

Regulation of Breathing Through a Feedback Breathing Monitoring Device Reduces Attention Bias in Patients with Anxiety Disorder

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Introduction

Modifying cognitive bias as a treatment of anxiety disorders has been suggested as an alternative to less accessible and more expensive pharmacological and psychotherapeutic methods. Since it has been shown that breathing dysregulations play an important role in pathological reactions to stressful stimuli we suggest an alternative to currently used attention bias modification treatments through the retraining of breathing during response to stressful stimuli.

Objectives and Aims

We present the effects on attention bias following by a breathing retraining program using a breathing feedback monitoring device.

Methods

Subjects with anxiety disorder were asked to use a computer program at their home for 30 days, 10-minutes daily. The program would randomly select a threat-related image and the subjects were asked to blow into the breathing feedback device to observe the image on the computer screen fade away in accordance to their breathing. Pre and post-training attention bias was measured with the dot probe task. State and trait anxiety levels were measured with self reported State-Trait Anxiety Inventory before in the middle and after the training period.

Expected results and discussion

In this study we present the effects of a breathing retraining program through a breathing feedback device on attentional bias and long term effects on trait anxiety measured at various time points with the Hamilton Anxiety Scale. Attention Bias Modification Treatment arises from the notion that cognitive biases cause pathological anxiety, which also underlies models of CBT.

References

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