The WAGER, Vol. 8(29) – Reshaping Gambling Beliefs Through Group Therapy

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The principal aim of cognitive therapy for gambling disorders is to correct misconceptions about gambling that contribute to the establishment and maintenance of a gambling disorder (for a review of cognitive therapy see WAGER 4(7)). Ladouceur et al. (2001; 1998) have previously demonstrated the efficacy of individual cognitive therapy in decreasing disordered gambling. Delivering treatment in a group format can be more cost-effective than individual treatment, reduce wait-lists, and can result in treatment benefits derived from observational learning. Consequently, Ladouceur et al. (2003) undertook a subsequent study to evaluate the efficacy of cognitive therapy offered in a group format.

Pathological gamblers were recruited when they contacted a gambling treatment facility. Some gamblers referred themselves and some were referred to the facility by health professionals in the Quebec and Montreal areas. The researchers randomized participants into two groups: 46 gamblers were assigned to cognitive treatment in a group format and 25 gamblers were assigned to a wait-list control group. Treatment consisted of 10 weekly group sessions lasting 2 hours each and focused on correcting "participants' misconceptions of the basic concept of randomness" as well as identifying "high-risk situations and erroneous thoughts associated with these situations (Ladouceur et al., 2003, p. 590-1). All participants completed dependent measures at pre-and post-treatment. Post-treatment for the treated sample was at the end of the ten-weeks of treatment; for the waiting-list group, post-treatment was later at the end of the four month waiting period. The treatment group also completed 6, 12 and 24 month follow-ups. The dependent variables included DSM-IV criteria for pathological gambling, self-efficacy perception (i.e. belief in ability to refrain from gambling), perception of control over gambling problems, desire to gamble, and frequency of gambling (Ladouceur et al., 2001; Sylvain, Ladouceur, & Boisvert, 1997). The authors adjusted the standard level of significance, p < .05, for the number of opportunities for finding a difference by chance (i.e., the number of dependent

variables) and used p<.01 as the appropriate level of significance.

All gamblers met DSM-IV criteria for pathological gambling prior to treatment. As shown in Table 1, both groups improved over time (ten weeks for the treatment sample and four months for the people on the waiting list). However, the treated sample had fewer DSM-IV criteria $(F(1,57)=26.41, p < .01)$ and demonstrated significantly greater perception of control $(F(1,54)=37.02, , p < .01)$ and self-efficacy $(F(1,53)=24.01, p=, p < .01)$ at post-treatment; in addition, the rate of improvement over time was greater for the treatment group leading to a significant Time by Group interaction for these three variables. The group difference in desire to gamble did not reach the corrected significance level $(F(1,54)=4.91, p=0.0310)$ and the Group by Time interaction also was not significant. The authors noted that there were no significant Group . Time interactions for the frequency of gambling measures. After four months of waiting for treatment 5 of 25 (20%) gamblers no longer met pathological gambling criteria. After ten weeks of treatment, 30 of the 34 (88%) gamblers who completed treatment no longer met criteria. Gamblers who completed treatment and who were available for follow-up maintained a consistent proportion who reported below-criterion level of problems: 18 of 27 (67%) at 6 months, 18 of 26 (69%) at 12 months and 15 of 22 (68%) at 24 months.

It is important to note that the analyses presented by Ladouceur et al. are based on only the participants who completed the entire treatment program and could be followed. For example, only 34 of the original 46 participants completed the treatment program and were included in the post-treatment analyses. An interpretation of outcomes should take into account the potential effect of treatment drop-outs and subjects who could not be followed. A standard conservative procedure would assign the worst outcome to dropouts and people not followed. We applied this strategy to the Ladouceur et al. data: comparing results of four months for the waiting-list group and six months for the treated sample indicates the proportion of non-diagnostic gamblers as 20% for the wait-list and 39% for the treated sample. This difference is not statistically significant (Fisher's exact test p = .12).

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Dependent Variable	Pre-treatment	Post-treatment
DSM-IV (0-10)*		
Wait-list	8.00 (1.38)	6.00 (3.10)
Treatment	7.26 (1.48)	1.56 (2.32)
Perception of Control (0-100)*		
Wait-list	9.78 (15.11)	17.60 (24.54)
Treatment	22.12 (23.15)	77.35 (21.50)
Self-efficacy Perception (0-10)*		
Wait-list	2.33 (2.35)	3.38 (3.05)
Treatment	2.60 (2.41)	7.36 (1.97)
Desire to Gamble (0-10)		
Wait-list	6.26 (3.08)	5.44 (3.23)
Treatment	5.58 (2.54)	2.41 (2.64)

*Indicates a significant Group X Time interaction

Few of the numerous treatment approaches in use for pathological gambling, have been empirically validated. This study is an important step towards the creation of evidence-based guidelines for the treatment of pathological gambling. The results are mixed, however, in that cognitive group therapy appears to reduce problems associated with gambling but not the desire or frequency of gambling itself. Further, Ladouceur et al. point out that the results obtained in follow-up after group therapy were not as good as those after individual cognitive therapy reported in their previous study (Ladouceur et al., 2001). They propose that a combination of individual and group therapy might be the optimal strategy. Further, while this study demonstrates the efficacy of cognitive therapy, it does not provide a measure of comparison to other therapeutic approaches, such as pharmacotherapy or psychodynamic therapies. Treatment guidelines would be further informed by studies that contrasted several therapeutic strategies.

Comments on this article can be addressed to Rachel Kidman at wager@hms.harvard.edu.

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