

## Bouldering therapy as a new treatment for depression: First results of a randomized waitlist-controlled intervention study

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**Background:** Depression is one of the most common psychiatric disorders. Alternative therapies, such as exercise, are on a rise to complement traditional care. A new mode of exercise which may be promising in alleviation of depressive symptoms is bouldering, a style of climbing without a rope in moderate heights. This present study aimed to find empirical support for the relationship between bouldering and depression.

**Method:** The short-term bouldering psychotherapy took place in a group format once a week for three hours over the course of eight weeks. Using a control-waitlist-design, participants were assigned to the two groups and assessed at baseline, and subsequently after 8, 16, and 24 weeks. Self-report measures included the Beck Depression Inventory (BDI-II), the Beck Anxiety Inventory (BAI), the Symptom Checklist-90-R (SCL- 90-R), and the questionnaire on resources and self-management skills (FERUS). Additionally, the attention test d2-R was performed. In the trials presented here, a total of 47 participants completed the study.

**Results:** Improvements after bouldering included lower depressive scores (BDI-II:  $d = 0.77$ ; SCL-90-R:  $d = 0.62$ ), reduced obsessive-compulsive behavior ( $d = 0.73$ ), enhanced self-efficacy ( $d = 0.63$ ) as well as improved coping skills ( $d = 0.82$ ). Depression scores dropped by up to 6.27 points on the BDI-II during the intervention. Group allocation evolved as only significant predictor of change in depression scores in a regression-analysis ( $p = .007$ ). NNT was four.

**Conclusion:** This study provides evidence that short-term bouldering psychotherapy can be effective in reducing symptoms of depression. Larger studies, however, are required.

### Biography

Stelzer Eva-Maria is a Doctoral student in Psychology at University of Erlangen, Germany. She has received her BSc and MSc in Psychology from the University of Erlangen where she worked with PD Dr. Katharina Luttenberger on a pilot study which investigated the effects of a short-term bouldering psychotherapy program for treatment of depression. Her research interests fall into two main categories: Grief, loss and social stress with a particular emphasis on bereaved parents after adult child loss and Effects of climbing/bouldering therapy on mental health outcomes. She has published in international journals and is currently conducting research at the University of Arizona.

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