### **Cognitive Behavioral Therapy for Pathological Gambling**



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### 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 underling 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. Gamblers may hold irrational beliefs such as having the ability to control or predict outcomes, attributing positive outcomes to skill and poor outcomes to bad luck, and overestimating their chances of winning. Other cognitive biases can develop that lead individuals to disproportionately attend to positive (wins) versus negative (losses) outcomes. CBT posits that a combination of irrational beliefs, cognitive bias, behavioral reinforcement scheduling, genetic vulnerabilities (impulsiveness), poor coping strategies, and environmental factors (e.g., current life stressors) combine to create an automatic pattern of problematic gambling (Sharpe, 2002).

# 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 CPGs to inform best clinical practices. In the absence of an official VA/DoD recommendation, clinicians should look to CPGs and authoritative reviews published by other recognized organizations and may rely on knowledge of the literature and clinical judgement.

#### Q: Do other authoritative reviews recommend CBT as a treatment for pathological gambling?

**A:** No, CPGs and authoritative reviews published by other organizations have not recommended the use of CBT for pathological gambling.

Other recognized organizations publish CPGs or conduct systematic reviews and evidence syntheses on psychological health topics using grading systems similar to the VA/DoD CPGs. These include the American Psychiatric Association, American Psychological Association, and the United Kingdom's National Institute for Health and Care Excellence. Additionally, Cochrane is an international network that conducts high-quality reviews of healthcare interventions.



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

**A:** Four recent systematic reviews examined CBT as a treatment for problematic gambling. Di Nicola et al. (2020) reviewed the literature for data on both psychosocial and pharmacological treatments for gambling disorder. They included 26 systematic reviews in their meta-review. CBT was the most used psychological intervention and they found that face-to-face CBT was effective in reducing the global severity of symptoms, the frequency of gambling, and total financial loss from gambling, at least in the short-term. Ribeiro et al.'s (2021) systematic review focused solely on non-pharmacological treatments for gambling disorder and included 22 randomized controlled trials, including nine on CBT. CBT demonstrated efficacy in seven out of the nine trials. The two exceptions were a study that utilized a novel, virtual reality modality, and another that used escitalopram as a control group (no differences were seen between the CBT group and control).

In Higueruela-Ahijado et al.'s (2023) review, the authors examined the effects of CBT on quality of life in individuals engaging in pathological gambling. They included nine studies in their review, all of which were randomized controlled trials. Six of the studies included a waitlist comparator, while the other three compared one type of CBT to another (e.g., online versus face-to-face). Their primary outcome was quality of life and two of the nine studies showed improvement on that metric. In the remaining studies, improvement was seen on a variety of other outcomes, including anxiety, depression, and gambling frequency. Finally, Pfund et al. (2020) noted that while CBT has been found to be an effective treatment for problematic gambling, questions remain about the appropriate treatment dosage. Their meta-analysis included 14 randomized controlled trials with a range of intended treatment dose between one and 30 sessions. Ten studies reported treatment dose, and both intended and received treatment dose was positively correlated with treatment outcome (i.e., greater number of sessions was associated with greater between-group effect sizes). Though a greater number of sessions was associated with greater treatment response, this was not specific to CBT: 37% of the included studies used CBT as the treatment type, with motivational interviewing (MI), personalized feedback, and a combination of CBT, MI, and feedback comprising the remaining 63%. No significant differences were found between treatment types (Pfund, 2020).

## 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. Recent systematic reviews show promising results for the efficacy of both individual and group CBT with some evidence that more sessions lead to greater symptom improvement. Additional research is needed regarding the ability of CBT to improve the quality of life of individuals exhibiting problematic gambling, how to sustain treatment gains at longer-term follow-up, and whether novel treatment modalities (e.g., virtual reality) are a viable option with this population.



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