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# A qualitative analysis of three pain scales translated into Dutch:

## The Psychological Inflexibility Pain Inventory
## The Brief Pain Coping Inventory-2
## The Brief Pain Response Inventory

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# Abstract

This paper gives an introduction to the field of the Acceptance & Commitment Therapy [ACT]. This form of therapy tries to help chronic pain patients to obtain a normal quality of life. ACT focuses on *psychological flexibility*, measured by questionnaires which are only available in English. This paper provides a qualitative analysis of three such English questionnaires translated into Dutch: the Psychological Inflexibility in Pain Inventory [PIPS], the Brief Pain Coping Inventory-2 [BPCI-2] and the Brief Pain Response Inventory [BPRI]. 18 participants, of whom six were male and 12 were female, were tested within the study.

The study was able to identify problems within the Dutch versions of the BPCI-2 and the BPRI concerning the scale and questions about *mindfulness*. The subjects input were used to correct these problems. Furthermore, the study was able to show a good understanding of the PIPS.

# Introduction

Chronic pain affects millions of people all over the world. It is difficult to obtain a normal quality of life for those who are living with chronic pain, but also for the families of the victims. The World Health Organization compiled their data on pain patients from a study of 15 care centers in the United States, Europe, Africa and Asia. The study showed that about 22% of the care patients had continuous pain during the past six months. The pain was so severe that it interfered with their lives. Medication was used instantly by the patients (McCracken, 2005, p.1). In the Netherlands alone, "the prevalence of chronic (>3 months) musculoskeletal pain was estimated up to 44% of the population with 26% being reserved for chronic low back pain only" (Samwel, 2008, p.11). Because of this high number of chronic pain patients, a therapy that increases the quality of life is essential.

A number of treatments are available to help patients to deal with their pain. Here the Acceptance & Commitment Therapy [ACT] and its underlying factors will be discussed. In detail, this paper focuses on a qualitative analysis of three pain scales that measure coping strategies of chronic pain patients. More important, it tries to identify a patient´s amount of pain avoidance behavior, called *psychological inflexibility*. Those three questionnaires are already available in English, and have to be translated and validated into Dutch for treatment of chronic pain patients in the Netherlands. For this purpose, this paper first provides an introduction about chronic pain. Then, a summary of ACT – and its underlying structures - will be given. Further, the paper discusses the theory that was applied to obtain the qualitative data.

Living with chronic pain often means a huge change in everyday life. According to Wicksell et al. (2008), people with chronic pain disable themselves by avoiding personal experiences that can provoke pain. Avoidance of activities produces short term relief, but at the same time prevents gaining satisfaction from these activities. This behavioral pattern of avoidance is called *psychological inflexibility*. According to McCracken & Vowles (2007), this inflexibility affects the patients' behavior and appears whenever pain or the possibility of pain occurs, leading to a behavior of avoiding situations with pain. To avoid this behavior, and lead a relatively normal life, it is important for chronic pain patients to learn how to cope with their pain and how to accept it. Acceptance & Commitment Therapy [ACT] helps chronic pain patients to cope with their fears and "enhances people's ability to be aware of the psychological event and the situation as two separate entities" (Wicksell et al., 2008, p.492), allowing them to adjust their feelings and behavior. ACT aims to help patients to gain *psychological flexibility* and abandon behavioral pattens of *inflexibility*. Within ACT, the patients' psychological flexibility is central and not the pain. By increasing flexibility, a change in behavior can be produced, which can lead to a more satisfactory life.

To understand how ACT works and changes the perceptions of the patients, it is important to understand the underlying theory of ACT: the Relational Frame Theory [RFT]. This theory will be discussed next.

## ***Relational Frame Theory***

As A-Tjak and De Groot (2008) explain it, RFT states that besides through experience and model learning, human beings learn by interacting verbally with their environment. By verbal interaction (or *verbal behavior*) the ability of associating spoken words with symbols and written words is meant. While humans interact verbally with one another, the vocalized words also trigger thoughts that are associatiated with those words. This sort of verbal interaction creates a network of associative thinking and paradigms, enabling us to function in highly complex situations without ever experiencing them before. On the one hand this relational framework gives us the opportunity to behave appropriately in dangerous and unknown situations, on the other hand it can create problems. Because the relational framework is an associative network, our experiences, thoughts and words can become modified throughout the process of associating, experiencing the new thoughts and feelings as real. In other words, we can teach ourselves to react to certain external phenomena in a negative way.

RFT states that the relational networks cannot be erased or modified, because these networks are fixed. Because the Acceptance & Commitment Therapy acts on the assumptions of RFT, ACT assumes that the only way to manipulate these fixed networks is by adding less damaging contexts, like taking oneself not too serious and literally (*cognitive defusion*) (A-Tjak & De Groot, 2008, p.14). Transforming those assumptions onto the problems chronic pain patients' experience, it becomes clear why they do not get involved in many activities any more. Chronic pain patients become anxious of getting involved in any sort of activity because it could result in pain, even if it also produces satisfaction at the same time. Seeing their pain as a fixed factor, always occurring whenever they get involved in any actions, it prohibits them from doing things they could otherwise enjoy. This psychological inflexibility to break out of the vicious circle of avoidance leads to a whole inhibition of their social lives. ACT can help to separate of those thoughts by helping patients to be aware of the benefits psychological flexibility can give. Being active again is just one of those benefits; more important is the change of thoughts and behavioural pattern that can be achieved through ACT.

## *Acceptance & Commitment Therapy*

Before one can understand such a complex form of therapy like ACT, it is important to understand its origins. ACT is not the first therapy that tries to alter behavior by treatment. P.A. Bach and D.J. Moran (2008) described the development of the different forms of therapy within their book “ACT in Practice” in detail. They distinguished three waves of behavior therapy: Classical Conditioning, Operant Conditioning & Cognitive Therapy and Acceptance & Commitment Therapy.

The first researchers who tried to influence behavior directly were I.P. Pavlov and J.B. Watson – both members of the school of behaviorism. They used classical conditioning as an instrument to change behavior of their counterparts. Waton’s famous experiment with *Little Albert* showed that it was possible to attain a specific change in behavior by applying stimuli. Even though it appeared to be possible to change someone’s behavior by conditioning, behaviorism described the human behavior purely objective with the goal to control and predict behavior. Behaviorists were only interested in observable properties – all other human characteristics like thoughts, emotions, feelings and language were excluded from the behavioristic view. Those shortcomings led to the development of new approaches.

After the ineffective trials of classical conditioning to conform the requirements that were needed to understand the complexity of human behavior, behaviorism expanded and produced a new approach: operant conditioning. Taking cognition and the human ability to learn into account, reinforcement and punishment were used to create the desired behavior. But the second wave of behavioral therapy was not influenced by operant conditioning alone. Cognitive Behavioral Therapies [CBT] were introduced around 1950s, trying to change the thoughts and cognition of the opponent by reattribution and reality testing to let the patient develop a more accurate view of the self. Although cognitive behavioral therapy seemed to have a great effect on the behavior of the patient, there are neither “basic theoretical principles that are supposed to underlie the therapy” (Bach & Moran, 2008, p.29), nor is there any empirical evidence that the cognition of the patient really changes throughout the therapy.

Trying to take a more evidence-based approach, a third wave of behavioral therapies emerged. It was a dimensional approach: all domains of a patients' life are taken into account while the therapy is adapted. The *Acceptance & Commitment Therapy* is such a concept. While it grew out of the CBT in the 1980s, it was not reviewed by S. Hayes until 1999. Ever since, ACT is used by more and more psychologists. Although the therapy shows a great success within treatments, it coexists side by side with CBT. CBT is still used within therapy settings because it proves to be effective, but ACT continues to gain popularity within the psychological world (Bach & Moran, 2008).

To apply a therapy like ACT, it is important to identify the factors that provoke psychological inflexibility, and to define the cause of the pain experience. Psychological inflexibility is the counterpart to psychological flexibility. Within ACT, patients try to gain flexibility and abandon inflexibility. Psychological flexibility is central within ACT. ACT consists of six processes that contribute to psychological flexibility:

1. Acceptance
2. Defusion
3. Contacting the present moment
4. Committed Action
5. Self as Perspective
6. Values

Because the components are so important for the understanding of how ACT works, a short description of those processes is given, depending on the book "ACT in Practice" written by P.A. Bach and D.J. Moran (2008):

1. **Acceptance** means "to experience the feelings as they are (just feelings) and not as something to be avoided" (Bach & Moran, 2008, p.8). This means that one has to be willing to experience events like they are, without defense or the evaluation of any kind of emotions.

2. When someone takes their own thoughts literally, it can lead to *cognitive fusion*: experiencing those thoughts not only as thoughts any more, but as literal truth. This can lead to a behavior of avoidance: avoiding al kinds of situations that trigger those beliefs. Strategies of **Defusion** can free the person from taking those thoughts literally and lets the person experience their thoughts as thoughts only again.
3. Being fully aware of what happens around you and living in the *here and now* is referred to as **Contacting the present moment**. It is important not to live in the past and not to worry about the future, but to be absolutely involved in what happens around you at that very moment, because experiences only can be gained by being aware of the present.
4. **Committed actions** are behaviors that patients could not perform in the past, but are able to do so after an intervention. By being unable to show a certain behavior, like being unable to step into a social interaction for example, the life of a patient can change in a negative way. A committed action intervention during therapy can help getting "their lives back on track" (Bach & Moran, 2008, p.9), enhancing the patient to show a behavioral pattern that was impossible in the past, leading to a more satisfying way of life for the patient.
5. **Self as perspective** is divided into three ways of looking at the self:
    a. Self as content
    b. Self as process
    c. Self as context (or: Self as perspective)

    *Self as content* is referred to as how someone describes and evaluates oneself.

    *Self as process* is the self-awareness one has. Being able or unable to note ones own processes like thoughts, feelings and bodily sensations.

*Self as context* can be described as the position from which someone observes his or her experiences and actions.

6. **Values** can be describes as "chosen life directions" (Bach & Moran, 2008, p.10). It is not about choosing a certain goal one wants to attain, but a course of action that will guide ones actions. Values are lived in the present and are never wrong.

The six processes of ACT are depicted in a model called the "Hexaflex" (Figure 1):

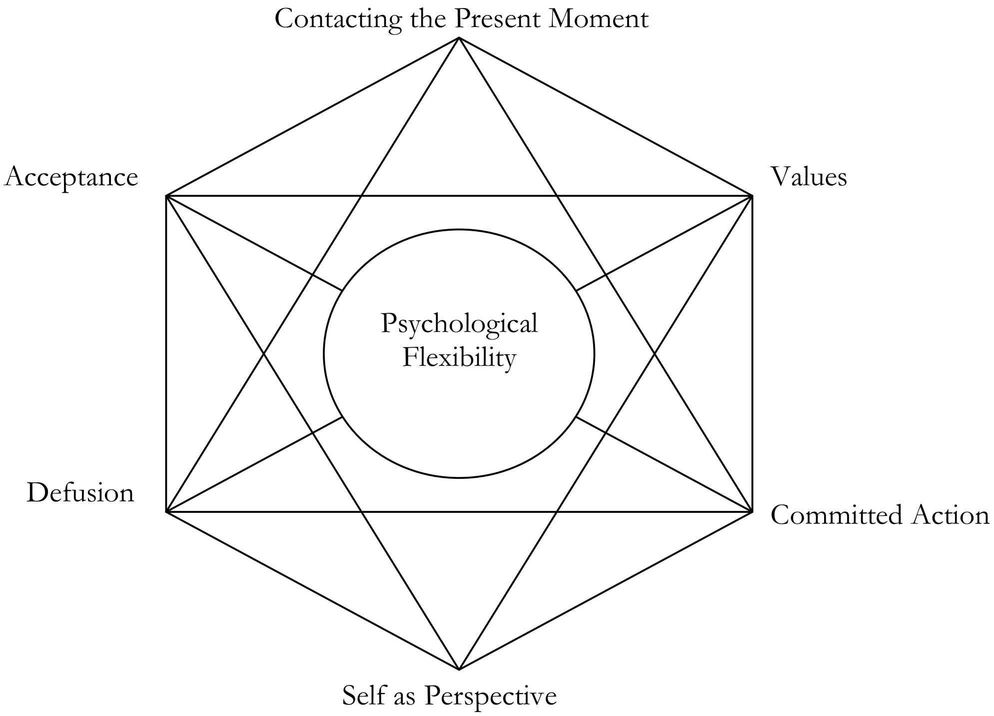

Figure 1: The ACT Hexaflex Model

The six components that define a successful working of ACT are interrelated with one another. They can hardly be seen as separate entities, because one influences the other. An increase of defusion for example can lead to higher acceptance. Therefore ACT uses all core processes to attain psychological flexibility, which is the goal of the ACT therapy.

The ACT Hexaflex can be divided into two parts (Figure 2). The first unit is called *Acceptance and Mindfulness*. The second one is named *Commitment*. Those two different units form together all processes of ACT.

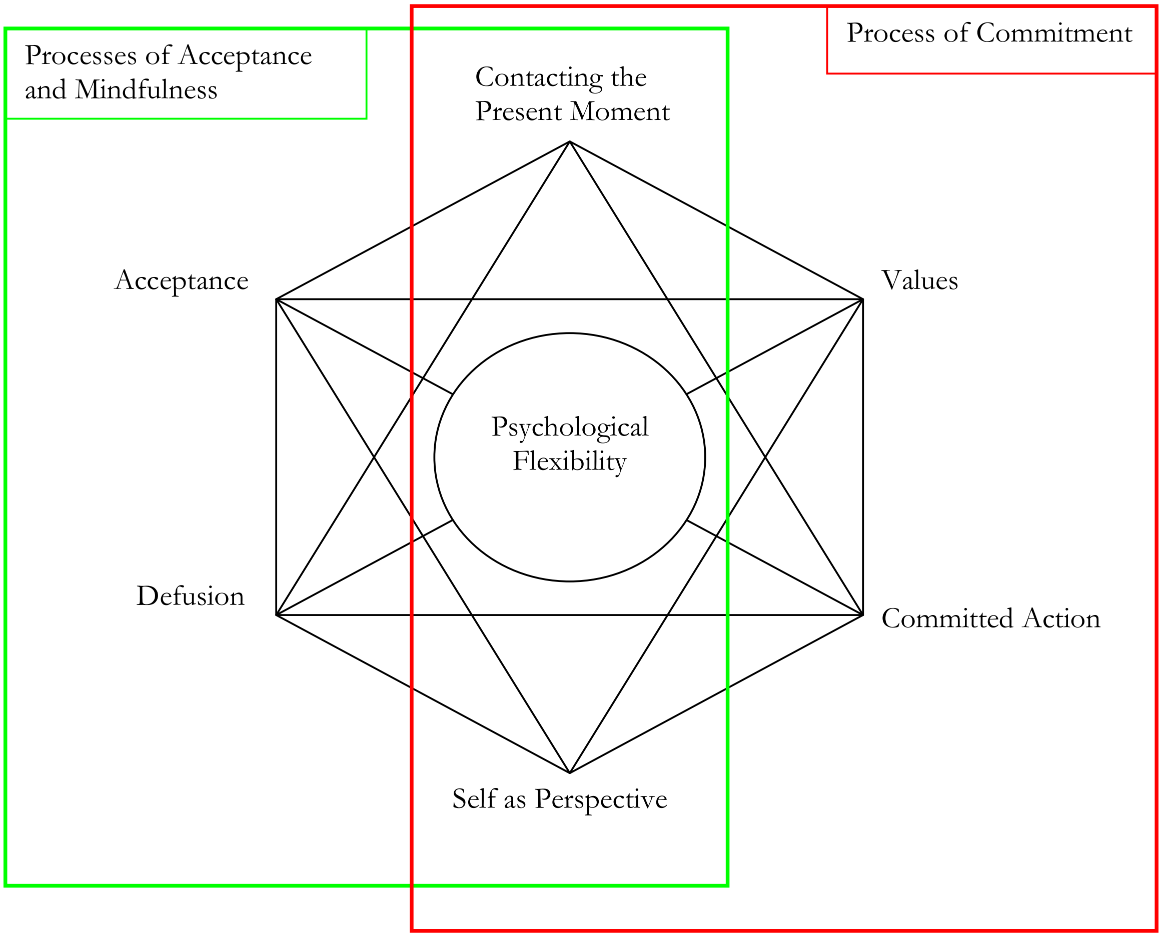

Figure 2: The ACT Hexaflex Model divided into parts

*Acceptance* is specified as the willingness to add less damaging contexts, taking oneself not literally and accepting the situation for what it is. *Mindfulness* is referred to as being aware of the situation, living in it and not to let the thoughts you have within your network influence how to perceive the situation. Finally, *commitment* is characterized as the ability to let your own values guide your actions, not the thoughts that are manipulated through the relational networks. At the same time it is important to be fully aware of how the situation is converted by your own actions (A-Tjak & De Groot, 2008, p.17).

Those two main processes, each consisting of four of the six components of ACT, are important for the therapy to work and have to be monitored carefully. Measuring whether the patient is able to adapt to the new behavioral and thinking pattern provided within the therapy can help defining if the Acceptance & Commitment Therapy is working and enabling the patient to live a more satisfactory life.

## *Measuring (in)flexibility in chronic pain patients*

Different instruments are available, measuring important aspects of psychological (in)flexibility and the ability of coping with pain, required for ACT. This paper focuses on three such instruments: the Psychological Inflexibility in Pain Inventory [PIPS], the Brief Pain Coping Inventory-2 [BPCI-2] and the Brief Pain Response Inventory [BPRI]. The first two of the questionnaires are already validated and available in English, the third one still needs to be published. While those forms are already accessible in English, they still need to be accredited in Dutch. It is important to have Dutch versions of the forms to assure a perfect understanding of the questions, in order to safeguard a successfully applied intervention. Therefore a validation of the three forms needs to be done in Dutch.

The first of the three questionnaires is the PIPS (Wicksell et al., 2008, p. 492). It measures the (in)flexibility of a chronic pain patient: the ability to deal effectively with negative occurrences like negative emotions or chronic pain. The PIPS is constructed by means of 16 questions. The form is made up of two subscales: *avoidance*, which contains ten items, and *cognitive fusion*, which consists of six questions. The participant has to use a 7-point Likert-type scale that rates from *never true* to *always true*. Higher scores on this scale indicate a greater psychological inflexibility.

The other two questionnaires, BPCI-2 and BPRI, on the one hand measure coping strategies that are used by chronic pain patients to deal with the inevitable pain and on the other hand measure psychological (in)flexibility. Both forms ask the subject to indicate how many days of the last week they used a certain coping strategy. Therefore its scale ranges from 0-7. The BPCI-2 and BPRI are much alike; the BPRI actually is an adjusted version of the BPCI-2. The BPCI-2 consists of 19 items, the BPRI of 15. Six statements of the BPRI are literally taken over from the BPCI-2. The other nine items of the BPRI are similar to those of the BPCI-2. While the BPCI-2 already is validated, the BPRI still needs to. Because the BPCI-2 and the BPRI are much alike it can be assumed that the BPRI should provide the same factorloadings and subscales as the BPCI-2.

McCracken and Vowles (2007, p.703) published an analysis of the subscales of the BPCI-2 showing a three-factor solution: 1. eight items ask about the pain management techniques one uses and is called *Pain Management Strategies*; 2. six items state aspects of reversed avoidance and pain control and is called *Pain Acceptance*; 3. the third subscale is called *Awareness and Values-based actions* and consists of five items that ask about the awareness of painful feelings and thoughts and whether one is able to participate in value-oriented actions.

All three questionnaires are useful in monitoring the ongoing therapy. They give a good insight in whether ACT is internalized by chronic pain patients. Therefore, Dutch versions of those questionnaires are indispensible within the Dutch care of chronic pain patients. This paper provides a qualitative analysis of the three questionnaires for use in the Netherlands.

## *The Three-Step Test Interview*

The first step within a validation cycle is a qualitative analysis of the questionnaires. The analysis is used to obtain data about *how* the questionnaires are filled in and *why* a subject reacts in a certain way.

It can be time consuming to carry out a qualitative analysis, but it has two major advantages. First, problems can be identified and adjusted before quantitative data is collected on a big number of respondents. Second, and more important, it helps to determine whether the respondents understand what the questions intend to ask.

For each of the three questionnaires -the PIPS, BPCI-2, and BPRI- the gathering of the data was conducted by using two of the three steps of the Three–Step Test–Interview [TSTI] developed by Jansen and Hak (2005). They tried to detect the greatest problems within the completion of a questionnaire and divided it into three steps:

1) *Expert Analysis*
2) *Think Aloud Technique*
3) *Cognitive Interview*

Using the *expert analysis*, almost al mistakes and problems occurring in a questionnaire can be eliminated (Jansen & Hak, 2005). Using an expert analysis can lead to a better questionnaire, which is easier to understand for the respondents.

The *think aloud technique* requires from the subjects to tell what they are thinking while they are filling in the form. This can really help figuring out the most common problems because the observer immediately can identify what the respondents cannot understand.

A *cognitive interview* is accomplished after the completion of the form. Asking specific questions about problems can lead to an advanced understanding of how the subject experiences the questionnaire and which problems occurred while filling it in.

According to Jansen and Hak (2005), it requires approximately ten respondents to discover the major problems within a questionnaire. Therefore, a minimum of ten test subjects is required for the test. In their paper, Jansen and Hak (2005) also expressed that it is important to interview a variance of respondents as subjects with a high education level could have fewer problems to understand particular questions. As this analysis draws participants from a predetermined, heterogeneous pool of people, with different backgrounds, such variability is likely to occur.

The first step of the TSTI was not used within this study. It was chosen to disregard the first step and give a rough draft of the translated questionnaires to the participants. In stead of an expert analysis in terms of Jansen and Hak (2005), the first step, before research began, was a *forward-backward translation* of the English questionnaires into Dutch.

The *forward-backward translation* was executed before the start of the experiment by means of translation of the questionnaires in three steps. First, the original questionnaires were translated by an expert into Dutch, to gain Dutch versions of the forms. During the second step, another independent translator converted the new Dutch versions back into English. The third step required an analysis of the differences between the translations. The new, back-translated English forms were compared to the original questionnaires to gain access to the accuracy of the translation. Those three steps were executed until the desired outcomes were provided.

After the translation was completed, the new Dutch questionnaires could be analyzed by means of the *think aloud technique* and the *cognitive interviews*. This analysis will be discussed within the following sections.

# Method

## *Participants*

Participants for the test were found in the revalidation center “Het Roessingh” in the city of Enschede, The Netherlands. Only patients with a chronic pain disease were tested. The subjects belonged to fixed therapy groups, and were asked by the group leaders to participate in the study. Participation was voluntary and did not award anything. In total 18 participants of four groups participated in the research.

The groups in therapy differed from each other concerning the advancement of treatment. Group 1 was a heterogeneous group with participants who differed in their advancement of treatment. Group 2 to 4 on the other hand were homogeneous groups within the groups: the groups themselves differed in advancement of treatment, but within the groups, everyone was in the same week of treatment. Further, concerning age and gender all groups were heterogeneous.

In total 18 subjects participated in the analysis of the test, six were male and 12 were female. For the female participants mean age was 47.33 years (SD=13.26; range=24–68). The mean age of the male participants was 45.17 years (SD=13.57; range=27–58).

Respondents one and two of group 1 were already four weeks in therapy. Respondent three of group 1 was eight weeks in therapy, respondent four was three weeks in therapy and respondent five of group 1 was seven weeks in therapy. Respondents six and seven were group 2 and already six weeks in therapy. Subjects eight to 12 of group 3 were six weeks in therapy and subjects 13 to 18 of group 4 just started therapy and were in their first week of treatment.

Here an overview of the participants’ data is provided (table 1, p. 17):

Table 1: Overview of the participant's data

| Respondent No. | Group No. | Version Questionnaires | Gender | Age | Weeks in Therapy | Chronic Disease | Education Level |
|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | Male | 58 | 4 | Back pain | LTS |
| 2 | 1 | 1 | Male | 27 | 4 | Whiplash | Unknown |
| 3 | 1 | 1 | Female | 58 | 8 | Back pain | HBO |
| 4 | 1 | 1 | Female | 46 | 3 | Thyroid disease | LHNO |
| 5 | 1 | 1 | Female | 44 | 7 | Fatigue Syndrome | LHNO |
| 6 | 2 | 1 | Female | 24 | 8 | Chronic Pain | MBO |
| 7 | 2 | 1 | Male | 29 | 8 | Whiplash | MBO |
| 8 | 3 | 2 | Female | 47 | 6 | Fibromyalgia, COPD, Crohn's disease | MBO |
| 9 | 3 | 2 | Male | 51 | 6 | Arthritis | MAVO |
| 10 | 3 | 2 | Female | 68 | 6 | Whiplash | HBO |
| 11 | 3 | 2 | Male | 55 | 6 | Arthritis | HAVO |
| 12 | 3 | 2 | Female | 54 | 6 | Fibromyalgia | LBO |
| 13 | 4 | 3 | Female | 45 | 1 | Back Pain | MAVO |
| 14 | 4 | 3 | Male | 51 | 1 | Fibromyalgia | LTS |
| 15 | 4 | 3 | Female | 51 | 1 | Fibromyalgia, Arthritis, Hernia | LHNO |
| 16 | 4 | 3 | Female | 28 | 1 | Whiplash | MAVO |
| 17 | 4 | 3 | Female | 38 | 1 | Fibromyalgia | MBO |
| 18 | 4 | 3 | Female | 65 | 1 | Back Pain | MBO |

### *Procedure*

Data was collected in terms of the *think aloud technique* and *cognitive interview* (Jansen & Hak, 2005). These techniques can be combined easily by letting the subject think aloud while filling in the questionnaire and asking questions afterwards.

In the actual study, the *think aloud technique* and *cognitive interview* had to be adjusted to the given circumstances. Because the first and second participants had problems to ignore the quiet observer and kept asking questions, it was not possible to maintain this procedure. Also because of the limitations of the participants' concentration due to the chronic pain, the participants were not able to remember things they said during the cognitive interview. Therefore, it was chosen to adjust the technique and interact with the participants. The procedure was adjusted into not being a quiet observer, but to interact with the participants during the task by asking and answering questions and embedding the *cognitive interview* within the *think aloud* session.

While conducting the *think aloud technique,* a voicerecorder was used, so the statements of the respondent could be analyzed afterwards. Also, the observer monitored the nonverbal statements of the respondent, which can indicate difficulty answering certain items of the questionnaire (Jansen & Hak, 2005). During the *cognitive interview*, questions were asked about statements of the participant and the behavior. Finally, all participants were asked about their overall opinion concerning the questionnaires.

## ***Tasks***

Each respondent was tested separately with the observer in a room and got a standardized instruction. They were instructed to read out loud every question and fill it in. Also they were instructed to say out loud everything they thought, including things they did not understand. The participants were instructed to pause whenever they needed to, to avoid a feeling of tiredness or pain. They also were advised to stop participation whenever they felt uncomfortable.

The three translated questionnaires were presented in a fixed order, first the PIPS was shown, then the BPRI–2, finally the BPCI was presented. Although all participants were presented with those three forms, the questionnaires within the different groups differed from one another. After every session, adjustments were made based on the problems and suggestions from the participants. Therefore group 1 and 2 got the rough draft of the forms: “Version 1”, group 3 obtained “Version 2” and group 4 received “Version 3”. The three different versions of the form can be found in the chapter called attachments on page 38 – 46.

## ***Results***

The data that was obtained from the *think aloud technique* and the *cognitive interviews* was used to adjust the questionnaires. Major problems, that were found after every member of a group was interviewed seperatly, were fixed. Not all problems that occurred were modified, but after every adjustment that was made, the new questionnaires were presented to the participants of the following group. In total three versions of the questionnaires were presented to the four groups. All problems that occurred during the interviews are listed in the attachment (table 2- 4, p. 50 – 53).

In the following, the problems of the different questionnaires are provided and the adjustments that were made are pointed out.

### PIPS

In total, the PIPS was presented to all of the 18 participants. The first version of the PIPS contained small errors such as a few spelling mistakes, but also large ones like a missing item (question 1: “Ik zou er bijna alles aan doen om van mijn pijn af te komen” was missing and included into the later versions). After those changes, the data was analyzed to correct the first version of the questionnaire. All problems, which are listed in table 2 (attachment p. 50), were taken into consideration while improving the questionnaires.

The first version of the PIPS was shown to seven participants, of whom five reported problems. Two of those participants had general problems with the understanding of the questionnaire. The first one made remarks out loud that were not consistent with his answers within the questionnaire. The other participant had problems understanding the questionnaire, because Dutch is a foreign language for him. The other three participants had specific problems with some of the items. Within the first version, four questions were perceived to be difficult: item 10, 11, 12 and 14. Question 10 (“Ik ben niet degene die controle heeft over mijn leven, dat is mijn pijn") was considerd difficult by one participant because of the syntax. The participant recomented a change in the word order to make the sentence more understandeable. Question 11 ("Ik moet begrijpen wat er mis is om verder te kunnen") was considered vague by two participants. They had problems with the statement because the word "moet" (Dutch for "*have to*") seemed to be too demanding. They did not agree with the statement and both said that they "would like" to know, but did not "have to". Question 12 ("Door mijn pijn maak ik geen plannen meer voor de toekomst") was seen as hard to fill in by one participant because she did not understand whether the question referred to behavior she showed before participating in the therapy or whether it referred to her current situation. Another participant had problems with question 14 ("Ik zeg geplande activiteiten af wanneer ik pijn heb"). She could not fill in the question because from her point of view, it did not apply to chronic pain patients. She argued that chronic pain patients do not make appointments any more, therefore the statement whether one cancles appointments because of pain, did not apply.

For the second version of the PIPS, the sytax of question 10 was changed. Also, item 1 was added and spelling mistakes were corrected. The other questions, item 11, 12 and 14 were chosen not to alter, because they were perceived as minor problems. It was chosen to disregard the problems and see whether participants in the following group would experience the same problems. After the adjustments were made, the second version of the questionnaire was presented to group 3.

The second version of the PIPS received a lot of comments concerning the scale. While all participants agreed that it was easy to use, two of the participants found it difficult to see the scale, while they filled in the questionnaire. One of the participants filled in the questionnaire and only used the right side of the scale. When the observer interfered, she had a closer look and filled in the questionnaire one more time. Further, the introduction was criticized. One of the participants did not understand whether the questionnaire asked questions about how one used to behave before the residence in the rehabilitation center, or whether it was about the current state. Besides those two difficulties, two items from the list appeared to be too complex: question 7 and 16 (formally statement 6 and 15 in version 1 of the PIPS). Question 7 ("Ik zeg dingen zoals "Ik heb helemaal geen energie.", "Ik ben niet goed genoeg.", "Ik heb geen tijd. ", "Ik durf het niet aan. ", "Ik heb teveel pijn.", "Ik voel me te slecht." of "Ik heb er geen zin in."") was perceived as too long. Also too many statements that differed from one another were made. Two participants did not know how to react to that question. Question 16 ("Ik onderbreek activiteiten wanneer ik pijn begin te voelen of wanneer de pijn erger wordt") was criticized by one participant. The question asks whether you stop all activities when you feel pain. She said that it was difficult for her to deal with the question, because she already is at the final point of her treatment. At this advanced state of treatment, one learns to behave in a certain way, and deals different with the pain.

After the session, a few adjustments were made: spelling errors were corrected, a indication of the scale was added right above the answers, question 7 and the introductory text were changed and now said that the PIPS referres to the current state of behavior. Item 16 was not changed. Instead, after analyzing the statement of the participant, it was chosen to expose the questionnaire to a new group of participants which just started treatment in the revalidation centre. This could reveal whether thinking patterns concerning item 16 really change throughout treatment.

The third version of the PIPS was presented to the six participants of group 4, of whom two had problems with the questionnaire. One participant had problems using the scale. The other participant was not able to answer question 10 ("Ik stop veel energie in het vechten tegen mijn pijn") and question 13 ("Door mijn pijn maak ik geen plannen meer voor de toekomst"). She did not understand which sort of *energy* was meant within question 10:

mental or physical? Within question 13 she had problems with the word *future* and did not know whether future nearby or far away was meant.

Those problems were considered minor and should not be changed for the final version of the PIPS. The participant who had problems using the scale had problems with all scales of every questionnaire. The scale schould not be changed because other participants did not have problems applying the scale. The other problems concerning item 10 and item 13 of the scale also should not be changed. It was the first time that anyone complained about those problems with the questions. Also it seemed like the participant only had problems with those items because she *overanalyzed* them. Due to overanalyzation, problems appeared that under normal testing circumstances should not occur. This problem will be discussed in detail later within in the *Discussion*.

### BPCI-2

17 of the 18 participants filled in the BPCI-2. A detailed overview of all the problems can be found in table 3 in the attachment (p. 51 – 52).

The first version of the questionnaire, which was presented to group 1 and 2, revealed many problems. Six of the seven participants of group 1 had huge problems to fill in the BPCI-2.The only participant who did not display any problems, was a woman with a high educational degree. For the others, the main problem was the scale. It used a measurement in days and ranged from 0 to 7. Participants were asked to indicate how many days they used a specific coping strategy within the last week. But they were unable to do so. Either they did not fill in questions because it was not possible to answer the question with this scale or they made an attempt in filling it in, but completely changed the scale in their minds. One participant treated the scale like a "Yes/No"-scale and simply filled in a high number when the answer appeared to be "yes". Another subject tried to apply the PIPS scale and said things like "Never true" and "Almost always true".

Besides the problems with the scales, there were other difficulties. The BPCI-2 displayed five problems in total with items 1, 4, 8, 13 and 15. Question 1 ("Moedigde mezelf aan of ging anders denken over mijn situatie of over de pijn") was perceived as a difficult item by one of the participants because it contained too much information. She suggested splitting up the question and convert it into three separate ones. Question 4 ("Ging door met activiteiten zonder me door de pijn te laten tegen houden.") was difficult for one participant. The question was about whether to continue an activity without stopping because of the pain. The participant said that it always depends on the severity of the pain. The same participant also experienced question 8 ("Realiseerde me dat pijn geen reden is om niet actief te zijn.") as difficult. He considered it ambiguous, but was unable to explain why. It seemed like he had problems with the double negation. Question 13 ("Bleef me bewust van de pijn en was me op hetzelfde moment ook bewust van de hele situatie") was criticized by one participant. The question asked whether someone is aware of the pain and also aware of their surroundings. The participant said that chronic pain patients are always aware of the pain and was not able to fill in the question. Finally, question 15 ("Gebruikte de pijn als reden om iets niet te doen.") seemed to be a complex one for one participant. This problem might have occurred because he is not a native speaker.

Adjustments were made to the scale of the BPCI-2. Further, it was chosen to disregard the other problems at this time, and see whether participants still had problems with those items in the second version of the form – with the changed scale. Although the problems with the five items were specific, it was chosen not to change anything and have a closer look whether those problems really were due to content of the questions or simply occurred because of the problems with the scale.

The second version of the BPCI-2 was presented to the third group. An improvement of the BPCI-2 scale could be seen immediately. While six of the seven participants struggled with the scale in version 1 of the BPCI-2, here only one person had problems with the scale. All of the other participants could use the scale in a proper way. The scale still ranged from 0 to 7, with 0 indicating "never" and 7 indicating "always". While the first version of the BPCI-2 mostly revealed problems with the scale, problems with statements could be found now. Five statements were identified to be difficult: item 1, 12, 13, 14 and 18. Question 1 ("Moedigde mezelf aan, of ging anders denken over mijn situatie of over de pijn.") was experienced as complex by only one person, but the participant managed to understand the statement after the second time he read it. Question 12 ("Merkte de pijn op zonder er wat aan te doen.") was ambiguous for one participant. The participant had problems at first with the statement, because it asks about whether one experiences pain without doing something about it. He said that chronic pain patients always experience pain, without being able to do something about it. When he said it out loud, he was able to fill in the question. Question 13 ("Bleef me bewust van de pijn en was me op hetzelfde moment ook bewust van de hele situatie") was seen as a difficult statement by two of the five participants. They experienced the statement as very vague and could not be filled in by the participants. One of the participants reported question 14 ("Koos ervoor om niet te worstelen met gedachten of gevoelens omtrent pijn.") also as vague. She could not describe why she did not understand the question. Question 18 ("Deed wat het beste werkt voor doelen in mijn leven, zonder rekening te houden met wat ik op dat moment dacht of voelde.") was seen as too complex by four of the five respondents. This indicates that this question is hard to understand for the participants. Three of the participants were able to fill in the question after they read it out loud several times and converted the question into their own words. Only one of those four subjects was unable to understand the question at all.

No changes were made to the questionnaire. Question 1 was not changed because the participant managed to fill in the question after intense reading and thinking. Question 14 also was not changed because the participant could not describe the specific problems with the item. The other questions, item 12, 13 and 18, were not changed despite the problems experienced with those questions. Those items refer to *mindfulness* and are paraphrized very vague. Therefore problems can occur. Problems concerning questions about *mindfulness* will be discussed in detail within the *Discussion*.

The third version (which was the same one as "Version 2") of the BPCI-2 was presented to the final group. This group just started treatment. In total, three of the six participants experienced problems with the questionnaire.

Two participants had problems with the scale and did not know how to use it properly. Another problem was question 8 ("Realiseerde me dat pijn geen reden is om niet actief te zijn."), which was found difficult by two participants. A double negation is used within the question. Although both participants were able to fill in the question, it was experienced as difficult. Two participants had problems filling in question 18 ("Deed wat het beste werkt voor doelen in mijn leven, zonder rekening te houden met wat ik op dat moment dacht of voelde."). It was considered to be too complex and too difficult.

Again, problems with the scale and item 18 occurred. The problems with the scale can be abandoned, because one of the participants had problems with all scales and therefore might have general problems with usage of scales. Also, the other four participants did not complain about the scale. Problems with item 18 still occurred and it should be seriously considered to rewrite the item, although questions about *mindfulness* always are vague. Question 8, on the other hand, should be revised if possible because of the difficulties with the double negation.

### BPRI

The BPRI displayed almost the same problems as the BPCI-2 – not surprising since it contains a lot of the same items as the BPCI-2. An overview of all problems is provided in the attachment (table 4, p. 53).

In total only 12 of the 18 participants filled in the questionnaire. This was either due to concentration problems, tiredness or a lack of understanding.

The first version of the BPRI was filled in by only four of the seven participants. The other three subjects did not want to fill it in because they were experiencing tiredness or did not understand the scale at all. Three of those four subjects who did fill in the form had major problems with it. All three participants had problems with the introduction, experiencing it as too long and extremely complex. Further, only three questions were seen as complicated: item 3, 8 and 15. Statement 3 ("Deed wat het beste werkt voor doelen in mijn leven los van hoe ik me op dat moment voelde") is the same one as item 18 in the BPCI-2. The participant did complain about the difficulty and length of the question. He felt unable to fill in the item. Contradictory to this declaration, the participant did not complain about the same statement within the BPCI-2 (question 18).

Question 8 ("Bleef me bewust van mijn pijn en was me op hetzelfde moment ook bewust van de hele situatie") within the BPRI was criticized to be vague and difficult to understand. The same person also criticized the same item within the BPCI-2 (item 13). The last statement, item 15 ("Offerde iets belangrijks op om mijn pijn onder controle te krijgen"), was considered vague. The question asks whether one gives up something important to control the pain. The participant would have liked to see an example for "something important". But she was able to fill in the question, so problems seemed minor.

Like within the BPCI-2, the scale of the BPRI was changed. Also the introductory text at the beginning was changed to fit the new scale. Further no adjustments were made, because question 15 was considered minor. The other two questions, item 3 and 8 display the same problems of *mindfulness* like within the BPCI-2, which will be discussed later.

The second version of the BPRI was presented to group 3. Only four of the five respondents filled it in. As well as with the BPCI-2, the scale of the BPRI improved.

Only a few problems were detected. The participants complained about item 3, 6 and 8. Question 3 ("Deed wat het beste werkt voor doelen in mijn leven, zonder rekening te houden met wat ik op dat moment dacht of voelde"), which is the same one as statement 18 within the BPCI-2, was still declared as difficult. Two of the four participants had problems anwering it. Rather interesting was that one of the participants that had problems with it within the BPCI-2, did not have problems with it in the BPRI. He seemed to understand the question within the BPCI-2. The other participants were not able to fill in the question reliable. Further, question 6 ("Erkende de pijn en realiseerde me dat ik het niet hoefde te veranderen") was seen as vague by one participant. He filled in the question, but had problems understanding it. The last problem within the BPRI was statement 8 ("Bleef me bewust van mijn pijn en was me op hetzelfde moment ook bewust van de hele situatie"). The same statement was criticized by the same person within the BPCI-2. She was not able to fill it in reliable.

No adjustments were made to see whether problems with the questionnaire continued. Also, the problems that occurred were due to to the complexity of question 3 and 8, which continue to create problems. Further, question 6 was not adjusted because the participant was the first one to complain about the question.

The third version (which was the same one as "Version 2") of the BPRI was presented to group 4. Only four of the six participants filled in the questionnaire. Two of those four participants experienced problems. Both participants had problems with the scale of the BPRI and did not exactly know how to use it. Another problem was experienced with question 6 ("Erkende de pijn en realiseerde me dat ik het niet hoefde te veranderen"). The participant had difficulties understanding and answering the question, but could not say why.

Again, question 6 was experienced as difficult. It should be tried to adjust the item without changing the essence of the question. The scale of the BPRI should not be changed.

Besides the problems that were found within the different versions of the questionnaires, other observations could be made. It was observed that about half of the participants did not read the introductory text that explained the questionnaires. This led to a lack of understanding of the intention of the questionnaires. Also it was observed that almost all participants had problems to apply the *think aloud technique*. Those participants had to be constantly reminded to say out loud what they were thinking.

## Discussion

The aim of this study was to create Dutch versions of three questionnaires concerning chronic pain and coping styles that are used. The results that were found within the qualitative analysis helped to improve the first translated versions of the three questionnaires. Also, the testing of the questionnaires by groups in various stages of therapy was helpful to acquire new information. Two participants, for example, complained about two items of the PIPS. Both participants explained their problems by their advancement of treatment they already received. Because their thinking pattern changed throughout treatment, they had problems answering two questions. One of those participants had three weeks of treatment, the other one six weeks. Aditional sessions with group 4, who were in their first week at the rehalibitation centre, showed how patterns of thought change throughout therapy. None of the six participants from group 4 displayed the same problems as did the other two participants from group 1 and 2. Therefore the additional research with group 4 revealed that the ACT treatment indeed influences the way one thinks and experiences pain.

Besides the minor problems within the PIPS, bigger ones were found within the BPCI-2 and the BPRI. The scales that were used for the original English questionnaires could not be applied by the participants within this study. The scales of the BPCI-2 and the BPRI ranged from 0 to 7 and asked the participant to fill in the quantity of days they used coping strategies. Six out of seven participants were not able to use the original scales. Either it was too exhausting for the participants to think about all events that occurred in the last seven days, or they did not understand how a statement could be answered with the provided scale. To improve the understanding of the questionnaires, it was chosen to change the scale for the BPCI-2 and the BPRI. The scales still ranged from 0 to 7 but did not ask about the quantity of days strategies were used, which is an absolute scale. Instead, the new scale asked to indicate how often strategies were applied, which is a relative scale. Relative scales, like the 7-point Likert-type scale within the PIPS, are easier to use for participants and do not demand as much cognitive performance and attention as absolute scales do. This fundamental change led to positive outcomes; participants within group 3 and 4 did not appear to have problems with the scale any more (besides one person from group 4 who had problems with the usage of every scale of all questionnaires). Although the scales of the BPCI-2 and the BPRI now differ from the original English versions, no concernes should be caused by this change. The new scale still provides the same indication and ranges from 0 to 7. The scoring of the questionnaires therefore should be the same. But during further research, it should be kept in mind that new scales were adapted to the BPCI-2 and the BPRI.

However, while some things within the questionnaires were changed, a few adjustments could not be made. Question 1 from the BPCI-2 for example was difficult to answer because of its complexity. One Participant suggested splitting up the question. Unfortunally, this is not possible to accomplish while adhering to the the original questionnaire. The English version of the BPCI-2 containes 19 items; the Dutch version should provide the same number of questions, because of the scoring of the questionnaire. Because the English version already is validated, the Dutch version should be kept as close as possible to the original questionnaire. A change in amount of items would demand a adjustment in the scoringsystem of the questionnaire.

Other problems within the BPCI-2 concerned items 12, 13 and 18. Participants described those questions as vague, ambiguous amd extreamly complex. Although a lot of participants displayed problems with those questions; it was not possible to change the items. The BPCI-2 was designed to monitor patients who receive the ACT treatment. Like A-Tjak and De Groot (2008) explained, ACT consists of two core principles: *Acceptance & Mindfulness* and *Commitment*. Those items (question 12, 13 & 18) try to measure mindfulness, the ability to be absolutely involved in the present and to be aware of it. Questions about mindfulness tend to be vague and complex. Not being able to understand those questions could display an absence of mindfulness, because a certain degree of mindfulness is required to understand those questions. The counterpart of mindfulness, *mindlessness*, is described as when an "individual refuses to acknowledge or attend to a thought, emotion, motive, or object of perception" (Warren Brown & Ryan, 2003, p.823). It is difficult to distinguish whether *mindlessness* takes place, or the disability to understand the question. Because a modification of the Dutch questions concerning mindfulness are extremely difficult and the problems that occur by displaying *mindlessness*, the translated questions were kept as close to the original English counterparts as possible.

Equal problems were perceived within the BPRI, because item 13 and 18 are also included into the BPRI. By comparing the answers of the different questionnaires it was possible to see whether they filled in the questions reliable. This revealed lots of problems with the items. Also participants said out loud that they understood the question, their answering pattern showed otherwise: most of the time, participants were not able to fill in the same answer within the BPRI as they did within the BPCI-2. This suggests a lack of understanding of those questions concerning mindfulness. They should be adjusted, otherwise no reliable answers can be provided by the questionnaire.

But not only problems concerning content of the questionnaires were found throughout the study. Also limitations of the method that was used were revealed. During the *think aloud technique*, problems occurred with answering the questionnaires and applying the technique. According to Jansen and Hak (2005), the observer stays quiet and attentive during the whole session and questions the participant afterwards during the cognitive interview. However, in this case, it was not possible to maintain this procedure and it was chosen to interact with the participants. Immediately at the first session it became clear that it was not possible to be a quiet observer. Although the participant was instructed that the beholder was not allowed to talk and was only observing, the first participant kept asking questions related to the questionnaires the whole time. Even though the participant was instructed anew, he kept asking. During the following *cognitive interview* the participant could not remember a lot of things he said or performed. He was not able to answer questions during the interview. Therefore it was chosen not to be a quiet observer, but to interact with the participants during the task by asking and answering questions and embedding the *cognitive interview* within the *think aloud* session.

Besides the problems with the original technique of the TSTI, the observations that could be made during the sessions led to interesting conclusions. A form of *reactivity* could have been taking place: the *Hawthorne Effect*. Due to observations concerning the behavior of the participants, this conclusion could be drawn. All participants within the study were volunteers. Everyone within the study wanted to participate and many expressed enthusiasm about participation. The desire to help developing the questionnaires and to be a part of the study influenced a few participants' behavior. The attention the participants obtained during the sessions seemingly led to an *overthinking* of the simpliest questions. This became clear when some participants did not understand statements that were obvious to other participants. Also, the participants who did not have problems with the understanding of the questionnaires reported the same: simply filling it in and not think about it too long. This difficulty with creating problems that only appears by overthinking the task reminds of the 'Hawthorne Effect'. The Hawthorne Effect describes an increase of productivity of the participant because of the attention of the observer and the nature of the task. This normally leads to positive outcomes. Here, the presence and the attention of the observer also increase productivity in some of the participants, but with different outcomes than expected. Remarks about the questionnaires, which possibly would not emerge under normal testing circumstances, appeared frequently.

The Hawthorne Effect can have a major influence on outcomes in a research. A possible Hawthorne Effect could be difficult to abandon because of the method that is used. Therefore it should always be carefully distinguished between actual problems with items and problems due to the Hawthorne Effect because of the attention the participants get. It should be monitored carefully within the following process of validation.

Although problems where found within the first translated versions of the three questionnaires, all the questionnaires could be improved. Problems with scales were solved, as well as spelling mistakes and problems concerning the understanding of the questionnaires. Questions about mindfulness continue to provide problems and could not be solved properly. However, a suggestion for a final version of the three questionnaires can be found in the attachment (p. 47 – 49).

Further research within the ACT field should provide further validation of the pain scales to assure a good way to monitor patients that obtain the Acceptance & Commitment Therapy.

## Suggestions for further research

The analysis of the data provided by applying the TSTI showed great problems with the scales and could reveal problems concerning questions about mindfulness. In the author´s opinion, those questions about mindfulness should be changed. Although it seems difficult to distinguish whether those problems are due to a lack of understanding mindfulness or due to problems of understanding the question at all, the questions should be modified. By adjusting those questions, it can be made sure that problems are only due to a lack of understanding mindfulness. The BPCI-2 and the BPRI are not ready yet to be tested on a broad number of participants. Also, it should be considered whether or not to split up the first question of the BPCI-2, because of the problems it caused. It should be divided into three questions, as a result the scoring system of the BPCI-2 must be adjusted, too. Although adjusted versions of the BPCI-2 and the BPRI could help to gain data concerning psychological flexibility, the questionnaires need a huge improvement before they can be used. At this point, participants do not like working with those questionnaires. Neither do they like the vague questions concerning mindfulness, nor do they enjoy filling in the BPCI-2 and the BPRI.

On the other hand, the PIPS showed satisfying outcomes within this study. Participants did enjoy working with it. The PIPS is ready to be presented to participants to obtain quantitative data.

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# Attachments

## *Dutch "Version 1" PIPS*

### **PIPS**

Hieronder vindt u een lijst met uitspraken. Wilt u bij iedere uitspraak het cijfer omcirkelen dat voor u het meest van toepassing is.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| Nooit waar | Bijna nooit waar | Zelden waar | Soms waar | Vaak waar | Bijna altijd waar | altijd waar |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1. Om te voorkomen dat ik pijn voel, doe ik niet de dingen die ik belangrijk vind | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. Als ik pijn heb, ga ik andere mensen uit de weg | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. Het is belangrijk dat ik leer mijn pijn te controleren | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. Het is belangrijk om te begrijpen wat mijn pijn veroorzaakt | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. Ik voel me boos over mijn pijn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. Ik zeg dingen zoals "Ik heb helemaal geen energie.", "Ik ben niet goed genoeg.", "Ik heb geen tijd. ", "Ik durf het niet aan. ", "Ik heb teveel pijn.", "Ik voel me te slecht." of "Ik heb er geen zin in." | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. Ik vermijd het doen van dingen wanneer er het risico bestaat dat het pijn zou doen of de dingen erger maakt | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. Ik vermijd het inplannen van activiteiten vanwege mijn pijn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. Ik stop veel energie in het vechten tegen mijn pijn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. Ik ben niet degene die controle heeft over mijn leven, dat is mijn pijn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. Ik moet begrijpen wat er mis is om verder te kunnen | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. Door mijn pijn maak ik geen plannen meer voor de toekomst | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. Ik stel dingen uit vanwege van mijn pijn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. Ik zeg geplande activiteiten af wanneer ik pijn heb | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. Ik onderbreek activiteiten wanneer ik pijn begin te voelen of wanneer de pijn erger wordt | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## *Dutch "Version 1" BPCI-2*

**BPCI-2**

Op hoeveel dagen VAN DE AFGELOPEN WEEK gebruikte u onderstaande manieren op met de pijn om te gaan? Wilt u aangeven op hoeveel dagen u iedere "strategie" gebruikte IN REACTIE OP UW PIJN?

| | AANTAL DAGEN | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1. Moedigde mezelf aan of ging anders denken over mijn situatie of over de pijn. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. Vermeed een pijnlijke activiteit. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. Gebruikte lichamelijke oefening of deed stretching. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. Ging door met activiteiten zonder me door de pijn te laten tegen houden. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. Rustte het grootste gedeelte van de dag. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. Gebruikte ontspanningstechnieken. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. Nam de tijd (koos haalbare doelen, rustte tussendoor, of voerde activiteiten uit in een aangepast tempo). | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. Realiseerde me dat pijn geen reden is om niet actief te zijn. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. Veranderde van activiteit om mijn aandacht van de pijn af te leiden. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. Gebruikte ijs, warmte, massage of TENS (een elektrische stimulator). | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. Vocht voortdurend om controle te krijgen over de pijn. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. Merkte de pijn op zonder er wat aan te doen. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. Bleef me bewust van de pijn en was me op hetzelfde moment ook bewust van de hele situatie | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. Koos ervoor om niet te worstelen met gedachten of gevoelens omtrent pijn. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. Gebruikte de pijn als reden om iets niet te doen. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. Nam even rust (minder dan 30 minuten) en ging toen door met mijn activiteit. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. Koos er eerder voor om te doen wat ik waardevol vind, dan iets aan mijn pijn te doen. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18. Deed wat het beste werkt voor doelen in mijn leven los van wat ik op dat moment dacht of voelde. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 19. Probeerde "positief te denken" voordat ik in actie kwam. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## *Dutch "Version 1" BPRI*

### BPRI

Wilt u hieronder aangeven op hoeveel dagen van de AFGELOPEN WEEK u heeft gereageerd op ieder van de beschreven manieren, minstens een keer per dag IN RELATIE TOT UW PIJN. Bijvoorbeeld, als u helemaal niet op die manier heeft gereageerd, kiest u '0'. Als u elke dag op die manier reageerde, kiest u '7'. Wilt u het cijfer van de schaal kiezen dat het beste weergeeft hoeveel dagen van de afgelopen week u op de beschreven manier op uw pijn reageerde.

| | AANTAL DAGEN | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 1.Vermeed een pijnlijke activiteit | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. Ging door met wat ik deed zonder me door pijn te laten stoppen | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. Deed wat het beste werkt voor doelen in mijn leven los van hoe ik me op dat moment voelde | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. Rustte het grootste gedeelte van de dag | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. Realiseerde me dat de pijn me niet hoefde te weerhouden om actief te zijn | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. Erkende de pijn en realiseerde me dat ik het niet hoefde te veranderen | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. Vocht voortdurend om controle te krijgen over de pijn | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. Bleef me bewust van mijn pijn en was me op hetzelfde moment ook bewust van de hele situatie | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. Gebruikte pijn als een reden om een niet actief te zijn of te stoppen met een activiteit | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. Koos ervoor te doen wat belangrijk voor me is, in plaats van iets te doen aan mijn pijn | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. Merkte de pijn op zonder er wat aan te doen | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. Miste een belangrijke activiteit door pijn | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. Bleef gericht op "het totale plaatje" inclusief dat wat voor mij het belangrijkste is | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. Stond toe dat pijngevoelens me beperken | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. Offerde iets belangrijks op om mijn pijn onder controle te krijgen | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## *Dutch "Version 2" PIPS*

### PIPS

Hieronder vindt u een lijst met uitspraken. Wilt u bij iedere uitspraak het cijfer omcirkelen dat voor u het meest van toepassing is.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| Nooit waar | Bijna nooit waar | Zelden waar | Soms waar | Vaak waar | Bijna altijd waar | altijd waar |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1. Ik zou er bijna alles aan doen om van mijn pijn af te komen | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. Om te voorkomen dat ik pijn voel, doe ik niet de dingen die ik belangrijk vind | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. Als ik pijn heb, ga ik andere mensen uit de weg | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. Het is belangrijk dat ik leer mijn pijn te controleren | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. Het is belangrijk om te begrijpen wat mijn pijn veroorzaakt | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. Ik voel me boos over mijn pijn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. Ik zeg dingen zoals "Ik heb helemaal geen energie.", "Ik ben niet goed genoeg.", "Ik heb geen tijd. ", "Ik durf het niet aan. ", "Ik heb teveel pijn.", "Ik voel me te slecht." of "Ik heb er geen zin in." | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. Ik vermijd het doen van dingen wanneer er het risico bestaat dat het pijn zou doen of de dingen erger maakt | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. Ik vermijd het inplannen van activiteiten vanwege mijn pijn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. Ik stop veel energie in het vechten tegen mijn pijn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. Mijn pijn heeft de controle heeft over mijn leven, niet ik | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. Ik moet begrijpen wat er mis is om verder te kunnen | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. Door mijn pijn maak ik geen plannen meer voor de toekomst | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. Ik stel dingen uit vanwege van mijn pijn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. Ik zeg geplande activiteiten af wanneer ik pijn heb | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. Ik onderbreek activiteiten wanneer ik pijn begin te voelen of wanneer de pijn erger wordt | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## *Dutch “Version 2” BPCI-2*

### **BPCI-2**

Hoe vaak gebruikte u IN DE AFGELOPEN WEEK onderstaande manieren om met de pijn om te gaan? Wilt u in iedere regel een cijfer omcirkelen?

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. Moedigde mezelf aan, of ging anders denken over mijn situatie of over de pijn. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 2. Vermeed een pijnlijke activiteit. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 3. Gebruikte lichamelijke oefening of deed stretching. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 4. Ging door met activiteiten zonder me door de pijn te laten tegen houden. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 5. Rustte het grootste gedeelte van de dag. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 6. Gebruikte ontspanningstechnieken. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 7. Nam de tijd (koos haalbare doelen, rustte tussendoor, of voerde activiteiten uit in een aangepast tempo). | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 8. Realiseerde me dat pijn geen reden is om niet actief te zijn. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 9. Veranderde van activiteit om mijn aandacht van de pijn af te leiden. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 10. Gebruikte ijs, warmte, massage of TENS (een elektrische stimulator). | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 11. Vocht voortdurend om controle te krijgen over de pijn. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 12. Merkte de pijn op zonder er wat aan te doen. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 13. Bleef me bewust van de pijn en was me op hetzelfde moment ook bewust van de hele situatie | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 14. Koos ervoor om niet te worstelen met gedachten of gevoelens omtrent pijn. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 15. Gebruikte de pijn als reden om iets niet te doen. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 16. Nam even rust (minder dan 30 minuten) en ging toen door met mijn activiteit. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 17. Koos er eerder voor om te doen wat ik waardevol vind, dan iets aan mijn pijn te doen. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 18. Deed wat het beste werkt voor doelen in mijn leven, zonder rekening te houden met wat ik op dat moment dacht of voelde. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 19. Probeerde “positief te denken“ voordat ik in actie kwam. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |

## *Dutch "Version 2" BPRI*

**BPRI**

Hoe vaak gebruikte u IN DE AFGELOPEN WEEK onderstaande manieren om met de pijn om te gaan? Wilt u in iedere regel een cijfer omcirkelen?

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.Vermeed een pijnlijke activiteit | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 2. Ging door met wat ik deed zonder me door pijn te laten stoppen | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 3. Deed wat het beste werkt voor doelen in mijn leven, zonder rekening te houden met hoe ik me op dat moment voelde | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 4. Rustte het grootste gedeelte van de dag | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 5. Realiseerde me dat de pijn me niet hoefde te weerhouden om actief te zijn | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 6. Erkende de pijn en realiseerde me dat ik het niet hoefde te veranderen | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 7. Vocht voortdurend om controle te krijgen over de pijn | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 8. Bleef me bewust van mijn pijn en was me op hetzelfde moment ook bewust van de hele situatie | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 9. Gebruikte pijn als een reden om een niet actief te zijn of te stoppen met een activiteit | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 10. Koos ervoor te doen wat belangrijk voor me is, in plaats van iets te doen aan mijn pijn | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 11. Merkte de pijn op zonder er wat aan te doen | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 12. Miste een belangrijke activiteit door pijn | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 13. Bleef gericht op "het totale plaatje" inclusief dat wat voor mij het belangrijkste is | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 14. Stond toe dat pijngevoelens me beperken | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 15. Offerde iets op wat belangrijk voor me is, om mijn pijn onder controle te krijgen | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |

## *Dutch "Version 3" PIPS*

### PIPS

Hieronder vindt u een lijst met uitspraken. Wilt u bij iedere uitspraak het cijfer omcirkelen dat op dit moment voor u het meest van toepassing is.
Gelieve alle vragen in te vullen.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| Nooit waar | Bijna nooit waar | Zelden waar | Soms waar | Vaak waar | Bijna altijd waar | Altijd waar |

| | Nooi waar | Bijna nooit waar | Zelden waar | Soms waar | Vaak waar | Bijna altijd waar | Altijd waar |
|---|---|---|---|---|---|---|---|
| 1. Ik zou er bijna alles aan doen om van mijn pijn af te komen | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. Om te voorkomen dat ik pijn voel, doe ik niet de dingen die ik belangrijk vind | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. Als ik pijn heb, ga ik andere mensen uit de weg | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. Het is belangrijk dat ik leer mijn pijn te controleren | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. Het is belangrijk om te begrijpen wat mijn pijn veroorzaakt | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. Ik voel me boos over mijn pijn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. Ik zeg dingen als "Ik heb helemaal geen energie."of "Ik ben niet goed genoeg." of "Ik heb geen tijd. " of "Ik durf het niet aan. " of "Ik heb teveel pijn." of "Ik voel me te slecht." of "Ik heb er geen zin in." | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. Ik vermijd het doen van dingen wanneer er het risico bestaat dat het pijn zou doen of de dingen erger maakt | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. Ik vermijd het inplannen van activiteiten vanwege mijn pijn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. Ik stop veel energie in het vechten tegen mijn pijn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. Mijn pijn heeft de controle over mijn leven, niet ik | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. Ik moet begrijpen wat er mis is om verder te kunnen | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. Door mijn pijn maak ik geen plannen meer voor de toekomst | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. Ik stel dingen uit vanwege van mijn pijn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. Ik zeg geplande activiteiten af wanneer ik pijn heb | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. Ik onderbreek activiteiten wanneer ik pijn begin te voelen of wanneer de pijn erger wordt | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## *Dutch "Version 3" BPCI-2*

### BPCI-2

Hoe vaak gebruikte u IN DE AFGELOPEN WEEK onderstaande manieren om met de pijn om te gaan? Wilt u in iedere regel een cijfer omcirkelen?
Gelieve alle vragen in te vullen.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. Moedigde mezelf aan, of ging anders denken over mijn situatie of over de pijn. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 2. Vermeed een pijnlijke activiteit. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 3. Gebruikte lichamelijke oefening of deed stretching. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 4. Ging door met activiteiten zonder me door de pijn te laten tegen houden. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 5. Rustte het grootste gedeelte van de dag. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 6. Gebruikte ontspanningstechnieken. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 7. Nam de tijd (koos haalbare doelen, rustte tussendoor, of voerde activiteiten uit in een aangepast tempo). | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 8. Realiseerde me dat pijn geen reden is om niet actief te zijn. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 9. Veranderde van activiteit om mijn aandacht van de pijn af te leiden. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 10. Gebruikte ijs, warmte, massage of TENS (een elektrische stimulator). | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 11. Vocht voortdurend om controle te krijgen over de pijn. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 12. Merkte de pijn op zonder er wat aan te doen. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 13. Bleef me bewust van de pijn en was me op hetzelfde moment ook bewust van de hele situatie | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 14. Koos ervoor om niet te worstelen met gedachten of gevoelens omtrent pijn. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 15. Gebruikte de pijn als reden om iets niet te doen. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 16. Nam even rust (minder dan 30 minuten) en ging toen door met mijn activiteit. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 17. Koos er eerder voor om te doen wat ik waardevol vind, dan iets aan mijn pijn te doen. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 18. Deed wat het beste werkt voor doelen in mijn leven, zonder rekening te houden met wat ik op dat moment dacht of voelde. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 19. Probeerde "positief te denken" voordat ik in actie kwam. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |

## *Dutch "Version 3" BPRI*

### BPRI

Hoe vaak gebruikte u IN DE AFGELOPEN WEEK onderstaande manieren om met de pijn om te gaan? Wilt u in iedere regel een cijfer omcirkelen?
Gelieve alle vragen in te vullen.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.Vermeed een pijnlijke activiteit | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 2. Ging door met wat ik deed zonder me door pijn te laten stoppen | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 3. Deed wat het beste werkt voor doelen in mijn leven, zonder rekening te houden met hoe ik me op dat moment voelde | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 4. Rustte het grootste gedeelte van de dag | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 5. Realiseerde me dat de pijn me niet hoefde te weerhouden om actief te zijn | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 6. Erkende de pijn en realiseerde me dat ik het niet hoefde te veranderen | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 7. Vocht voortdurend om controle te krijgen over de pijn | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 8. Bleef me bewust van mijn pijn en was me op hetzelfde moment ook bewust van de hele situatie | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 9. Gebruikte pijn als een reden om niet actief te zijn of te stoppen met een activiteit | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 10. Koos ervoor te doen wat belangrijk voor me is, in plaats van iets te doen aan mijn pijn | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 11. Merkte de pijn op zonder er wat aan te doen | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 12. Miste een belangrijke activiteit door pijn | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 13. Bleef gericht op "het totale plaatje" inclusief dat wat voor mij het belangrijkste is | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 14. Stond toe dat pijngevoelens me beperken | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 15. Offerde iets op wat belangrijk voor me is, om mijn pijn onder controle te krijgen | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |

## *Final Dutch version PIPS*

**PIPS**

Hieronder vindt u een lijst met uitspraken. Wilt u bij iedere uitspraak het cijfer omcirkelen dat OP DIT MOMENT voor u het meest van toepassing is.
Gelieve alle vragen in te vullen.

| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|
| Nooit waar | Bijna nooit waar | Zelden waar | Soms waar | Vaak waar | Bijna altijd waar | Altijd waar |

| | Nooit waar | Bijna nooit waar | Zelden waar | Soms waar | Vaak waar | Bijna altijd waar | Altijd waar |
|---|---|---|---|---|---|---|---|
| 1. Ik zou er bijna alles aan doen om van mijn pijn af te komen | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 2. Om te voorkomen dat ik pijn voel, doe ik niet de dingen die ik belangrijk vind | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 3. Als ik pijn heb, ga ik andere mensen uit de weg | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 4. Het is belangrijk dat ik leer mijn pijn te controleren | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5. Het is belangrijk om te begrijpen wat mijn pijn veroorzaakt | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 6. Ik voel me boos over mijn pijn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 7. Ik zeg dingen als “Ik heb helemaal geen energie.”of “Ik ben niet goed genoeg.” of “Ik heb geen tijd. “ of “Ik durf het niet aan. “ of “Ik heb teveel pijn.” of “Ik voel me te slecht.” of “Ik heb er geen zin in.“ | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8. Ik vermijd het doen van dingen wanneer er het risico bestaat dat het pijn zou doen of de dingen erger maakt | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 9. Ik vermijd het inplannen van activiteiten vanwege mijn pijn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 10. Ik stop veel energie in het vechten tegen mijn pijn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 11. Mijn pijn heeft de controle over mijn leven, niet ik | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 12. Ik moet begrijpen wat er mis is om verder te kunnen | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 13. Door mijn pijn maak ik geen plannen meer voor de toekomst | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. Ik stel dingen uit vanwege mijn pijn | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. Ik zeg geplande activiteiten af wanneer ik pijn heb | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. Ik onderbreek activiteiten wanneer ik pijn begin te voelen of wanneer de pijn erger wordt | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

## *Final Dutch version BPCI-2*

### BPCI-2

Hoe vaak gebruikte u IN DE AFGELOPEN WEEK onderstaande manieren om met de pijn om te gaan? Wilt u in iedere regel een cijfer omcirkelen?
Gelieve alle vragen in te vullen.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1. Moedigde mezelf aan, of ging anders denken over mijn situatie of over de pijn. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 2. Vermeed een pijnlijke activiteit. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 3. Gebruikte lichamelijke oefening of deed stretching. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 4. Ging door met activiteiten zonder me door de pijn te laten tegen houden. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 5. Rustte het grootste gedeelte van de dag. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 6. Gebruikte ontspanningstechnieken. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 7. Nam de tijd (koos haalbare doelen, rustte tussendoor, of voerde activiteiten uit in een aangepast tempo). | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 8. Realiseerde me dat pijn geen reden is om niet actief te zijn. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 9. Veranderde van activiteit om mijn aandacht van de pijn af te leiden. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 10. Gebruikte ijs, warmte, massage of TENS (een elektrische stimulator). | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 11. Heb voortdurend gevochten om controle te krijgen over de pijn. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 12. Merkte de pijn op zonder er wat aan te doen. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 13. Bleef me bewust van de pijn en was me op hetzelfde moment ook bewust van de hele situatie | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 14. Koos ervoor om niet te worstelen met gedachten of gevoelens omtrent pijn. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 15. Gebruikte de pijn als reden om iets niet te doen. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 16. Nam even rust (minder dan 30 minuten) en ging toen door met mijn activiteit. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 17. Koos er eerder voor om te doen wat ik waardevol vind, dan iets aan mijn pijn te doen. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 18. Deed wat het beste werkt voor doelen in mijn leven, zonder rekening te houden met wat ik op dat moment dacht of voelde. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 19. Probeerde “positief te denken“ voordat ik in actie kwam. | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |

## *Final Dutch version BPRI*

### BPRI

Hoe vaak gebruikte u IN DE AFGELOPEN WEEK onderstaande manieren om met de pijn om te gaan? Wilt u in iedere regel een cijfer omcirkelen?
Gelieve alle vragen in te vullen.

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1.Vermeed een pijnlijke activiteit | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 2. Ging door met wat ik deed zonder me door pijn te laten stoppen | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 3. Deed wat het beste werkt voor doelen in mijn leven, zonder rekening te houden met hoe ik me op dat moment voelde | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 4. Rustte het grootste gedeelte van de dag | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 5. Realiseerde me dat de pijn me niet hoefde te weerhouden om actief te zijn | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 6. Erkende de pijn en realiseerde me dat ik het niet hoefde te veranderen | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 7. Heb voortdurend gevochten om controle te krijgen over de pijn | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 8. Bleef me bewust van mijn pijn en was me op hetzelfde moment ook bewust van de hele situatie | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 9. Gebruikte pijn als een reden om niet actief te zijn of te stoppen met een activiteit | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 10. Koos ervoor te doen wat belangrijk voor me is, in plaats van iets te doen aan mijn pijn | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 11. Merkte de pijn op zonder er wat aan te doen | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 12. Miste een belangrijke activiteit door pijn | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 13. Bleef gericht op “het totale plaatje” inclusief dat wat voor mij het belangrijkste is | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 14. Stond toe dat pijngevoelens me beperken | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |
| 15. Offerde iets op wat belangrijk voor me is, om mijn pijn onder controle te krijgen | NOOIT | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | ALTIJD |

Table 2: Problems concerning the different versions of the PIPS

| Questionnaire | Item | Problem |
|---|---|---|
| PIPS Version 1 | Question 10<br>“Ik ben niet degene die controle heeft over mijn leven, dat is mijn pijn” | Question is too difficult because of the sytax. It would be easier to understand if it said: "Mijn pijn heeft de controle over mijn leven" |
| | Question 11<br>“Ik moet begrijpen wat er mis is om verder te kunnen” | Vague question. “Moet” is too demanding. |
| | Question 12<br>“Door mijn pijn maak ik geen plannen meer voor de toekomst” | “Toekomst” is an indistinct point in time. It should be more specific |
| | Question 14<br>“Ik zeg geplande activiteiten af wanneer ik pijn heb” | Statement does not apply to chronic pain patients because they avoid planning anything due to the pain |
| PIPS Version 2 | Introduction | Unclear that the questions allude to how you feel at this very moment |
| | Scale | Scale is easy to overlook |
| | Question 7<br>“Ik zeg dingen zoals “Ik heb helemaal geen energie.”, “Ik ben niet goed genoeg.”, “Ik heb geen tijd. “, “Ik durf het niet aan. “, “Ik heb teveel pijn.”, “Ik voel me te slecht.” of “Ik heb er geen zin in.“ | Too many statements at the same time. Also statements differ a lot from each other |
| | Question 16<br>“Ik onderbreek activiteiten wanneer ik pijn begin te voelen of wanneer de pijn erger wordt” | Difficult to answer the question. Does not apply when the patient already is advanced in therapy |
| PIPS Version 3 | Scale | Scale is too difficult to use |
| | Question 10<br>“Ik stop veel energie in het vechten tegen mijn pijn” | Indistinct which sort of *energy* is meant: physical or mental? |
| | Question 13<br>“Door mijn pijn maak ik geen plannen meer voor de toekomst” | Unclear which sort of future is meant: tomorrow or over two years? |

Table 3: Problems concerning the different versions of the BPCI-2

| Questionnaire | Item | Problem |
|---|---|---|
| BPCI-2 Version 1 | Scale | The scale is too difficult to use. Participants have problems to understand how to answer in "days" |
| | Question 1<br>"Moedigde mezelf aan of ging anders denken over mijn situatie of over de pijn." | Question is too long and asks to many questions at the same time, therefore participants have problems understanding it |
| | Question 4<br>"Ging door met activiteiten zonder me door de pijn te laten tegen houden." | Respondents have problems answering because it depends on how intense the pain is |
| | Question 8<br>"Realiseerde me dat pijn geen reden is om niet actief te zijn." | Question is vague |
| | Question 13<br>"Bleef me bewust van de pijn en was me op hetzelfde moment ook bewust van de hele situatie" | Question is difficult to understand. One participant noticed that a chronic pain patient always is aware of the pain. |
| | Question 15<br>"Gebruikte de pijn als reden om iets niet te doen." | In combination with the scale, the question is not understood by the patients |
| BPCI-2 Version 2 | Question 1<br>"Moedigde mezelf aan, of ging anders denken over mijn situatie of over de pijn." | Question is difficult to understand. Participants have to read several times before they understand it |
| | Question 12<br>"Merkte de pijn op zonder er wat aan te doen." | Question does not seem to apply, because chronic pain patients always experience pain |
| | Question 13<br>"Bleef me bewust van de pijn en was me op hetzelfde moment ook bewust van de hele situatie" | Question does not apply, because chronic pain patients are always aware of their pain |
| | Question 14<br>"Koos ervoor om niet te worstelen met gedachten of gevoelens omtrent pijn." | Question is too difficult |
| | Question 18<br>"Deed wat het beste werkt voor doelen in mijn leven, zonder rekening te houden met wat ik op dat moment dacht of voelde." | Question is too complex. Respondents need to read it multiple times and often translate it in their own words |

| | | |
|---|---|---|
| BPCI-2<br>Version 3 | Scale | Scale is difficult to use because you only have two indications, one on the left of the scale and another to the right |
| | Question 8<br>“Realiseerde me dat pijn geen reden is om niet actief te zijn.” | Double negation seems difficult |
| | Question 18<br>“Deed wat het beste werkt voor doelen in mijn leven, zonder rekening te houden met wat ik op dat moment dacht of voelde.” | Difficult to understand. Also it seems impossible to answer because you do not think about your whole life and all the goals you set all the time. |

Table 4: Problems concerning the different versions of the BPRI

| Questionnaire | Item | Problem |
|---|---|---|
| BPRI Version 1 | Scale | *Same scale as BPCI-2*<br>The scale is too difficult to use. Participants have problems to understand how to answer in "days" |
| | Introduction | The description of the form is too long. Participants have to read it multiple time before they understand the assignment |
| | Question 3<br>"Deed wat het beste werkt voor doelen in mijn leven los van hoe ik me op dat moment voelde" | *Same question as BPCI-2 #18*<br>Question is too long and too difficult to understand |
| | Question 8<br>"Bleef me bewust van de pijn en was me op hetzelfde moment ook bewust van de hele situatie" | *Same question as BPCI-2 #13*<br>Question is difficult to understand. |
| | Question 15<br>"Offerde iets belangrijks op om mijn pijn onder controle te krijgen" | "iets belangrijks" is too indistinct. An example would help |
| BPRI Version 2 | Question 3<br>"Deed wat het beste werkt voor doelen in mijn leven, zonder rekening te houden met wat ik op dat moment dacht of voelde." | *Same question as BPCI-2 #18*<br>Question is too complex. Respondents need to read it multiple times and often translate it in their own words |
| | Question 6<br>"Erkende de pijn en realiseerde me dat ik het niet hoefde te veranderen" | Question is too vague. It needs to more specified |
| | Question 8<br>"Bleef me bewust van de pijn en was me op hetzelfde moment ook bewust van de hele situatie" | *Same question as BPCI-2 #13*<br>Question does not apply, because chronic pain patients are always aware of their pain. Also two questions are asked at the same time |
| BPRI Version 3 | Scale | *Same scale as BPCI-2*<br>Scale is difficult to use because you only have two indications, one on the left of the scale and another to the right |
| | Question 6<br>"Erkende de pijn en realiseerde me dat ik het niet hoefde te veranderen" | Question is difficult to answer |