

Approach Bias Modification Training in Bulimia Nervosa: A Pilot Trial

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Authors

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Pre-study:

Objective: Even though people suffering from high levels of food craving are aware of the negative consequences of binge eating, they cannot resist. Automatic action tendencies (i.e. approach bias) towards food cues that operate outside conscious control may contribute to this dysfunctional behavior. The present study aimed to examine whether people with high levels of food craving show a stronger approach bias for food than those with low levels of food craving and whether this bias is associated with cue-elicited food craving.

Method: Forty-one individuals reporting either extremely high or extremely low levels of trait food craving were recruited via an online screening and compared regarding approach bias towards visual food cues by means of an implicit stimulus-response paradigm (i.e. the Food Approach-Avoidance Task). State levels of food craving were assessed before and after cue exposure to indicate food cue reactivity.

Results: As expected, high food cravers showed stronger automatic approach tendencies towards food than low food cravers. Also in line with the hypotheses, approach bias for food was positively correlated with the magnitude of change in state levels of food craving from pre-to post-cue exposure in the total sample.

Discussion: The findings suggest that an approach bias in early stages of information processing contributes to the inability to resist food intake and may be of relevance for understanding and treating dysfunctional eating behavior.

Proof-of-Concept study:

Objective: The aim of the present proof-of-concept study was to test a novel cognitive bias modification (CBM) programme in an analogue sample of people with subclinical bulimic eating disorder (ED) psychopathology.

Method: Thirty participants with high levels of trait food craving were trained to make avoidance movements in response to visual food stimuli in an implicit learning paradigm. The intervention comprised ten 15-minute sessions over a 5-week course.

Results: At baseline, participants showed approach and attentional biases towards high-caloric palatable food that were both significantly reduced and turned into avoidance biases after the training. Participants also reported pronounced reductions in both trait and cue-elicited food craving and in ED symptoms as well. The overall evaluation of the training by the participants was positive.

Discussion: The specific CBM programme tested in this pilot trial promises to be an effective and feasible way to alter automatic action tendencies towards food in people suffering from bulimic ED psychopathology.

The findings of this project are published in:

Brockmeyer T, Hahn C, Reetz C, Schmidt U, Friederich H-C. (2015). Approach Bias Modification in Food Craving—A Proof-of-Concept Study. *European Eating Disorders Review*, 23(5), 352-360.

Brockmeyer T, Hahn C, Reetz C, Schmidt U, Friederich H-C. (2015). Approach bias and cue reactivity towards food in people with high versus low levels of food craving. *Appetite*, 95, 197-202.

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