

Can negative expectations increase pain and pain-related avoidance behavior?

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Ethische beoordeling	Niet van toepassing
Status	Werving gestart
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON21000

Bron

Nationaal Trial Register

Verkorte titel

N/A

Aandoening

The experiment is done on healthy participants aged 18-35

Ondersteuning

Primaire sponsor: Leiden University, Leiden, The Netherlands

Overige ondersteuning: NWO – Gravitation Grant

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Difference in average pain scores (on a scale of 0 to 10) between the conditioned cue trials and control cue trials during the test phase; Proportion of participants that select the

avoidance task (the difficult game).

Toelichting onderzoek

Achtergrond van het onderzoek

Expectancy and avoidance behavior are thought to be one of the key mechanisms in the transition from acute to chronic pain. However, studies that directly evaluate the relationship between negative expectancy and avoidance are lacking. In this study, we investigate whether negative expectations can increase pain related avoidance behavior in healthy participants. Participants are assigned to either the placebo group or control group, in which negative or no expectations regarding electrical pain stimuli are induced. A sham third electrode will act as the placebo device, and negative expectations are induced through verbal suggestions and conditioning (i.e., pairing certain color cues with high and medium intensity electrical pain stimuli). Avoidance behavior is measured through task selection (choosing to play a difficult game, rather than an easy game, in order to avoid high intensity stimulus).

Doel van het onderzoek

Our research objectives are two-fold: First we investigate whether placebo effects can be learned via electrical pain conditioning and verbal suggestions. We expect that participants in the placebo group, but not the control group, will report higher pain ratings when seeing the conditioned cue (yellow or purple color), compared to the control cue during the placebo test phase when the same intensity stimuli are given for these cues. Second, we investigate whether negative expectations induced via conditioning and verbal suggestions can increase avoidance behavior. We expect that participants in the placebo group will select the avoidance task (playing a difficult game as opposed to an easy game) more than participants in the control group.

Exploratory hypothesis: We also assess several individual factors such as state anxiety, pain catastrophizing, pain vigilance, and fear of pain for exploratory analyses. We would like to investigate whether these individual factors 1. Moderate the relationship between negative expectancy and level of avoidance, 2. Correlate with induced pain expectations and 3. Moderate and mediate the placebo effect.

Onderzoeksopzet

1 session- 90-minute experiment.

Onderzoeksproduct en/of interventie

Participants in the placebo group receive a verbal suggestion stating that the third (sham) electrode will increase the intensity of the pain stimuli depending on the colors (conditioned

cue) that are displayed on the screen. In addition, participants will receive a high intensity stimulus when they see the conditioned cue, and a medium intensity stimulus when they see the control cue during the acquisition phase, as part of the nocebo conditioning procedure. To assess avoidance, participants are asked to choose between playing an easy game or a difficult game which are paired with the color cues. The easy game is paired with the conditioned cue which was previously associated with the high intensity stimulus. The difficult game is paired with the control cue which was previously associated with the medium intensity stimulus. Therefore, participants must decide whether they want to play the easy game and receive a high intensity stimulus or avoid the high intensity stimulus by playing the difficult game.

Participants in the control group will not receive any verbal suggestions, and the high and medium stimuli are semi-randomized in that they are paired evenly with the color cues. Avoidance will also be assessed in participants in the control group. However, as the colors were not previously associated with a certain intensity, participants will not be influenced by the colors when selecting a game to play.

Contactpersonen

Publiek

Leiden University
Andrea Evers

N/A

Wetenschappelijk

Leiden University
Andrea Evers

N/A

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Healthy adults age 18-35; sensitivity to electrical pain (reaching a pain level that takes some effort to tolerate before reaching the max current of 8mA and can discriminate between the high and medium intensity stimuli)

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

Diagnosed conditions associated with chronic pain (pain lasting at least three months); diagnosed psychiatric or neurological conditions; drug use of more than 3 times a month; disabilities in the upper body; colorblindness; use of pacemaker; pregnancy or breastfeeding.

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blinding:	Open / niet geblindeerd
Controle:	Placebo

Deelname

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	05-03-2021
Aantal proefpersonen:	116
Type:	Verwachte startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Ja

Toelichting

We plan to publish coded data to an online data repository as part of the publication of the research findings. No sensitive personal data will be shared to protect the participants' privacy of data.

Ethische beoordeling

Niet van toepassing

Soort: Niet van toepassing

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL9306
Ander register	Psychology Research Ethics Committee Leiden University : 2021-01-12-A.W.M. Evers-V2-271

Resultaten

Samenvatting resultaten

N/A