

Overcoming addiction with an app

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Can a game installed on your smartphone help you to overcome an addiction? Soon this will be a possibility. Marloes Postel, a lecturer at the University of Twente, observed the need for easily accessible care for people with addictions. This has led to the development of an app version of an existing computer course used for training the brain to break free from acquired patterns of thought. Approaching a therapist is too big a step for many addicts. The app makes the training course easily accessible to a larger group of people.

Marloes Postel describes the Breindebaas (ControlTheBrain) app as being "online brainwashing with a positive aim". In addition to working at the UT, Postel is also a senior researcher at Tactus Verslavingszorg, a care organization for addicts. The Netherlands Organization for Scientific Research (NWO) provided funding for the app under its Knowledge Innovation Mapping (KIEM) programme, which promotes research projects partnered with the creative industry.

Easily accessible

The aim of the app is to change the associations alcoholics have with alcohol. During training, participants are shown photographs of alcoholic and non-alcoholic drinks. By swiping, the participants can then push the photographs away from themselves or bring them closer. They are allowed to bring the photographs of the non-alcoholic drinks closer, but as soon as an alcoholic drink appears, the participants are ordered to swipe the photograph away. They then see the photograph disappearing into the distance. In other words, they are rejecting the alcohol. Through repeated training, the app changes the response and thought patterns in the brain.

"A lot of research is currently being carried out into cognitive bias modification (CBM)," explains Postel. "CBM is a form of online therapy that trains the brain to break free from acquired patterns of thought, or 'biases'. It tackles the unconscious processes the brain uses for processing information when someone has an addiction. A conventional treatment for addiction is cognitive behavioural therapy, during which a therapist makes the patient aware of his or her acquired patterns of thought. Both conscious and unconscious processes play a role in keeping an addiction going, so paying attention to both will therefore have the greatest effect. The app offers a simple alternative to those addicts for whom approaching a therapist is too big a step, as it helps them to overcome these biases themselves in an unconscious way."

When CBM is used for addiction therapy, the chance of relapse after a year is reduced by more than 10%. This has already been demonstrated in Germany. App designers are helping Postel and the development of the app represents a big step forward.

Marloes Postel is a lecturer working at the Department of Psychology, Health and Technology (the Institute for Innovation and Governance Studies within the Faculty of Behavioural, Social and Management Sciences) at the UT. She also works as a senior researcher at the Internet Treatment department at Tactus Verslavingszorg. She obtained her doctoral degree in 2011 on the basis of her thesis entitled 'Well Connected. Web-based Treatment for Problem Drinkers'. Her expertise lies in e-health and online interventions within mental health care.

Provided by: University of Twente