Reducing dental anxiety by taxing working memory

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON28447

Source
Nationaal Trial Register

Health condition

The purpose of this study is to determine whether playing the computer game Tetris® prior to dental treatment is capable of
reducing trait anxiety in patients suffering from a severe form of dental anxiety.

Sponsors and support

Primary sponsor: Academic Centre for Dentistry Amsterdam (ACTA). University of Amsterdam, Vrije University Amsterdam, The Netherlands
Source(s) of monetary or material Support: none

Intervention

Outcome measures

Primary outcome

Trait anxiety for dental treatment; state anxiety; liveliness of the flashforward, emotional charge of the flashforward.

Secondary outcome

Difficulty of accessing the flashforward. The percentage of people that may or may not (any longer) meet the characteristics of a specific phobia of dental treatment after the intervention.

Study description

Background summary

The working memory account predicts that a task that tax working memory will affect the intensity of a memory. Indeed, it has been found that a competing task for working memory resources will reduce not only the emotionality of retrospective images but prospective images as well (Engelhard et al., 2011; Butler et al., 1995). Although the effects of taxing working memory with a dual-task on flashbacks (disturbing memories of past events) and flashforwards (scary fantasies about what could possibly happen in the future) has been supported by prior studies (Holmes et al, 2009; Holmes et al, 2010; Engelhard et al, 2010; Engelhard et al, 2011), it is not yet clear whether these effects can be replicated in patients suffering from a specific phobia. The purpose of this study is to determine whether playing the computer game Tetris® prior to dental treatment is capable of reducing trait anxiety in patients suffering from a severe form of dental anxiety. Patients who visist a dental fear clinic are asked to think about one aspect of dental treatment that they fear most, their 'flashforward'. At the same time their working memory will be taxed by playing the computer game Tetris®.

Study objective

1. Taxing working memory of patients with fear of dental treatment by playing the computer game Tetris® reduces the vividness of their flashforward. (as indexed by a Visual Analogue Scale (VAS), from 0 = 'not lively' to 100 = "extremely lively").
2. Taxing working memory of patients with fear of dental treatment by playing the computer game Tetris® reduces the emotionality of a flashforward (as indexed by a Visual Analogue Scale (VAS), from 0 = "not at all emotionally charged" to 100 = 'extremely emotional').
3. Taxing working memory of patients with fear of dental treatment by playing the computer game Tetris® reduces trait anxiety in regard to the dental treatment significantly, compared to the levels of three
weeks prior. Level of dental trait anxiety is measure at the start of the study using the K-ATB, and is administered again when
commencing dental treatment three weeks thereafter.
4. Taxing working memory of patients with fear of dental treatment by playing the computer game Tetris® reduces dental trait anxiety regarding the dental treatment significantly more than it does for
patients without intervention.

Study design

Baseline, immediately after treatment, three weeks later.

Intervention

The purpose of this study is to determine whether playing the computer game Tetris® prior to dental treatment is capable of
reducing trait anxiety in patients suffering from a severe form of dental anxiety. Patients who visist a dental fear clinic are asked to think about one aspect of dental treatment that they fear most. They focus on their mental representation of what might go wrong (a so called 'flashforward'). At the same time their working memory will be taxed by playing the computer game Tetris®.

Contacts

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Eligibility criteria

Inclusion criteria

The participants are 18 years old or older. They must have a severe fear for dental interventions (and comply fully or partially to the criteria of a specific phobia stated by DMS-IV-TR).

Exclusion criteria

Patients who are familiar with the EMDR treatment method are excluded from participation.

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Recruiting
Start date (anticipated):	01-11-2013
Enrollment:	60
Type:	Anticipated

Ethics review

Positive opinion

Date:	03-11-2013
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL4102
NTR-old	NTR4247
Other	jldqgcqe : 15658
ISRCTN	ISRCTN wordt niet meer aangevraagd.

Study results

Summary results
N/A