

Q. What is cognitive behavioral therapy?

A. Cognitive behavioral therapy (CBT) is one of the most researched psychotherapy treatments (David, Cristea, & Hofmann, 2018). CBT was developed in the 1970s by Aaron T. Beck and is based on the idea that biases in thinking lead to and maintain problematic emotions and behaviors. In CBT for pathological gambling, treatment involves psychoeducation on the role of thoughts and behaviors in perpetuating unhealthy gambling behaviors, the use of tools to help patients identify and change irrational beliefs related to gambling, development of problem solving skills, and relapse prevention practices (Ladouceur, Sylvain, Boutin, & Doucet, 2002). In the gambling literature, the terms ‘pathological gambling’ and ‘problem gambling’ are used to encompass gambling disorder and subthreshold symptoms.

Q. What is the theoretical model underlying CBT for pathological gambling?

A. CBT is based on Beck’s theory of depression (Beck, 1967; Beck, 2008) but has been adapted to support the underlying features of pathological gambling. Irrational beliefs play a part in pathological gambling; gamblers may believe that they can control or predict outcomes, attribute positive outcomes to skill and poor outcomes to bad luck, and overestimate their chances of winning. Other cognitive biases can develop that lead individuals to attend to positive (wins) versus negative (losses) outcomes. It is likely a combination of irrational beliefs, cognitive bias, behavioral reinforcement scheduling, genetic vulnerabilities (impulsiveness), poor coping strategies, and environmental factors (current life stressors) that combine to create an automatic pattern of problematic gambling (Sharpe, 2002). Given that the underlying theory of pathological gambling has cognitive and behavioral elements, CBT is a preferred treatment and remains well supported (Abbott, 2019).

Q. Is CBT recommended as a treatment for pathological gambling in the Military Health System (MHS)?

A. There is no VA/DoD clinical practice guideline (CPG) on the treatment of pathological gambling.

The MHS relies on the VA/DoD clinical practice guidelines (CPGs) to inform best clinical practices. However, in the absence of an official VA/DoD recommendation, clinicians should look to CPGs published by other recognized organizations, and may rely on knowledge of the literature and clinical judgement.

Q. Do other organizations with CPGs for the treatment of pathological gambling recommend CBT?

A. Yes. CPGs published by other organizations recommend the use of CBT for pathological gambling.

- A search of the ECRI Institute Guidelines Trust did not locate any CPGs on the treatment of pathological gambling.
- The Massachusetts Department of Public Health’s practice guidelines for treating gambling- related problems includes CBT as an intervention with “strong evidence” for the treatment of disordered gambling (Korn & Shaffer, 2004).
- The Singapore Ministry of Health’s CPGs on the management of gambling disorders recommends CBT for the treatment of pathological gambling with a “Grade B, Level 2++” recommendation (high quality systematic reviews of case control or cohort studies; Ministry of Health, Singapore, 2011).

Q. Do other authoritative reviews recommend CBT as a front-line treatment for pathological gambling?

A. No. Other authoritative reviews have not substantiated the use of CBT as a front-line treatment for pathological gambling.

Several other recognized organizations conduct systematic reviews and evidence syntheses on psychological health topics using similar grading systems as the VA/DoD CPGs. These include the Agency for Healthcare Research and Quality (AHRQ) and Cochrane.

- AHRQ: No reports on gambling were identified.
- Cochrane: A 2012 systematic review of psychological therapies for pathological and problem gambling concluded that CBT is efficacious in reducing gambling behavior in the short-term, but that the quality of evidence was low to very low (Cowlshaw et al., 2012).

Q. Is there any recent research on CBT as a treatment for pathological gambling?

A. A June 2019 literature search identified a 2017 systematic review of treatments for problem gambling that included 21 randomized trials of psychosocial treatments, three of which included in-person delivery of CBT without the addition of motivational interviewing (Petry, Ginley, & Rash, 2017). The first of these studies randomized 102 participants with gambling disorder to a waitlist, individual CBT, or group CBT (Oei, Raylu, & Casey, 2010). At post-treatment, both therapy groups improved significantly on gambling variables compared to waitlist, but there were no significant differences between individual and group therapy conditions. In another study, 87 problem gamblers were given a cognitive behavioral workbook, and were randomized to either five sessions with a therapist or brief check-ins with a research assistant (Campos, Rosenthal, Chen, Moghaddam, & Fong, 2016). This study reported potential short-term benefits of therapist support; there were no long-term differences between groups. A third study randomized 231 participants with gambling disorder into three conditions: referral to Gamblers Anonymous (GA), referral to GA along with a cognitive behavioral workbook, and referral to GA along with individual CBT (Petry et al., 2006). At the end of treatment, participants in the workbook and therapy conditions showed greater improvement on days gambled than GA referral alone. At 12-month follow-up, improvements did not differ by group.

Q. What conclusions can be drawn about the use of CBT as a treatment for pathological gambling in the MHS?

A. There is currently no VA/DoD CPG on the treatment of pathological gambling. There are a small number of published RCTs of CBT for pathological gambling with somewhat promising results, but the poor quality of the research limits the conclusions that can be drawn. Recent and in-progress trials are focused on self-directed, internet-based approaches that involve components of CBT, rather than traditional, in-person delivery.

*Find the full series of Psych Health Evidence Briefs, provide feedback and subscribe to receive future briefs at <http://www.pdhealth.mil/research/evidence-synthesis/evidence-briefs>.

References

- Abbott, M. W. (2019). Professionally delivered interventions for gambling disorder. *Current Opinion in Psychiatry*, 32, 313–319.
- Beck, A. T. (1967). *Depression: Clinical, experimental, and theoretical aspects*. New York, NY: Harper and Row.
- Beck, A. T. (2008). The evolution of the cognitive model of depression and its neurobiological correlates. *American Journal of Psychiatry*, 165, 969–977.
- Campos, M. D., Rosenthal, R. J., Chen, Q., Moghaddam, J., & Fong, T. W. (2016). A self-help manual for problem gamblers: The impact of minimal therapist guidance on outcome. *International Journal of Mental Health and Addiction*, 14, 579–596.
- Cowlshaw, S., Merkouris, S., Dowling, N., Anderson, C., Jackson, A., & Thomas, S. (2012). Psychological therapies for pathological and problem gambling (Review). *Cochrane Database of Systematic Reviews*, 11, CD008937.
- David, D., Cristea, I., & Hofmann, S. G. (2018). Why cognitive behavioral therapy is the current gold standard of psychotherapy. *Frontiers in Psychiatry*, 9(4), 1–3.
- Korn, D. A., & Shaffer, H. J. (2004, January). Massachusetts Department of Public Health's practice guidelines for treating gambling-related problems: An evidence-based treatment guide for clinicians. Retrieved from https://www.divisiononaddiction.org/html/publications/2004_Korn_Shaffer.pdf.
- Ladouceur, R., Sylvain, C., Boutin, C., & Doucet, C. (2002). *Understanding and treating the pathological gambler*. West Sussex, England: John Wiley & Sons, Ltd.
- Ministry of Health, Singapore. (2011). *Management of gambling disorders*. Singapore: Chung Printing Pte Ltd.
- Oei, T. P., Raylu, N., & Casey, L. M. (2010). Effectiveness of group and individual formats of a combined motivational interviewing and cognitive behavioral treatment program for problem gambling: A randomized controlled trial. *Behavioural and Cognitive Psychotherapy*, 38, 233–238.
- Petry, N. M., Ammerman, Y., Bohl, J., Doersch, A., Gay, H., Kadden, R., ... Steinberg, K., (2006). Cognitive-behavioral therapy for pathological gamblers. *Journal of Consulting and Clinical Psychology*, 74, 555–567.
- Petry, N. M., Ginley, M. K., & Rash, C. J. (2017). A systematic review of treatments for problem gambling. *Psychology of Addictive Behaviors*, 31(8), 951–961.
- Sharpe, L. (2002). A reformulated cognitive-behavioral model of problem gambling a biopsychosocial perspective. *Clinical Psychology Review*, 22, 1–25.

