

## Dialectical behavior therapy (DBT) for co-morbid substance use disorder and serious mental illness

### Substance Use Disorders: Treatment for Adults

Literature review updated May 2014.

As part of WSIPP's research approach to identifying evidence-based programs and policies, WSIPP determines "what works" (and what does not work) to improve outcomes using an approach called meta-analysis. For detail on our methods, see our [Technical Documentation](#). At this time, WSIPP has not yet calculated benefits and costs for this topic.

**Program Description:** Dialectical behavior therapy (DBT) is a cognitive-behavioral treatment originally developed by Marsha Linehan at the University of Washington to treat those with severe mental disorders including chronically suicidal individuals often suffering from borderline personality disorder. DBT for substance abusers was developed by Dr. Linehan and colleagues to treat individuals with co-occurring substance use disorders and borderline personality disorder. DBT for substance abusers focuses on the following five main objectives: (1) motivating patients to change dysfunctional behaviors, (2) enhancing patient skills, (3) ensuring the new skills are used in daily life, (4) structuring the client's environment, and (5) training and consultation to improve the counselor's skills. For substance abusers, the primary target of the intervention is the substance abuse and specific goals include reducing abuse, alleviating withdrawal symptoms, reducing cravings, avoiding opportunities and triggers for substance abuse, and creating a healthy environment and community. Treatment generally includes 90 minute sessions twice per week for 12 months.

#### Meta-Analysis of Program Effects

Outcomes measured	No. of effect sizes	Treatment N	Adjusted effect size and standard error			Unadjusted effect size (random effects model)	
			ES	SE	Age	ES	p-value
Alcohol use disorder	1	27	0.149	0.264	34	0.149	0.573
Illicit drug use disorder	2	39	-0.024	0.348	34	-0.024	0.946
Cannabis use	1	27	-0.090	0.263	34	-0.090	0.732
Psychiatric symptoms	1	27	-0.596	0.270	34	-0.596	0.027

Meta-analysis is a statistical method to combine the results from separate studies on a program, policy, or topic in order to estimate its effect on an outcome. WSIPP systematically evaluates all credible evaluations we can locate on each topic. The outcomes measured are the types of program impacts that were measured in the research literature (for example, crime or educational attainment). Treatment N represents the total number of individuals or units in the treatment group across the included studies.

An effect size (ES) is a standard metric that summarizes the degree to which a program or policy affects a measured outcome. If the effect size is positive, the outcome increases. If the effect size is negative, the outcome decreases.

Adjusted effect sizes are used to calculate the benefits from our benefit cost model. WSIPP may adjust effect sizes based on methodological characteristics of the study. For example, we may adjust effect sizes when a study has a weak research design or when the program developer is involved in the research. The magnitude of these adjustments varies depending on the topic area.

WSIPP may also adjust the second ES measurement. Research shows the magnitude of some effect sizes decrease over time. For those effect sizes, we estimate outcome-based adjustments which we apply between the first time ES is estimated and the second time ES is estimated. We also report the unadjusted effect size to show the effect sizes before any adjustments have been made. More details about these adjustments can be found in our [Technical Documentation](#).

## Citations Used in the Meta-Analysis

- Linehan, M.M., Schmidt, H., Dimeoff, L.A., Craft, J.C., Kanter, J. & Comtois, K.A. (1999). Dialectical Behavior Therapy for Patients With Borderline Personality Disorder and Drug-Dependence. *American Journal on Addictions*, 8(4), 279-292.
- van den Bosch, L., Koeter, M., Stijnen, T., Verheul, R., & van den Brink, W. (2005). Sustained efficacy of dialectical behaviour therapy for borderline personality disorder. *Behaviour Research and Therapy*, 43(9), 1231-1241.
- van den Bosch, L.M.C., Verheul, R., Schippers, G.M., & van den Brink, W. (2002). Dialectical Behavior Therapy of Borderline Patients With and Without Substance Use Problems: Implementation and Long-Term Effects. *Addictive Behaviors*, 27(6), 911-923.

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