

# Influence of Implementation Intentions on compliance when using the 'online bewegingscoach'.

Published: 09-05-2006

Last updated: 14-05-2024

The following research questions are answered in the research. I. To what extent does filling out an Implementation Intentions form influence the compliance when using 'the online bewegingscoach'? II To what extent can intention be explained by...

|                              |                 |
|------------------------------|-----------------|
| <b>Ethical review</b>        | Approved WMO    |
| <b>Status</b>                | Recruiting      |
| <b>Health condition type</b> | Other condition |
| <b>Study type</b>            | Interventional  |

## Summary

### ID

NL-OMON30356

### Source

ToetsingOnline

### Brief title

Implementation Intentions and compliance

### Condition

- Other condition

### Synonym

chronicle pain

### Health condition

chronische pijnklachten aan houdings- en bewegingsapparaat

### Research involving

Human

## Sponsors and support

**Primary sponsor:** roessingh research and development

**Source(s) of monetary or material Support:** Ministerie van OC&W

## Intervention

**Keyword:** compliance, Implementation Intentions, rct

## Outcome measures

### Primary outcome

The baseline parameters (T0) exist of socio-demographic variables , the degree of catastrophizing, the degree of fear of movement , health locus of control, the attitude with respect to doing exercises, the influence of the subjective norm and the degree in which the patient has belief in its own capacities with respect to continuing the exercise programme (self-efficacy), the physical functional level and the perceived pain. These parameters are measured by means of questionnaires mentioned in table 2. On T2 to T4 the compliance is measured by means of self-evaluation questionnaires. The outcome variables (T5) are formed by the degree of compliance and the experienced pain. Also measured on T5 is the degree of satisfaction by means of a newly formed questionnaire. With respect to the questionnaires the following can be mentioned. For the questionnaire concerning the attitude a subgroup is asked firstly for their salient ideas with respect to following an exercise programme. These ideas are further processed in a questionnaire. This method has been taken over from Azjen (2002). The questionnaire regarding the attitude, self-efficacy and subjective standard has been focused on doing exercises. The questionnaire concerning the satisfaction is measured by means of 5 a point scale.

## Secondary outcome

not applicable

## Study description

### Background summary

Within the framework of the innovation centre and the related incoming money, the paindivision has started the development of an on-line application which will show home-exercises for patients (project "de online bewegingscoach"). The importance of exercises for the health of the individual has been shown in a lot of studies (Cooper, 2001; Plach, 2002; Saunders, Greig, Young & Mead, 2002). Physical activity is considered worldwide as a good preventative action for a lot of chronic disorders (Warburton, Nicol & Bredin, 2006). Several scientific studies have made it clear that the percentage of people that stops doing exercises before the programme has expired, is considerable (Hartigan, Rainville, Sobel & Hipona, 2000). When developing an application it is therefore important to build in tools which can promote the compliance. With the use of social cognition theories we can get better insight in underlying factors that may influence the compliance. In social cognition theories such as the TPB the individual intention is used as most important and best predicting factor of behaviour (Ajzen, 1991; Rogers, 1983). It appears however that, to proceed from intention to effective behaviour there are more important factors than one's intention alone (Orbell & Sheeran, 1998). It is valued that only 28% of intentions are converted into behaviour (Sheeran, 2002). It became clear from literature, how striking high the percentages were of patients who stuck to the exercises in some studies which made use of Implementation Intentions (Conner & Norman, 2005). In this experiment the theory behind Implementation Intentions will be used to promote converting a positive intention into desired behaviour.

### Study objective

The following research questions are answered in the research.

I. To what extent does filling out an Implementation Intentions form influence the compliance when using 'the online bewegingscoach'?

II To what extent can intention be explained by attitude, subjective norm and self-efficacy when using 'the online bewegingscoach'?

III To what extent do the HLOC, fear of movement and the degree of catastrophizing have influence on intention and is this influence directly or (as Ajzen predict) by means of attitude, subjective norm and self-efficacy when using 'the online bewegingscoach'?

IV How satisfied are patients with the use of 'the online bewegingscoach'?

The main hypothesis in this research is, that filling in Implementation Intentions by the users of the 'online bewegingscoach' leads to higher compliance.

## **Study design**

An experimental and a control group will be formed who both will use the 'online bewegingscoach' for four weeks when following their exercise program. The experimental group fills out Implementation Intentions with respect to place, time and type of exercises during the four weeks. At the end of every week both groups have to fill out a self-evaluation questionnaire regarding the compliance of the previous week.

## **Intervention**

The intervention has been set up as following. Both groups will be asked to follow the exerciseprogramme. which can be found on the Internet site of [www.r-motion.nl](http://www.r-motion.nl), for four weeks. This exerciseprogramme is 'tailor made' by means of the loadability estimation of the treating physical therapist of their former group. The exercises consist of mobilizing, muscle strengthening and conditional exercises. All these exercises have been done already once during the rehabilitation period. The 'tailor made' factor is present especially in the individual intensity (number of recurrences and number of serials) and the individual points of interest. Both the experimental and the control group imposed exercise frequency is 3 time per week . The quantity of exercises for both groups is equal. On mondays the experimental group will be asked to fill out their Implementation Intentions and send these by mail to [s.purmer@rrd.nl](mailto:s.purmer@rrd.nl). The Implementation Intentions must be formed with regard to time, place and type of exercise (that is mobilizing, muscle strengthening and conditional exercises). The Implementation Intentions are phrased as following: as...., then I do..... Then the participants of the experimental group will be asked to indicate on which day and at which time they do their exercises (Prestwick, Lawton, Conner & Taylor, 2003rd Rise, Thompson & Verplanken, 2003). At the beginning of the next week all participants in both groups will be asked to evaluate the previous week by means of a questionnaire in which will be asked if they have achieved their goals for the previous week, how much effort this costed physically and regarding organisation, what the reasons were why they have not (if so) reached their goals, and if they have done the exerciseprogramme alone or with someone else. This questionnaire must be send to [s.purmer@rrd.nl](mailto:s.purmer@rrd.nl). The participants in the experimental group also have to fill out their new Implementation Intentions for the coming week and send these to [s.purmer@rrd.nl](mailto:s.purmer@rrd.nl). If no mail has been received on Tuesday contact will be made bij telephone . Beside this subjective information, objective data are collected by collecting the inlogdata on the Internet site. This way it's possible to determine how frequently the participants log in, how long they have used their internet account and how many movements they have made through

the program.

### **Study burden and risks**

Risk of overload has been limited by taking the loadability level of the participant at locking the policlinic rehabilitation program. The interval between finishing the rehabilitation programme and start of the experiment has been kept relatively short, so that the loadability level is a good indication. The exercises of 'the online bewegingscoach' are the same as during the policlinic rehabilitation period. The exercises which the participant must carry out during 4 weeks are entirely tailor made, this means applied to the complaints and loadability level of the patient. The impact of the used questionnaires on the daily functioning of the participants is negligible small. We do not expect that the participants will experience more complaints in the field of mental well-being due to the questionnaires. The risk of developing mental complaints is being diminished by naming a trustworthy contactperson in the name of Dr. Warmerdam (rehabilitation physician paindivision) and taking an SLC larger than 179 as an exclusioncriterium.

## **Contacts**

### **Public**

roessingh research and development

postbus 310  
7500 AH Enschede  
Nederland

### **Scientific**

roessingh research and development

postbus 310  
7500 AH Enschede  
Nederland

## **Trial sites**

### **Listed location countries**

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

Inclusion criteria are: a good knowledge of the Dutch language; having followed and finished the rehabilitation programme in The Roessingh at least two weeks and upmost three months ago; age between 18 and 65 years old and the availability of a computer with internet connection at home. Sending and receiving e-mail may be of no problem for the participants.

### Exclusion criteria

Exclusion criteria are: serious medical counter-indications (such as hypertension, coronary and cardiovascular diseases, inflammation) for following an exercise program; decreased loadability due to complications after finishing the rehabilitation programme (exacerbation of complaints), psychosocial problems (SCL 179)

## Study design

### Design

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

### Recruitment

|                           |            |
|---------------------------|------------|
| NL                        |            |
| Recruitment status:       | Recruiting |
| Start date (anticipated): | 01-07-2006 |
| Enrollment:               | 60         |

Type:

Actual

## Ethics review

Approved WMO

Date:

09-05-2006

Application type:

First submission

Review commission:

METC Twente (Enschede)

## 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

NL11235.080.06