

Schweizerische Anorexia Nervosa Stiftung  
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**Approach bias modification training in bulimia nervosa and binge eating disorder: a randomised controlled trial**  
(project no. 44-15)

**Applicants/Authors**

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**Objective**

Bulimia nervosa (BN) and binge eating disorder (BED) are associated with poorly controlled approach behaviour towards food resulting in binge eating. This approach behaviour is considered to be governed to a large degree by an impulsive information processing system that operates rapidly and automatically. Approach bias modification (ABM) may reduce these automatic action tendencies (i.e., approach bias) towards food and may thus decrease binge eating and related eating disorder symptoms

**Method**

total of 56 patients with BN/BED participated in this multi-centre, double-blind, randomised controlled superiority trial (RCT) comparing real and sham ABM. The real ABM condition adopted an implicit learning paradigm in which participants were trained by a computerised task to consistently show avoidance behaviour in response to food cues. Participants in the sham condition used a similar task but were not trained to avoid food cues. Both conditions comprised 10 training sessions (15 min. each) within 4 weeks. Binge-eating frequency and general eating disorder symptoms were assessed at baseline and at 2-month follow-up. In addition, trait food craving, food cue reactivity, food intake in the lab, and approach and attention bias towards visual food cues were assessed at baseline and at treatment termination.

**Results**

Participants in both groups experienced significant reductions in binge eating, eating disorder symptoms, trait food craving, and food cue reactivity. Real ABM tended to result in greater reductions in eating disorder symptoms than sham ABM. Food intake, approach bias, and attention bias toward food did not change.

## **Discussion**

This is the first RCT on ABM in eating disorders. The findings provide tentative support for the efficacy of ABM in BN/BED but pose questions regarding its active ingredients and its usefulness as a stand-alone treatment for bulimic-type eating disorders.

*A manuscript describing the findings of this project in detail is currently submitted for publication. The study protocol can be found here: Brockmeyer T, Schmidt U, Friederich H-C (2016). The ABBA study –approach bias modification in bulimia nervosa and binge eating disorder: study protocol for a randomised controlled trial. *Trials*, 17, 466.*

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