

Brain training against depression



Forget happy pills: Research from Nord University shows that regular brain training at home has a measurable effect against depression.

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Bente Nordtug is an Associate Professor of Health Sciences at Nord University. Photo: Bjørnar Olav Leknes.

The study that provides the uplifting results was conducted during the autumn of 2016 by Nord University in cooperation with brain

scientist Svetla Velikova (Smartbrain AS Oslo – Brussel).

The study refers to a method called 'self-guided imagery therapy'.

- Guided imagery therapy is considered an efficient method within modern cognitive psychotherapy.

- The method has demonstrated positive outcomes against phobias, depression, anxiety, degree of optimism and improving of relational connections for the

patients, says Project Manager and Associate Professor Bente Nordtug at Nord University.

Used Questionnaire and Measured Brain Activity

- We used both internationally recognised questionnaires as well as electric measuring of brain activity through EEG (electroencephalogram). Data measured prior to

commencement was compared to data following three months of training, Nordtug says.

- The purpose of this study was to gain knowledge about whether courses in positive imagery training techniques had any effect on the course participants' health following their practicing the method on their own, without a guide, i.e. not lead by a psychotherapist, Nordtug explains.

Potential for Treating Depression

- We can conclude that this training method may be useful for emotional self-regulation of healthy persons, and that it carries the potential for treating forms of sub-clinical depression, Nordtug says.

How Brain Training Works

- Guided imagery training may take its starting point from important incidents or situations for the person in question. The person who conducts the training wants to change or affect something inside himself or herself.

- One imagines the incident or situations in question in a deeply relaxed situation, and uses various inner cognitive techniques to affect one's own brain in relation to the incident or situation.

- Using cognitive techniques may for instance mean that one imagines a formerly painful situation and imagines a different outcome in which the situation is changed into something positive.

- It may also be that one imagines how a relevant situation can turn into a good experience, Nordtug says.

Invited Through Facebook

Thirty healthy individuals in Norway were invited through Facebook to participate in the study.

First, they participated in a two-day course to learn techniques for positive imaginary training methods. Later, they trained at home on a regular basis. After three months, they went through the techniques again.

More Satisfied and Efficient

- At the outset of the study, 22 of the participants demonstrated symptoms of early depression. Following the training period, the analysis of their questionnaires demonstrated that the depressive symptoms were less prevalent.

- Furthermore, they were more satisfied with their lives and evaluated themselves as more efficient, Nordtug explains.

Positive Change Visible in the Brain

Researchers then viewed the data in the questionnaires in connection with the EEG measurements.

- It is interesting to note that the findings from both the questionnaires and the EEG measurements concur, so that it is actually possible to see positive changes in the brain on images showing the brain's activity, Nordtug tells.

She says that this is the first study where changes in the brain are measured following

a completed training period using this method.

- The measurements show physiological changes in activities in the parts of the brain that play a role in the person's feelings and mental health, according to Nordtug.

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