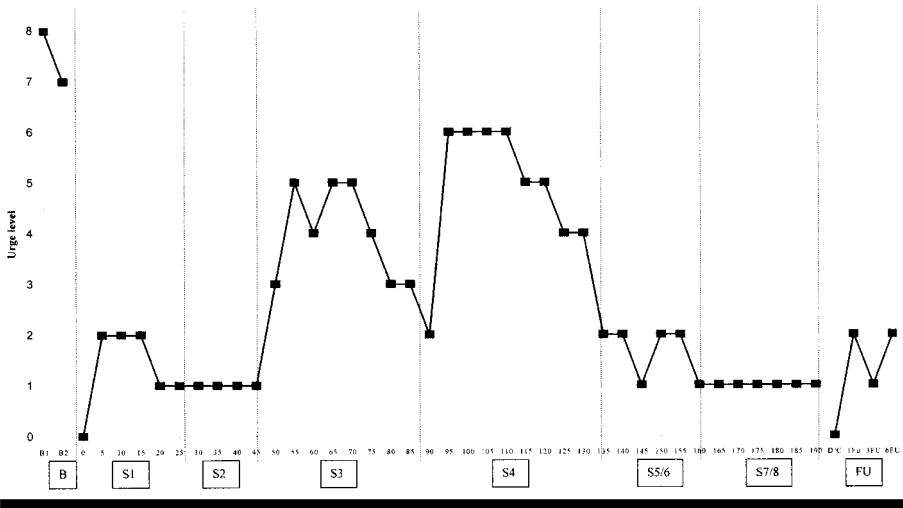
FIGURE 1

Urge to gamble of patient at baseline, during one-session treatment and at follow-up.

Note: B = baseline; S1–S8 = session stages (measured in 5-minute intervals); FU = follow-up.

Treatment

The client wished to overcome her gambling problem as quickly as possible and so agreed to participate in the single-session approach. Her prognosis was mixed as she had a previous history of both anxiety and depression and a strong family history of depression. The SOGS has a cut-off of 5 that indicates a gambling problem. Her low score of 8 compared to other problem gamblers presenting to the service suggested she might benefit from a single-session approach.

A repeated measures single-case experimental design was applied (Hersen & Barlow, 1976). On the day of treatment she attended the session with her sister who was to act as co-therapist in the later stages of treatment. The first step was to establish that there had been no changes in her gambling in the intervening weeks. The single-session therapy was conducted in a series of stages that involved the client being gradually exposed to greater urge-provoking stimuli. Throughout all stages of therapy the therapist (BT) asked the client to rate her urge to gamble every 5 minutes using a 0–8 scale where 8 was maximum urge. Each stage concluded when her urge rating had stabilised and reduced by at least 50% from the maximum level triggered by the stimulus. The therapist remained with her during all but the last two stages when her sister became involved in the second-last stage and the client completed the last stage alone.

The initial phase of therapy took place in the clinic where she practised imaginal exposure to being in a gambling venue. The second treatment phase took place in a venue. The walk to this gambling venue took some 15 minutes during which time she was asked to focus on what she would usually do when going to a venue (S2). Again throughout she was asked to rate her urge to gamble. Before entering the hotel she spent the third stage (S3) standing immediately outside the gaming room until her urge reduced. She then entered the venue and sat in the gaming room within clear sight of the machines. This final phase was broken down into

TABLE 1

Scores on Measures Used at Baseline, Discharge and Follow-Up

Measures	Baseline 1	Baseline 2	Discharge	1-month follow-up	3-month follow-up	6-month follow-up
SCL-90-R GSI (0–4)	2.49	2.7	N/A	0.02	0.5	0.5
GSCL (0–8)	5.63	4.2	0	1.12	1.68	1.5
SOGS*(0–20)	8	N/A	N/A	N/A	N/A	N/A
BDI (0–63)	34	23	0	2	4	5

Note: SCL-90-R = Symptom Checklist-90-Revised; GSI = Global Severity Index; GSCL = Gambling
     Severity Checklist; SOGS = South Oaks Gambling Screen; BDI = Beck Depression Inventory.
       *The SOGS was not administered beyond baseline as it is a 12-month tool.

four stages (S4–S8) with increasing levels of difficulty, culminating in her being in the gaming room alone with money.

Results

At baseline the client gambled up to five times per week where she averaged $50 lost per gambling session. During the single-session treatment she did not gamble at all. At 6-month follow-up she had gambled only once, where she lost $40. On completion of the single-session treatment she continued to practise the final step of exposure in the live setting. Exposure therapy resulted in a very substantial reduction in her gambling behaviour and there was a significant reduction in her urge levels and frequency of experiencing the urge to gamble (see Figure 1).

It is unlikely that the single session alone produced the changes, but that it was a combination of rapid reduction in urge during the session followed by maintenance and further reduction in urge using standard exposure treatment after the session. There was no therapist involvement in the follow-up sessions other than for re-taking of the measures and discussing progress. All measures at follow-up showed sustained improvement (see Table 1).

Discussion

This case study has demonstrated that a single-session of exposure therapy can be successfully applied to the treatment of problem gambling. Clients suitable for this treatment are most likely to have relatively moderate gambling problems that are not confounded by serious concerns of depression, anxiety or other psychiatric illness. Motivation to undertake further exposure without the assistance of a therapist is also necessary and the outcome may be enhanced by a co-therapist.

This case used only a behavioural intervention. From a theoretical perspective the outcome gives support to the behavioural model of problem gambling, the primacy of the gambling urge, its similarities with the arousal component of anxiety and how this can be modified using a deconditioning approach. This behavioural intervention used exposure with response prevention based on the now well-established successful intervention for obsessive–compulsive disorder (Foa & Kozak, 1996), giving support to the proposition that problem or pathological gambling be classified as an obsessive–compulsive spectrum disorder rather than the controversial impulse control disorder (American Psychiatric Association, 1994).

152

This single case demonstrates that the process is feasible and acceptable to a gambling client. It will be necessary to test the intervention in experimental designs with a control group in various settings to determine whether the outcomes are significant and valid. A key research question will be to determine if the effect is seen in people with a typical range of gambling problems presenting to clinics. If as proposed, a single-session approach has more applicability to clinic attenders with mild or moderate problems, it may be possible to develop this approach as part of early intervention and prevention programs. These brief intervention modules may be self-administered by people who access computer-, internet- or telephone-based services and who wish to remain anonymous or do not want the inconvenience of attending a clinic during office hours.

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