The role of pain catastrophizing in the mood-as-input model

Published: 10-10-2008
Last updated: 06-05-2024

The aim of the experiment is to test whether people who catastrophize about pain stop sooner with a task in a negetaive mood than in a positive mood

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Other condition
Study type	Interventional

Summary

ID

NL-OMON32000

Source
ToetsingOnline

Brief title
Pain catastrophizing and the mood-as-input model

Condition

- Other condition

Synonym
chronic pain

Health condition

chronische pijn

Research involving
Human

Sponsors and support

Primary sponsor: Universiteit Maastricht
Source(s) of monetary or material Support: NWO

Intervention

Keyword: chronic pain, fear avoidance, mood-as-input, Pain catastrophizing

Outcome measures

Primary outcome

The primary study parameter is the duration that a participant persists in a task.

Secondary outcome

Secundary study parameters are catatstrophizing about pain, negative and positiev affectivity, habitual use of stop rules, experienced pain during the experiment, and perceived task duration. The goal of these variables is to measure factors that might influence task persistence as well (the dependent variable). Experienced positive and negative mood and experienced threat during the experiment will be assesed to check whether the mood and threat manipulation succeeded.

Study description

Background summary

There are differen therethical models to explain why some people develop chronic pain symptoms. The wellknown fear avoidance model postulates that people who interpret pain negatively develop a vicious crikle in which pain and disability increase. That is, a catastrophic interpretation of pain results in fear of pain and avoidance of physical tasks. In turn, avoidance of physical tasks results in less muscle strength increasing disability and pain even more. There are many research findings supporting the Fear avoidance model. However, research shows that there is a group of patients that develop chronic pain due to overuse rather than disuse. To explain the mecahnisms that explain the developemnt of these two groups of patients the mood-as-input model has been proposed. This model assumes that a negative mood (such as fear) does not always result in avoidance behaviour. The effect of mood on avoidance behaviour

depends on the goals that people strive for. Individuals with a performance goal will interpret negative moods as a signal that not enough progress on the task has been made. These people will persist longer in a task than in positive moods.
In contrats individuals that enjoy the moment will interpret negative moods as a signal that they are not enjoying the task any more.
It has been suggested that the mood-as-input model and the fear-avoidance model partially overlap. That is, people with an Enjoy goal show similar avoidance behaviour when in a negative mood as people who catatsrophize about pain.
A negative mood will inform a person who catastrophizes about pain that the situation is dangerous, whereas a positive mood will inform the person that the situation is safe. It still remains unclear whether the combination of mood and pain catastrophizing influence task persistence

Study objective

The aim of the experiment is to test whether people who catastrophize about pain stop sooner with a task in a negetaive mood than in a positive mood

Study design

The study is an experimental design in which mood and threat of pain will be manipulated.
The design is a 2 Mood (positive versus negative) x 2 Threat (Threat versus No threat) fecatorial design with mood and threat as within subjects factors and task persistence as dependent variable.

Intervention

The study has two interventions:
1) Positive and negative mood will be induced by false feedback during an intelligence test. In the negative condition 80% of the answers will be incorrect. In the positive mood condition 80% of the anwers will be correct.
2)Threat of pain will be induced by providing a warning message before a painfultask. This warning message will state that the painful stimulus may cause painful symptoms after the task that will be very much like RSI (Repetitive Strain Injury)

Study burden and risks

The risk of participation is the experience of negative moods after the false negative feedback on the intelligence test. To minimize the negative consequences of experiencing negative moods partcipants will be explained about the goal of the negative feedback at the end of the experiment. Moreover, they will watch a positive film to induce positive moods. Participants who still

experience negative moods after the positive film will be givven a phone call by the researcher some hours after the film.

It is possible that participants get the idea that they can get RSI symptoms after the experiment due to the threat message before the mars attack task. Participants will be explained the reason for this threat message at the end of the experiment. Moreover they will be explained that the electrocuteneaus stimuli do not cause any symptoms or physical damage.

Finally, participants will experience pain symptoms due to the elctrocuteneous stimuli during the mars attack task. The intensity of these stimuli will not be higher than 10 mA. It is known that electrocuteneous stimuli of less than 10 mA will not cause any physical damage. Moreover, participants are able to stop the painful stimuli at any moment during the mars attack task by pressing a stop button.

Contacts

Public
Universiteit Maastricht

universiteitssingel 50
6229 ER Maastricht
Nederland
Scientific
Universiteit Maastricht

universiteitssingel 50
6229 ER Maastricht
Nederland

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

Age between 18 and 60 years old

Exclusion criteria

acute or chronic pain symptoms
pregnant
pacemaker
insufficient knowledge of the Dutch language

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Single blinded (masking used)
Control:	Active
Primary purpose:	Basic science

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	01-06-2008
Enrollment:	128
Type:	Anticipated

Ethics review

Approved WMO

Date:	10-10-2008
Application type:	First submission
Review commission:	METC academisch ziekenhuis Maastricht/Universiteit Maastricht, METC azM/UM (Maastricht)

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
CCMO	NL23442.068.08