Preferences of Chronic Pain Patients with regard to an Internet Treatment

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Abstract

The purpose of this study was to explore which type of treatment chronic pain patients prefer, the traditional or an Internet treatment, and which factors contribute to their preference.

Qualitative semi-structured interviews were conducted with 25 patients with chronic pain from a pain rehabilitation centre in the Netherlands. Thirteen participants were selected from the patient waiting list and twelve participants were recruited by physiotherapists. This group existed of patients who received exercise therapy for their pain complaints at the time or had just finished the treatment. In the interviews the participants were asked about advantages and disadvantages of the traditional face-to-face treatment and different types of Internet treatments. The method of data analysis was qualitative content analysis.

Overall, participants considered an Internet treatment very helpful as a complement to the traditional treatment or as follow-up, but would not choose it as an autonomous treatment.
The motives that were mentioned by participants fitted the decomposed Theory of Planned Behaviour and were mainly related to the perceived usefulness. Especially personal attention and feedback were found to be important to chronic pain patients. This highlights the need for physiotherapists to be aware of the impact of the therapy setting and personal attention on individual patients and the need to ensure appropriate selection of treatment type. It should be noted that the preferences of the participants in this study were based on hypothetical scenarios instead of real experiences with Internet treatments. As a consequence, familiarity might have influenced the preferences of these participants.

More research is needed to investigate the effectiveness of Internet treatments and for whom Internet treatments will be most appropriate. The decomposed Theory of Planned Behaviour is recommended as a framework in future research on patients' preferences with regard to Internet treatments.

Preferences of chronic pain patients: online versus face-to-face

Pain is a multifaceted process including sensory as well as cognitive and emotional aspects. Pain is defined by the International Association for the Study of Pain (Merskey & Bogduk, 1994) as “an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage”. Wall (1979) also describes this subjective character of pain. He states that: “The normal process of sensing pain is first as a pure pain followed by a second process in which this sensory event is dressed in emotional clothes”.

Pain is essential for survival because of its adaptive functions, namely avoidance, escape, and recuperation. A distinction can be made between acute pain and chronic pain. While acute pain is a normal sensation triggered in the nervous system to alert you to possible injury and the need to take care of yourself, chronic pain is different. Chronic pain persists and is commonly defined as “pain that persists for longer than the expected time frame for healing” or “pain associated with progressive, nonmalignant disease” (Ashburn & Staats, 1999). The IASP defines chronic pain as “pain that persists beyond the normal time frame of healing (...)” (Merskey & Bogduk, 1994). Whereas acute pain is functional and can be considered as a mainly physiological response to tissue damage, chronic pain involves psychological and behavioural mechanisms in addition to physiological mechanisms (Turk, 1999; Turk & Okifuji, 2002; Verhaak, Kerssens, Dekker, Sorbi, & Bensing, 1998). Thus, chronic pain should not be viewed as either solely physical or solely psychological. Rather, the experience of pain is maintained by an interdependent set of behavioural, cognitive, and affective factors.

This complex nature of chronic pain means that its prevalence cannot be measured by assessing well-defined physical conditions. It requires a multidimensional approach including a number of dimensions such as the localization of pain, pain intensity, temporal characteristics, affective appraisal, coping, and grading of pain (Verhaak et al., 1998). Verhaak et al. (1998) reviewed the literature on the epidemiology of chronic benign pain among adults. Attention was paid to the methodology used to assess the prevalence of chronic benign pain and aimed to determine the prevalence of chronic benign pain. However, a search in the literature revealed that there have been no epidemiological studies into the prevalence of chronic pain in the general population. Nevertheless, Verhaak et al. stated that: “without doubt, many people suffer from pain to such an extent that they are seriously limited in their daily activities over a considerable period of time” (p. 234). The 15 studies they reviewed yielded a median point prevalence of chronic pain of 15% in the adult population, with a

range from 2% to 40%. The patients suffering from chronic pain were relatively often middle-aged women from the lower socioeconomic strata. The body areas most frequently affected were the low back, neck, and shoulder.

The effect of chonic pain on the patient tends to be more pervasive than that of acute pain. It often profoundly affects the patient's mood, personality, and social relationships. Patients with chronic pain typically experience concomitant depression, sleep disturbance, fatigue, and decreased overall functioning (Ashburn & Staats, 1999). This may cause a strong decrease in the quality of life.

Patients with chronic pain often display a range of "pain behaviours". Philips (1987) argued that the most prominent and extensive behaviour shown by chronic pain patients is that of avoidance. Chronic pain patients spend a great deal of time trying to control pain levels by limiting their behaviour and avoiding contact with any stimulation or situation that might provoke elevations in pain. They may, for instance, limit their movements due to the fear of pain (Turk, Robinson, & Burwinkle, 2004). However, this avoidance behaviour is not efficacious and may become counterproductive, since it maintains pain and increases disability.

Avoidance may not be restricted to movement. The diversity and extend of avoidance behaviour became evident in a study of pain behaviour undertaken in a large group of headache patients (Philips & Jahanshahi, 1986). Using a behavioural checklist, the responses of 267 chronic headache patients were systematically assessed by means of factor-analytic procedures. It appeared that avoiding was the most prominent component of pain behaviour. It was not limited to avoidance of movement, but included extensive withdrawal, particularly from social interactions. Even though this study of avoidance behaviour was undertaken on headache cases, it seems likely that comparable results will emerge when back pain and other chronic problems are assessed.

Avoidance behaviour is adaptive as a response to acute injury by promoting or allowing tissue healing in the recuperative period. However, in the chronic pain patient avoidance behaviour persists despite the fact that tissue healing is complete (Wall, 1979). Hence, the behaviour is not longer fulfilling the adaptive function. Instead, the physical inactivity may lead to deterioration of many body functions, and maybe to disuse syndrome (Bortz, 1984). The characteristics of this syndrome are cardiovascular vulnerability, obesity, musculoskeletal fragility, depression and premature aging.

Treatment

As a consequence the focus of pain treatments is more and more on active types of treatment such as exercises and behavioural interventions. Various studies support the trend toward a more active treatment approach. Rainville et al. (2004), for instance, concluded that exercise can diminish the behavioural, cognitive, affect and disability aspects of back pain syndromes. Fordyce et al. (1981) found a negative relationship between exercise or activity and pain complaints. The more exercise performed, the fewer the pain behaviours. These findings are in contrast with the frequently observed physician prescription with chronic pain to limit exercise when pain increases. Exercise alone or as part of a multidisciplinary treatment was also found to reduce sick leave in patients with back pain (Lindstrom et al., 1992). Hence, therapeutic exercise in physiotherapy practice has shown to be beneficial for chronic pain patients.

Active treatments are mostly delivered face-to-face. However, with the rise of the Internet more possibilities have come to the surface. More and more programs are being developed without the need for face-to-face contact, but with the opportunity to provide patients with the skills and knowledge necessary for promoting behaviour change (Marshall, Bauman et al., 2003; Napolitano et al., 2003). The traditional face-to-face treatments might be replaced by a treatment program provided via the Internet. An Internet treatment program could also be used as a supplement to the traditional treatment or as follow-up. Treatment programs could be developed that match patients' preferences.

Various authors have found that the Internet and Web-based interventions can be cost-saving (Ferney & Marshall, 2006; Johnson, Loureiro, & Harwin, 2008; Marshall, Bauman et al., 2003; Marshall, Leslie, Bauman, Marcus, & Owen, 2003; Rosen, 1999). Particularly websites and e-mail have the potential to deliver information to large numbers of patients at low costs (Ferney & Marshall, 2006). Moreover, the Internet and web-based interventions can be beneficial for patients who are immobile or geographically remote from direct service (Forducey et al., 2003; Johnson et al., 2008; Rosen, 1999). Many patients have poor access to transportation, or may find travel to a clinic too tiring because of the added effort imposed by their disability. Such patients could benefit from rehabilitation services provided via the Internet, since this brings the opportunity to stay at home for treatment or to shorten the visits at the clinic and pursue the follow-up at home.

Examples of clinical applications that use the Internet include treatment of phobias (Andersson et al., 2006) and depression (Andersson et al., 2006; Trimbos, 2007), post-

traumatic stress disorders (Knaevelsrud & Maercker, 2007), eating disorders (Carrard et al., 2006), and problematic alcohol use (Trimbos, 2004). Moreover, the Internet is increasingly used in physical rehabilitation. Clark et al. (2002) described the use of 'TeleRehab' in the management of a patient poststroke. They speculate that practice of postacute rehabilitation could greatly be enhanced by the use of TeleRehab. It allows for increased access to services at a reduced cost. This was supported by Forducey et al. (2003), who conducted a case study in which teletherapy was successfully utilised to improve the functional outcomes, both physical and cognitive, of a patient with severe brain injury. A physical therapist from a metropolitan rehabilitation centre employed teletherapy to provide Neuro Developmental Treatment for a patient and to mentor staff in a nursing home located over 100 miles from the metro area. The patient participated in 48 physical teletherapy sessions over a 24-week period. During the course of therapy, goals were adjusted upward to match the patient's improvements. The outcomes showed improvements in physical and neuropsychological status.

Hence, treatment programs provided via the Internet certainly seem to have potential. It can save time and costs for the patient, it is feasible, and has shown positive results in diverse studies.

Preferences

It is important that treatments fit the preferences of the patients, so that treatments can be selected that best match the needs and expectations of the patients to improve compliance, treatment outcomes, and ultimately satisfaction (Gan et al., 2004; Moffet et al., 2005). However, studies investigating the preferences of chronic pain patients toward an Internet treatment have not been reported. Thus it is not clear which setting is recommended as most appropriate for chronic pain patients: the clinic with face-to-face contact with the physiotherapist, or a home-based setting with distant contact with the physiotherapist and making use of some form of technology.

Some authors have investigated the advantages and disadvantages of the home setting for therapy without the use of technology. Several advantages and disadvantages of this mode of service delivery were found. Advantages of home-based settings included convenience, decreased stress of travel, increased comfort and privacy, and appropriate formulation of goals relevant to the home-environment (Stephenson & Wiles, 2000; Young & Forster, 1992). Disadvantages of home-based setting included lack of equipment and floor space, decreased social interaction and increased stress of caregivers (Stephenson & Wiles, 2000). Hence,

literature shows that home-based physiotherapy can have advantages as well as disadvantages for patients. Nevertheless, in the studies described above, home-based settings included home-visits, whereas in Internet treatments patients communicate with their therapists at a distance via some sort of technology.

More research is needed to investigate the preferences of chronic pain patients with regard to Internet treatments. Therefore the aim of this study is to explore which type of treatment patients with chronic pain prefer: the traditional or an Internet treatment. Also the factors that contribute to their preference will be studied.

Whereas litarature found advantages and disadvantages of home-based treatments, also models have been developed with the focus on explaining and predicting behaviour, like using a particular system. In people's acceptance of technologies two related frameworks have been popular and well-supported: Davis' Technology Acceptance Model (Davis, 1989; Davis, Bagozzi, & Warshaw, 1989) and Ajzen's Theory of Planned Behaviour (Ajzen, 1991).

The Technology Acceptance Model (TAM) was introduced by Davis (Davis, 1989; Davis et al., 1989). The Technology Acceptance Model is an adaptation of the Theory of Reasoned Action (TRA) and was originally developed to explain and predict the individual's attitude toward acceptance of information technology. TAM, presented in Figure 1, focuses on two determinants of the user's attitude toward the acceptance of information technology. The first determinant is the perceived usefulness of the technology. Perceived usefulness is defined as the user's "subjective probability that using a specific application system will increase his or her job performance within an organizational context" (p. 985). The second determinant is the perceived ease of use of the technology. Perceived ease of use is "the degree to which the . . . user expects the target system to be free of effort" (p. 985).

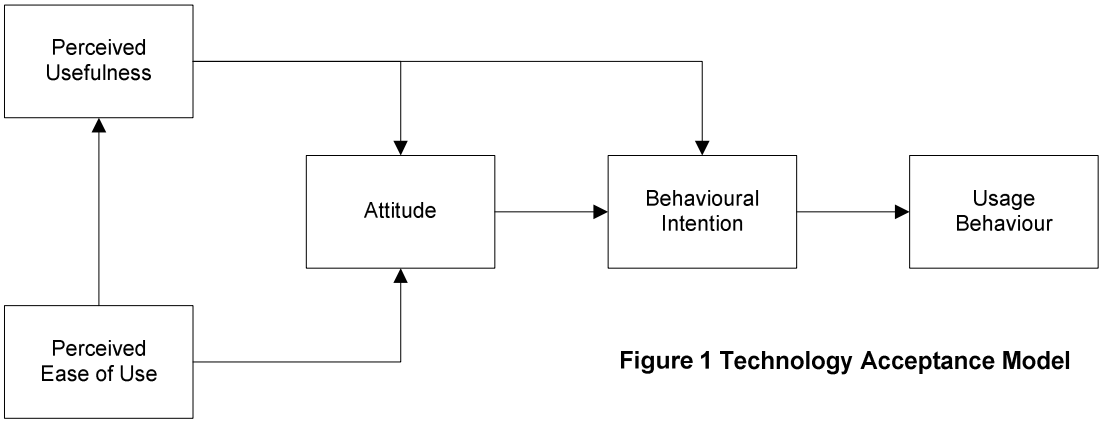


Figure 1 Technology Acceptance Model

The Theory of Planned Behaviour (TPB) (Ajzen, 1991) extends the Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975) to account for conditions where individuals do not have complete control over their behaviour. In this framework, the intention to perform the behaviour, like using a particular system, is predicted by three factors: attitude toward the behaviour, subjective norms, and perceived behavioural control (See Figure 2).

The first factor, attitude, is determined by behavioural beliefs and outcome evaluations. A behavioural belief is the subjective probability that the behaviour will lead to a particular outcome. An outcome evaluation is a rating of the desirability of the outcome.

The second factor, subjective norms, reflects the perceived opinions of referent others. A "referent other" is a person or group whose beliefs may be important to the individual. A normative belief is the individual's perception of a referent other's opinion about the individual's performance of the behaviour. Motivation to comply is the extent to which the person wants to comply with the wishes of the referent other.

The third, and last factor, perceived behavioural control (PBC), refers to the individual's perception of ". . . the presence or absence of requisite resources and opportunities" (Ajzen & Madden, 1986) necessary to perform the behaviour. PBC depends on control beliefs and perceived facilitation. A control belief is a perception of the availability of skills, resources, and opportunities. Perceived facilitation is the individual's assessment of the importance of those resources to the achievement of outcomes. Control beliefs can be situational (e.g., having access to a terminal) as well as personal (e.g., being able to use a system).

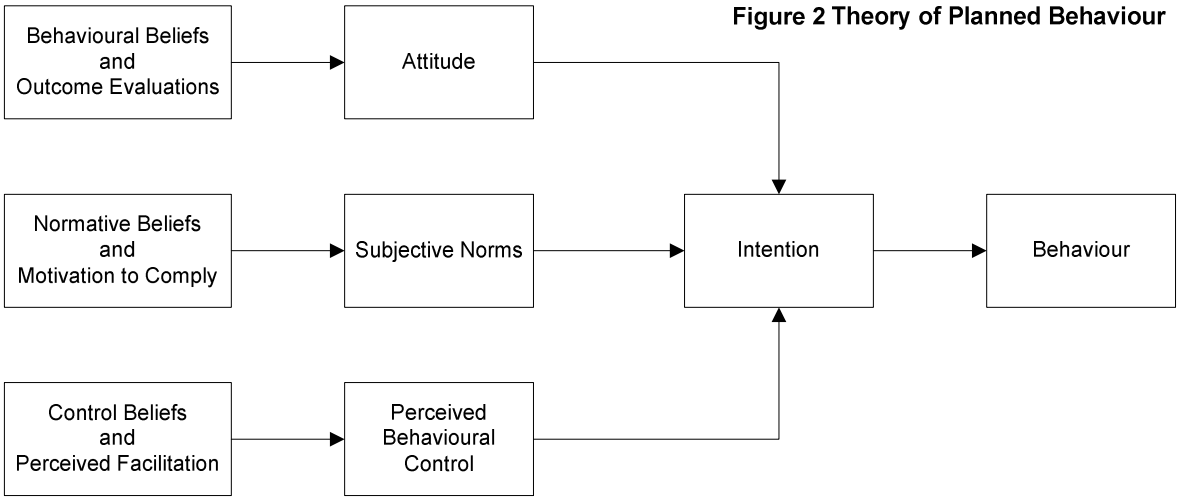
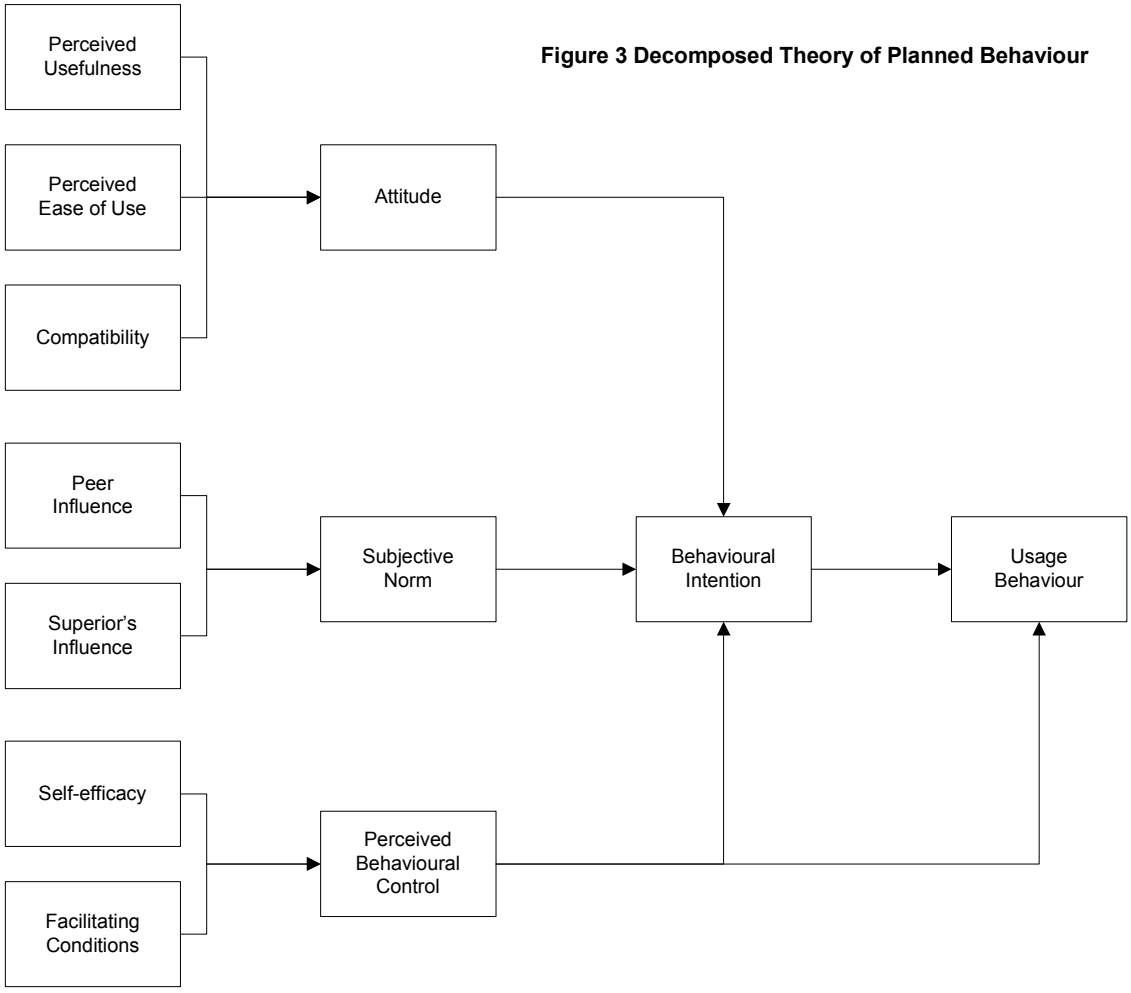


Figure 2 Theory of Planned Behaviour

There has been empirical support for both the Technology Acceptance Model and the Theory of Planned Behaviour in information technology studies. Mathieson (1991), for instance, conducted a comparison of the Technology Acceptance Model and the Theory of Planned Behaviour in the decision to use a spreadsheet. He found that both theories predicted the intention to use the spreadsheet quite well. However, Mathieson concluded that the Theory of Planned Behaviour had more context specific information related to the importance of subjective norms and the user's perceived control, while the Technology Acceptance Model provided context-free information by focusing on the usefulness and ease-of-use of the spreadsheet itself.

Taylor and Todd introduced a new model of decomposing the belief structures for users' attitude and intention toward using technology – essentially integrating the Technology Acceptance Model with the Theory of Planned Behaviour (Taylor & Todd, 1995a; Taylor & Todd, 1995b). They found that this decomposed Theory of Planned Behaviour model, shown in Figure 3, increased the predictive power and provided a better understanding of the intention to use technology than either theory alone.

Figure 3 Decomposed Theory of Planned Behaviour



In this qualitative study the motives that play a role in the choice between the traditional and an Internet treatment, and the extent to which the motives can be catagorized into the decomposed Theory of Planned Behaviour, will be verified. With an Internet treatment, a home-based treatment with distant contact with the physiotherapist by means of some sort of technology is meant. The traditional treatment implies face-to-face contact with the physiotherapist, possibly complemented by a paper with descriptions and drawings of prescribed exercises to perform at home. This study will focus only on chronic pain without a clear physical basis.

The corresponding questions are: (1) Which treatment do patients with chronic pain prefer: the traditional or an Internet treatment? (2) Which factors contribute to patients' preferences? (3) To which extend can the decomposed Theory of Planned Behaviour be used as a framework for categorizing the preferences of chronic pain patients with regard to an Internet treatment?

Methods

Since not much is known about preferences among chronic pain patients, qualitative methods were adopted. One advantage of qualitative methods in explorative research is that use of open-ended questions and probing gives participants the opportunity to respond in their own words. Quantitative methods, on the other hand, force participants to choose from fixed responses. Qualitative methodology sacrifices generalisability for more in-depth and detailed analysis of small subgroups of patients.

Setting and Sampling

The study took place at Het Roessingh, centre of rehabilitation, in the Netherlands. Participants were selected who fulfilled the following criteria: (1) they had to be treated for neck- or back problems, (2) the therapy had to include active exercises, like muscle-strengthening and stability exercises, (3) their communication skills had to be sufficient; basic knowledge of the Dutch language was required, (4) they had to be familiar with personal computers and the Internet, and (5) only adults were asked to participate.

Two different samples of participants were selected for interviews. Thirteen participants were selected from the patient waiting list of 'Het Roessingh', and twelve participants were recruited by physiotherapists of 'Het Roessingh'. This group existed of patients who received exercise therapy for their pain complaints at the time or had just finished the treatment at 'Het Roessingh'. Hence, these twelve participants had already experienced the traditional treatment, as opposed to the participants who were on the waiting list. A total of 25 participants was interviewed. The sample included maximum variation, including a balance of men and women, older and younger participants, and patients with and without experience with the traditional, face-to-face, exercise therapy at 'Het Roessingh'. Witten and verbal consent to participate was obtained from all participants.

Data collection

Most interviews were conducted at Roessingh Research and Development (RRD), which is situated next to the rehabilitation clinic. Generally, participants were interviewed while they were waiting for their physiotherapy session or afterwards. Only if participants could not come to RRD they were visited at home. The main reasons for home-visits were unavailability during working hours and problems with traveling due to disability. Also some participants had already finished the treatment at 'Het Roessingh'.

Interview

Interviews were conducted by two researchers (EB and KC), lasted between 30 and 90 minutes, and were guided by a semi-structured interview guide (See Appendix). The interviews focused on the perceived advantages and disadvantages of both, the traditional and Internet treatments. To trigger the pattern of discussing advantages and disadvantages of treatment aspects, participants were first asked to mention things they liked or disliked about past treatments. That is, treatments participants may had followed before coming to 'Het Roessingh'. After this 'warming up' part about the past, the interview continued with asking about the (dis)advantages of the treatment at 'Het Roessingh'. For some participants this was the present treatment or the treatment they had just finished. For other participants this was the treatment they would start in the nearby future. These participants, who were selected from the waiting list, received a short scenario on paper about a treatment program at 'Het Roessingh'.

Subsequently, all participants received four hypothetical scenarios with different aspects of Internet treatments to ask about (dis)advantages concerning possible Internet treatments in the future. All scenarios consisted of a paper with a short discription of a treatment, illustrated by a picture. The first scenario implied a home-based treatment with home-visits once a week in addition to face-to-face contact with the therapist at intake and evaluation. This scenario was not an Internet treatment, but a treatment in the home-setting instead and with less face-to-face contact than the traditional treatment, and without the use of technology. The second scenario was a video-consult with face-to-face contact at intake and evaluation, and webcam-contact with the therapist once a week. The third scenario implied a biofeedback treatment with face-to-face contact with the therapist restricted to intake and evaluation. The remaining time patients wear a garment that incorporates sensors while performing the prescribed exercises. These sensors provide the patients with feedback about their movements during exercising. The last scenario was a software program on the Internet in which moving images with written text and sound fragments are used. Patients log onto a personal exercise page with a personal exercise schedule and training goals. In this scenario face-to-face contact was also restricted to intake and evaluation.

At last, participants were asked three more questions with the purpose of emphasizing the factors that they found most important. Participants were asked to put the scenarios in order of preference, to formulate their 'dream scenario' and how much they were willing to pay for the traditional versus an Internet treatment.

Analysis

Interviews were audio recorded and transcribed verbatim by EB. The method of data analysis was qualitative content analysis; the process of identifying, coding, and categorizing patterns (Patton, 1990). Analysis began with the identification of key themes and patterns using the process of coding. The analytic process began inductively and was iterative; the data were reviewed multiple times, and codes were added and changed as new data were collected and new topics and relationships identified. Credibility of the analysis was aided by coanalysis of transcripts by a second researcher (KC), continual reexamination of the interview data throughout the research process, and ongoing discussion with two additional reviewers (SD, AB).

Data anlysis of the interview transcripts identified various themes and subthemes which fitted the decomposed Theory of Planned Behaviour. As a result this framework was chosen for structuring the data and explaining relations between the themes and subthemes.

Results

Twenty-five participants were selected for interview: 12 man and 13 women, with a mean age of 40 years, ranging from 20 to 77. Other sample characteristics are shown in Table 1.

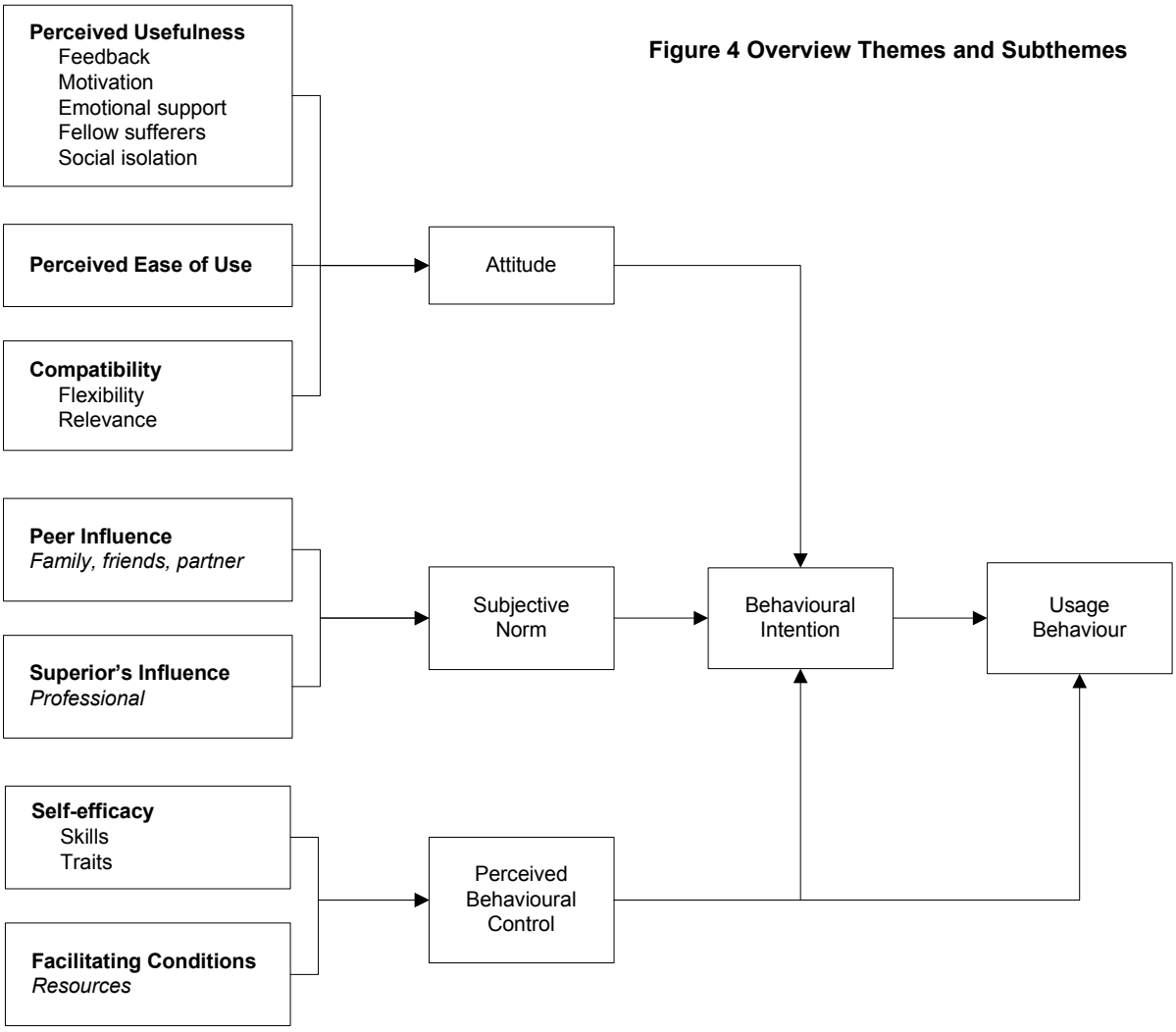
Table 1 Sample Characteristics

	Waiting list participants (n = 13)	Physiotherapy participants (n = 12)	Qualitative study participants (n = 25)
Age, mean (range) years	44 (23-77)	35 (22-59)	40 (22-77)
Sex			
Male	7	5	12
Female	6	7	13
Marital state			
Single / living alone	3	4	7
Married / living with partner	10	8	18
Nationality			
Dutch	11	12	23
Different nationality	2	-	2
Educational level			
Primary school	1	-	1
Secundary	9	6	15
Postsecondary	3	5	8
Missing...	-	1	1
Treatment group			
Back	3	3	6
Whiplash	6	4	10
Pain	2	5	7
Missing..	2	-	2
Occupational state			
Employed	5	7	12
Unemployed	8	4	12
Missing..	-	1	1
Personal Computer at home			
Yes	12	12	24
No	1	-	1

The majority of the participants considered an Internet treatment very helpful as a complement to the traditional face-to-face treatment or as follow-up. Participants especially liked the Internet treatment with videos. They found it much more practical than just a paper with drawings and short discriptions. Nevertheless, participants stated that they would not choose for an Internet treatment as an autonomous treatment with face-to-face contact restricted to intake and evaluation. Participants stressed the importance of learning the basics at the clinic together with the physiotherapist. Even so, it seemed that most participants would certainly try an Internet treatment if the therapist asked them to. Only one or two participants stated that they would reject an Internet treatment.

The main themes and subthemes that participants associated with the traditional and Internet treatments (See Figure 4) will be discussed next. One should keep in mind that in the interviews the treatments were represented as autonomous treatments.

Figure 4 Overview Themes and Subthemes



Attitude

The most arguments mentioned by participants were related to attitude. The attitude toward an Internet treatment seemed to be mainly affected by the perceived usefulness, followed by perceived ease of use and the compatibility of the application.

Perceived Usefulness

With perceived usefulness the expected effects of the treatment and other considerations are meant. Five factors related to perceived usefulness were identified from the data: feedback, motivation, emotional support, fellow-sufferers, and social isolation.

Firstly, most participants mentioned the lack of direct feedback by the therapist as one of the most important disadvantages of an Internet treatment. Many pain patients did not feel very confident about their own exercise performances and were afraid that something would go wrong in absence of the therapist: *"...then you're at home with such a videoscreen around you and then he will explain you something...but what if you don't do it right and you can't correct yourself, then what?"* (Female, 23). Generally patients expect their therapist to touch them during therapy, which is not possible in an Internet treatment:

"[At physiotherapy] you perform particular exercises. You do this mainly in the beginning. And such a physiotherapist just tries to explain you accurately which muscles you have to tense and also lets you feel it. (I: Yes) it is, via the Internet that is impossible" (Female, 59).

However, feedback by means of touching and feeling does not seem equally important to everyone: *"I mean, the therapist doesn't always have to touch you of course"* (Male, 37). Nearly half of the participants were positive about a biofeedback system providing patients with feedback about their exercise performances. They thought that a biofeedback system might even be more accurate than a therapist. Nevertheless, most of them still preferred face-to-face contact to discuss the feedback.

Secondly, a lot of participants raised the topic of motivation. Especially patients with little self-disipline associated the clinic with motivation. Apparently, for patients with little self-discipline it is important to be motivated by others, like the therapist or fellow-sufferers: *"...you buck each other up a little and you don't want to be inferior to one another"* (Female, 23). Moreover, the barrier to cancel an appointment was expected to be larger than just not performing exercises at home, when there is no one around. In addition, participants found the house a more distracting environment: "*Well, you're in your own environment, so uhm... persons might just ring the doorbell. Persons can call"* (Female, 36).

A third factor that was mentioned by most participants was emotional support. Patients reported that pain rehabilitation is not only a physical but also an emotional process. As a consequence, it is important for them that a person is present with whom they can share their feelings: *"Well, then I'm coming back in the safe place again. Because if the... In my case, and that's what this is all about, the physiotherapist was also very important for the things between the lines"* (Female, 47). Some participants reported that, in an Internet treatment, the therapist might fail to notice emotions as well as new pain complaints. They expect that patients will hide feelings, intentionally as well as unintentionally. The barrier to share

feelings with someone by webcam was expected to be a lot bigger than in live contact. Patients may, for instance, step away from the camera when feeling down or sad.

Moreover, 'impersonal approach' was related to an Internet treatment. An Internet treatment might make the patient feel like being a 'number': *"I have with [the webcam scenario] something like... you are a bit like a number"* (Female, 26). Also some participants associated Internet treatment with machines or robots: *"...I don't know, it just seems a weird feeling to me. If you do it like this. Well, kind of a 'robotic' idea"* (Male, 28).

Fourth, advice from fellow-sufferers at the clinic was frequently mentioned by participants: *"Well, you learn a bit... or you learn from each other, not that, but you can give each other a bit of advice like gosh, try this or try that"* (Female, 55). Moreover, when performing exercises together with other patients, patients could learn from one another by modelling. Some participants stressed the importance of fellow-sufferers in providing emotional support in the rehabilitation process:

> *"Well, also mainly that group process that just, I just find that a rather important factor, because... look, you can by such a physiotherapist, there you can open your heart, but he doesn't know what you feel, how you feel. And then at home you can, as in my case, tell your mother and your sister, but they don't really get it. (I: Yes) they act as if they get it, they do try it, but they don't really get it"* (Female, 23).

An Internet treatment was expected to miss this kind of emotional support, due to the lack of personal contact: *"It's just so.. detached"* (Female, 26). Nonetheless, some participants preferred a treatment in the home-setting, because they did not like the presence of other persons in group treatments. The main reason participants expressed for not liking the presence of others was demotivation by fellow-sufferers: *"And all this moaning by these persons. Some persons complain about it extremely much, don't they?"* (Female, 54). One female participant (47) had another argument for preferring an individual over a group treatment. She thought that patients express feelings more openly in an individual treatment. Hence, a group may have an inhibiting effect.

A fifth factor that was associated with an Internet treatment by a minority of the participants was social isolation. One male participant (27), who was asked for his first reaction after explaining the concept of an Internet treatment, reacted as follows:

"Yes, then you're thus sitting at home... (I: Yes) ... for me that plays a role, you know, because if I don't pay attention, since I have no studies and no job then I will be at home all day long."

Furthermore, going to the clinic was seen as a good way 'to get out of the house': *"Wel, and then you go [to the clinic]. You throw off work. You do have to follow therapy and everything... (I: Yes) But then you go with other thoughts. You are completely out of the ambiance"* (Male, 44). One or two participants reported the preference for a separation of rehabilitation and home situation. However, some respondents mentioned that they preferred a home-based treatment, because they found the home-environment more private and comfortable.

In summary, as for perceived usefulness patients were somewhat hesitant. Especially direct feedback, motivation, emotional support, fellow-sufferers, and social isolation are important contributors in patients' preferences.

Perceived Ease of Use

Generally, participants thought that the software program on the Internet (last scenario) would be relatively easy to use. Participants were particularly positive about the video function. Video, as opposed to a paper with exercise descriptions, brings about the opportunity to watch exercises more closely. Moreover, the program could function as a 'mnemonic device'. This would be especially practical for patients with a Whiplash, who suffer from bad memory due to their ailment. One male participant (27) for whom knowledge and information were two important aspects of the rehabilitation process reacted on the Internet treatment scenario as follows:

"Uhm... positive point. Uhm.. I find it very good that you, uhm, that all exercises and things, uhm, are completely elaborated. That you can look them up. (I: Hmm hmm) And that there are also videos. I find that very pleasant, because now I would have written it all down myself, but well, if it's sufficient there it's more pleasing, for it's also more detailed etc."

As for applications like webcam or biofeedback systems, some participants expressed hesitations with respect to the practical implementation: *"Well, I think that the camera brings about a lot of clumsiness"* (Male, 27). Moreover, some participants expected difficulties in working with the technology due to their ailment. One male participant (27) also mentioned that using a computer might lead to problems, since the computer was what caused his ailment in the first place! *"Uhm... well, this is with a computer. (I: Hmm hmm) That's for me*

also, well, especially if you're suffering from RSI [Repetitive Strain Injury] this lets the alarm bells ring a bit, you know."

Hence, although most participants expected no, or only minor, difficulties in working with the Internet, participants expressed hesitations with respect to applications like webcam or biofeedback systems.

Compatibility

Participants spoke of flexibility as the main advantage of an Internet treatment. An Internet treatment was expected to be more compatible with daily life: *"No longer hurried like oh, I have to go to [the clinic], and I have to do this, and I can nót do al these things. For, you can fit your treatment into your own rhythm, I suppose?"* (Female, 47). Although most persons thought of flexibility in time as an advantage, a lot of them still preferred exercising at fixed times. In the traditional treatment, these times have to be within working hours. With the biofeedback or Internet treatment there is still the possibility to exercise at fixed times. Patients may even perform their exercises early in the morning or late in the evening, before and after work. With the biofeedback or Internet treatment it is even possible to perform your exercises *at* work: *"And then you could also uh, possibly, you could do it at work"* (Male, 28).

Especially participants with a job or other commitments mentioned the advantage of not having to travel to the clinic. It saves time, which may also lead to a reduction of costs. Moreover, participants stressed the physical and mental exhaustion of traveling to the clinic:

> *"Uhm. Well, at the time I had a lot of trouble with driving. (I: Ok) and especially when it's somewhat busier than uh... (I: It's a bit hard) then it's hard yes. Then you were already tired if you had arrived..."* (Male, 28).

Some participants mentioned the relevance of acquiring the exercise skills at home instead of at the clinic. In the traditional treatment, patients have to transfer everything they learn into their home situation. In an Internet treatment this transfer is no longer necessary.

In short, most participants found the flexibility in time and location the biggest advantage of an Internet treatment.

Subjective Norm

In this study, subjective norm is defined as a patient's perception of whether persons that are important to the patient think that the patient should follow an Internet treatment. Subjective norm is influenced by peers (family, friends, partner) on the one hand, and by superiors (professional) on the other hand.

Participants stated that it would be pleasant for them if their social environment holds a positive attitude toward the treatment. However, this would not be a vital factor: *"Uhm... I think so, but it's no crucial factor. (I: Ok) but it's nice if they think, well how should I put it... uhm, when they're positive, then obviously it is easier."* (Male, 27).

Nevertheless, most participants expected positive reactions: [about partner] *"... he would back me up 100 percent."* (Female, 39). Conversely, in some cases the social environment was expected to react critically: *"They'd say, by no means are you doing what you'd do there"* (Male, 44). Or sometimes participants expected the attitude of their social environment to depend on the outcomes of the treatment: *"Well, I think that it will partly depend of the results that are achieved by it"* (Male, 28). One female participant (41) did not know if her social environment would take an Internet treatment seriously.

Some participants associated the clinic with professionality. As a consequence, they would follow the treatment 'Het Roessingh' advised them to: *"I always think... I think, well, you have so much experience here, at 'Het Roessingh'. (I: Yes, then..) ... that you 'd know better how it works best"* (Woman, 59). She also stated: *"... and I just think, well, at Het Roessingh they're specialised."*

Hence, most participants don't seem to attach a lot of value to others' opinions about their treatment.

Perceived Behavioural Control

With perceived behavioural control the participants' perceived ease or difficulty of performing the prescribed exercises at home and by means of technology is meant. Two factors were found to be related to the perceived behavioural control: self-efficacy and facilitating conditions.

Self-efficacy

The majority of the participants thought that an application like the software program on the Internet would not be dreadfully demanding. Most of them were experienced computer users. As a result, they expected themselves to be capable of utilising such an application. However, some participants were less confident in their own skills: *"... because I don't have that much understanding. (I: Yes) I have to learn it all first"* (Female, 35). Additionally she said: *"If I also have to spend my time on it. (I: Yes. Then uh...) I have better things to do."*

Nearly all participants spoke of self-discipline as an important trait one must possess to be able to follow an Internet treatment. Many participants reported lacking self-discipline. These

participants often stressed the importance of the presence others: *"Well, in my case uh... (I: Yes) ... there must always be someone around, because I've something like... I can't do it... you know, then forget it… then I quit"* (Male, 23). Participants also mentioned distractions in the home environment and the importance of having an appointment:

> *"… I mean, and then I have to sit at home exercising a little bit, and this may all be easy, but... but it's also that piece of going out, that you go somewhere and that you have an appointment, and then you must do it"* (Female, 41).

Performing the exercises via the Internet requires participants to log on to a personal account. Whereas some participants found the log on registration a motivational factor, others mentioned the possibility to fake:

> *"And that [the therapist] can see, based on your inlog and your exercises, how often and when and things like that. That I find very tricky. (I: Ok) that I find really dangerous. Since it can also happen that someone is very sneaky and is thinking 'I'm not in the mood for performing exercises but let's just log in so [the therapist] will think that I've done them anyway'. I find that dangerous"* (Female, 23).

There were also a lot of participants who thought that one just had to get used to an Internet treatment: *"Yes, perhaps it's getting used to. Maybe it's odd, but later..."* (Male, 23).

In short, as for self-efficacy participants found themselves capable of learning to use a particular system. However, participants had doubts about following an Internet treatment due to lack the of self-discipline.

Facilitating Conditions

The majority of the participants mentioned the necessity of resources. A couple of barriers were mentioned, pertaining to the implementation of exercising by means of a technology in the home-environment. These were lack of floor space, lack of exercise material, lack of a (working) personal computer with a connection to the Internet, and Internet costs. One female participant (47) spoke of lack of resources as unprofessional: *"Yes, that's... not professional, since you don't have everything"*.

Finally, one participant expected the costs of an Internet treatment to be higher than the costs of the traditional treatment, as opposed to most participants, who thought just the opposite.

Willingness to Pay

At last participants were asked how much they were willing to pay for the traditional face-to-face treatment and how much they were willing to pay for an Internet treatment. This was a hypothetical question, since participants got their treatments paid by their health insurances. However, the purpose of this question was to surface the value participants attached to both types of treatment.

Nearly all participants would pay half the price for an Internet treatment of what they would pay for the traditional treatment. Also a few participants were not willing to pay anything for an Internet treatment, whereas some others were willing to pay just as much as for the traditional treatment if the effects were alike. The main reason for participants to pay less for an Internet treatment was the expectation that it would be cheaper for the clinic to realise. Furthermore, some participants would pay less because of the lack of personal attention they associated with this type of treatment and its lower perceived usefulness.

Discussion

Qualitative methods were used to explore which type of treatment chronic pain patients prefer, the traditional or an Internet treatment, and which factors contribute to their preference. The results revealed that participants considered an Internet treatment very helpful as a complement to the traditional treatment or as follow up, but would not choose it as an autonomous treatment. The finding that most chronic pain patients prefer traditional treatment seems to contradict the results from previous studies in which preferences for Internet treatments for illnesses as phobias (Andersson et al., 2006) and depression (Andersson et al., 2006; Trimbos, 2007) was found. Apparently, chronic pain patients are different from other patients who are, for instance, suffering from depression or phobias, or post-traumatic stress or eating disorders. The difference in the need for face-to-face contact could be explained by the nature of patients' problems. The patients in previous studies suffered from more psychological and perhaps shameful problems. For that reason, these patients might prefer a more anonimous treatment. The problems of chronic pain patients are mainly physical, and less shameful and, therefore, easier to talk about. Another explanation could be the presence of pain in this population. The participants in our study did not feel very confident about their exercise performances and were afraid that making wrong movements could cause even more pain. As a consequence, participants associated face-to-face contact with feedback about their performances. In previous studies on patients with other disorders this pain factor was not involved.

Another interesting finding was that the motives that were mentioned by participants fitted the decomposed Theory of Planned Behaviour. Although various authors found support for the decomposed Theory of Planned Behavior in predicting computer intentions and usage for teachers (Smarkola, 2008), user accaptance of WAP services (Hung & Chang, 2005), or predicting consumer intentions to shop online (Lin, 2007), for instance, the decomposed Theory of Planned Behavior was not used in clinical settings before. Nonetheless, in our study the decomposed Theory of Planned Behaviour showed a useful framework for structuring factors that are related to patients' preferences with regard to an Internet treatment. The main reasons that were mentioned by the patients in this study were related to perceived usefulness.

Although feedback could also be provided via the Internet, by means of a biofeedback system for instance, which might be even more accurate than a therapist, most participants would still prefer personal feedback by the therapist. Our results suggest that the presence of

the therapist is not only important for factual feedback, but also for emotional support and motivation. This finding is in line with literature on chronic pain. Verhaak et al. (1998), for instance, stated that chronic pain not only involves physiological, but also psychological and behavioural mechanisms.

Another interesting finding is the importance of contact with fellow-sufferers during the traditional therapy. The participants in our study indicated that fellow-sufferers are important for emotional support. This finding is in line with previous studies on the importance of support groups (Ng & Chan, 2007; Subramaniam, Stewart, & Smith, 1999; Weis, 2003). In addition, the participants found fellow-sufferers important for raising motivation, as patients did not want to be inferior to one another and pushed each other to continue and not give up. This could result in increased performances of patients. In an Internet treatment, on the other hand, patients would have to perform the prescribed exercises on their own, without the motivation of others. However, no studies investigating the effect of fellow-sufferers on exercise performances of pain patients are known. The inhibiting effect that a group might have on patients, that was mentioned by some participants in our study, was also not found in literature.

The biggest advantage of an Internet treatment that participants mentioned was the compatibility. With an Internet treatment patients can perform their exercises whenever and wherever it suits them. In the traditional treatment, on the other hand, patients have to go to the clinic during working hours. Moreover, some participants mentioned the relevance of acquiring the exercise skills at home instead of at the clinic. This was also found in another study on the advantages and disadvantages of home-based treatments (Hale, Bennett, Bentley, Crawshaw, & Davis, 2003). Nonetheless, for most participants the flexibility of time and location was inferior to the advantages of the traditional treatment. Although traveling to the clinic could be exhausting and time-consuming, a lot of the patients found it a good way ‘to get out of the house’ and meet other people. This finding is in line with other research (Thomas & Parry, 1996). One possible explanation for this finding is that about half of the participants in our study was unemployed. As a result, they found it enjoyable to get out of the home-environment. Moreover, time might not be an important factor, because these participants had no job or other commitments to take into consideration. Another explanation might be that for chronic pain patients, feeling better is priority number one and therefore they do not mind spending time and money on their treatment.

Only few motives were mentioned that were related to perceived ease of use and perceived behavioural control. Although some participants expressed hesitations with regard to particular forms of technology, most participants thought that it would not be very difficult to learn how to use the particular systems. Only, a couple of barriers were mentioned by participants, pertaining to the implementation of exercising by means of a technology in the home-environment, namely lack of floor space and lack of exercise material. These barriers were the same as in a study by Stephenson and Wiles (2000). In addition, participants in this study mentioned the lack of a (working) personal computer with a connection to the Internet and Internet costs. Nonetheless, in the study by Stephenson and Wiles (2000) patients were home-visited by their therapists and did not have to use any kind of technology.

Subjective norm also seemed to exert only little influence on the decision to follow one treatment or another. Most participants stated that they would make their own choice, no matter what their family, partner or friends think would be best for them. Nonetheless, most participants expected positive reactions. This finding is in correspondence with the importance of fellow-sufferers that was expressed by participants. Some participants noted that fellow-sufferers know exactly what they feel, unlike family and friends. As a result, patients might expect that their family and friends do not know which treatment will be best for them. Consequently, they choose their treatment on their own.

It should be noted that the patients who participated in this study did not have any experience with Internet treatments. However, nearly all participants were familiar with the traditional face-to-face treatment: twelve participants had already experienced the traditional treatment at the clinic, whereas the other thirteen participants would start the traditional treatment in the nearby future. Most of them had already followed physiotherapy at other clinics, thus they had also experienced this type of treatment. Hence, it could be that participants' preferences for the traditional treatment might be caused by unfamiliarity with Internet treatments. The participants in this study only received a couple of hypothetical scenarios and had to imagine what they would like and dislike, without even knowing anything about the treatments, like effectiveness for instance. Further research is needed to investigate the effectiveness of Internet treatments, as effectiveness is a very important factor when considering a treatment. Moreover, researchers should compare patients with experience with an Internet treatment with unexperienced patients to investigate the role of familiarity on the preference of chronic pain patients with regard to Internet treatments. Researchers should also examine the best way to implement an Internet treatment. The

disadvantages of Internet treatments that the participants in this study mentioned, like lack of personal attention, could, for example, be resolved by including consulting hours, so that there is still the possibility for direct, face-to-face contact with the therapist.

Moreover, research is needed on other populations. In this study only patients with neck and shoulder problems were included. As a consequence, the results could not be generalised to patients with other pain problems. Quantitative research is necessary to investigate for whom Internet treatments will be most appropriate. The decomposed Theory of Planned Behaviour is recommended as a framework in future research on patients' preferences with regard to Internet treatments.

The main clinical implication of this study is that both types of treatment have advantages and disadvantages, often depending on the needs of the individual patients. What some patients perceive as advantageous may be perceived by other patients as disadvantageous. Most patients considered an Internet treatment very helpful in addition to the traditional face-to-face treatment or as follow up. However, all patients stressed the importance of learning the basics at the clinic together with the physiotherapist. This highlights the need for physiotherapists to be aware of the impact of the therapy setting and personal attention on individual patients and the need to ensure appropriate selection of the type of treatment. A treatment that matches the preferences of the patient might increase motivation, compliance, and consequently treatment outcomes. Inappropriate selection of treatment type, on the other hand, might lead to noncompliance and poor treatment outcomes.

Further research is needed to investigate the effects of Internet treatments on chronic pain patients. The best way to implement an Internet treatment is also an aspect that needs to be examined. Moreover, quantitative research is necessary to investigate for whom Internet treatments will be most appropriate.

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Appendix

Het Roessingh Res. & Dev.	
Interview preferenties t.a.v. behandeling blad 1	respondentnummer
Naam interviewer	
Datum afname: Jaar , maand , dag	

Vraag 1:

Geslacht:

- ☐ man
- ☐ vrouw

Vraag 2:

Wat is uw leeftijd? ___ jaar

Vraag 3:

Waarvoor bent u in behandeling bij Het Roessingh? (ziektebeeld)

- ☐ nek
- ☐ rug
- ☐ beide
- ☐ anders, nl…

Vraag 4:

4a *Welke behandelvormen heeft u in het verleden allemaal al gehad? (zowel op het Roessingh als buiten het Roessingh)*

Het Roessingh Res. & Dev.

Interview preferenties t.a.v. behandeling blad 2 respondentnummer

4b *Wat vond u de voordelen van deze behandelvorm(en)?*

4c *Wat vond u de nadelen van deze behandelvorm(en)?*

Vraag 5:

5a *Wat voor behandelvorm(en) krijgt u momenteel?* (ergotherapie, psychologie, maatschappelijk) … *Indien uitbehandeld: Wat voor programma volgde u op het eind?*

5b *Wat zijn, volgens u, de voordelen van deze behandelvorm(en)? (fysio-behandelingen)*

5c *Wat zijn, volgens u, de nadelen van deze behandelvorm(en)? (fysio-behandelingen)*

Het Roessingh Res. & Dev.

Interview preferenties t.a.v. behandeling blad 3 respondentnummer

5d *Welke factoren spelen, bij u, een rol bij het opvolgen van de voorgeschreven oefeningen?*

Vraag 6:

Hoeveel uren per week bent u op het Roessingh voor uw behandeling (en)?

… Hoe staat uw naaste omgeving tegenover uw behandeling? (thuis / werk / vriendenkring)

Vraag 7:

Hoe lang bent u onderweg van uw huis tot Het Roessingh?

Vraag 8:

8a *Hoe gaat u naar Het Roessingh?*

- ☐ openbaar vervoer
- ☐ lopen/fietsen
- ☐ eigen auto
- ☐ wordt gebracht / gehaald

8b Indien geen hulp van anderen: *U hebt dus geen hulp van anderen nodig…*

Indien wel hulp van anderen: *U krijgt dus hulp van anderen…*

… Hoe staat uw naaste omgeving tegenover uw behandeling? (thuis / werk / vriendenkring)

Het Roessingh Res. & Dev.

Interview preferenties t.a.v. behandeling blad 4 respondentnummer

Vraag 9:

Heeft u ervaring met pc's? ☐ nee

☐ ja

… zo ja, wat voor ervaring?(thuis / werk / anders..)

.....

Uitleg behandeling op afstand: *(fysiotherapie op afstand)*

We hebben het nu gehad over behandelingen die u in het verleden heeft gehad en over uw huidige behandeling(en). U hebt hier enkele voor- en nadelen van genoemd.

Nu zou ik graag even in willen gaan op een andere vorm van behandelen waar in de toekomst wellicht gebruik van zal worden gemaakt. Ook hier zou ik graag uw mening over horen.

Het gaat om op afstand behandelen. Dit houdt in dat u (1) op afstand wordt behandeld, dus u kunt thuis blijven, (2) het mogelijk is dat er gebruik wordt gemaakt van technologie, zoals een computer of tv, (3) de zorgverlener meer op afstand heeft, waardoor u minder frequent fysiek contact zult hebben, met als gevolg dat u (4) meer zelf bepaalt.

Vraag 10:

10a *Wat is uw eerste reactie hier op? (bijv. per aspect "wat vindt u hiervan?")*

.....

.....

.....

10b *Wat zouden, voor u, de voordelen van een behandeling op afstand zijn?*

.....

.....

.....

Het Roessingh Res. & Dev.

Interview preferenties t.a.v. behandeling blad 5 respondentnummer

10c *Wat zouden de nadelen van een behandeling op afstand voor u zijn?*

10f *Hoe zou uw directe omgeving tegenover een behandeling op afstand staan?*

Scenario's:

Ik zal nu enkele voorbeelden van mogelijke toekomstige behandelingen toelichten, zodat u zich een beeld kunt vormen van dergelijke behandelvormen. Ik zal u bij elk voorbeeld steeds om uw mening vragen. Het kan zijn dat de behandelingen en/of voor- en nadelen elkaar soms overlappen, waardoor u het gevoel krijgt dat u antwoorden herhaalt, maar dat is helemaal niet erg.

Uitleg Thuis Consult:

Eenmaal per week bezoekt uw fysiotherapeut u thuis waar u onder toeziend oog oefeningen uitvoert.
Deze oefensessies vinden plaats op vaste tijden.
Gedurende de week oefent u zelfstandig thuis met behulp van een papier waarop de oefeningen worden beschreven.

Contactmoment: 1x per week
Locatie contactmoment: thuis

Het Roessingh Res. & Dev.

Interview preferenties t.a.v. behandeling blad 6 respondentnummer

Vraag 11:

11a *Wat is uw eerste reactie hier op?*

11b *Wat zouden, voor u, de voordelen van thuis consult zijn?*

11c *Wat zouden de nadelen van thuis consult voor u zijn?*

11d *Hoe zou uw directe omgeving tegenover deze behandeling staan?*

<u>Uitleg Video Consult:</u>

Eenmaal per week heeft u thuis via video contact met uw fysiotherapeut, waarbij u onder toeziend oog oefeningen uitvoert. Deze oefensessies vinden plaats op vaste tijden.
Gedurende de week oefent u zelfstandig thuis met behulp van een papier waarop de oefeningen worden beschreven.

Contactmoment: 1x per week via video
Locatie contactmoment: thuis

Het Roessingh Res. & Dev.

Interview preferenties t.a.v. behandeling blad 7 respondentnummer

Vraag 12:

12a *Wat is uw eerste reactie hier op?*

12b *Wat zouden, voor u, de voordelen van video consult zijn?*

12c *Wat zouden de nadelen van video consult voor u zijn?*

12d *Acht u zichzelf in staat om met deze vorm van technologie te werken?*

12e *Hoe zou uw directe omgeving tegenover deze behandeling staan?*

Het Roessingh Res. & Dev.

Interview preferenties t.a.v. behandeling blad 8 respondentnummer

Uitleg Biofeedback behandeling:

U ontmoet uw fysiotherapeut 1 maal bij intake, en 1 maal bij de evaluatie, waarbij u onder toeziend oog oefeningen uitvoert. Deze ontmoetingen vinden plaats op de kliniek. Gedurende de resterende tijd van de behandelingen oefent u thuis zelfstandig met behulp van een papier waarop de oefeningen worden beschreven. Daarbij krijgt u hulp van een apparaat dat op het lichaam wordt gedragen. Dit apparaat levert terugkoppeling van spieractiviteiten. Hierdoor wordt uw manier van bewegen zichtbaar gemaakt.

Contactmoment fysiotherapeut: 2x gedurende de hele oefentherapie – intake & evaluatie
Contactlocatie: kliniek

Vraag 13:

13a *Wat is uw eerste reactie hier op?*

13b *Wat zouden, voor u, de voordelen van deze behandeling zijn?*

13c *Wat zouden de nadelen van deze behandeling voor u zijn?*

Het Roessingh Res. & Dev.

Interview preferenties t.a.v. behandeling blad 9 respondentnummer

13d *Acht u zichzelf in staat om met deze vorm van technologie te werken?*

13e *Hoe zou uw directe omgeving tegenover deze behandeling staan?*

Uitleg Online Bewegingscoach:

U ontmoet uw fysiotherapeut 1 maal bij intake en 1 maal bij de evaluatie, waarbij u onder toeziend oog oefeningen uitvoert. Deze ontmoetingen vinden plaats op de kliniek. Gedurende de resterende tijd van de behandelingen oefent u thuis zelfstandig met behulp van internet waarop de oefeningen terug te vinden zijn op video. U krijgt als patiënt van het Roessingh een eigen inlogcode waarmee u toegang krijgt tot een op maat gesneden oefenprogramma. Uw fysiotherapeut kan zien hoe vaak en hoe lang u heeft ingelogd en welke oefenvideo's u heeft bekeken.

Contactmoment fysiotherapeut: 2x gedurende de hele oefentherapie – intake & evaluatie
Contactlocatie: kliniek

Vraag 14:

14a *Wat is uw eerste reactie hier op?*

Het Roessingh Res. & Dev.

Interview preferenties t.a.v. behandeling blad 10 respondentnummer

14b *Wat zouden, voor u, de voordelen van de Online Bewegingscoach zijn?*

14c *Wat zouden de nadelen van de Online Bewegingscoach voor u zijn?*

14d *Acht u zichzelf in staat om met de Online Bewegingscoach te werken?*

14e *Hoe zou uw directe omgeving tegenover deze behandeling staan?*

Vraag 15:

15a Kunt u de besproken behandelvormen rangschikken op volgorde van voorkeur?

[1] _____

[2] _____

[3] _____

[4] _____

[5] _____

Het Roessingh Res. & Dev.

Interview preferenties t.a.v. behandeling blad 11 respondentnummer

15b Waarom juist deze volgorde?

Vraag 16:

Nog even over de Online Bewegingscoach…

16a *Wat zou u ervan vinden als de Online Bewegingscoach onderdeel zou worden van de huidige behandeling? Dit houdt in dat u, in plaats van een blaadje met daarop de oefeningen die u thuis moet doen, de Online Bewegingscoach gebruikt.*

16b *Wat zou u ervan vinden als de Online Bewegingscoach zou worden gebruikt in het na traject van de huidige behandeling? (dus als u uitbehandeld bent in de kliniek)*

Mogelijke doorvraag: …*En als u voor specifieke klachten (bijv. aan gewrichten) wel langs kunt komen op afspraak?*

Het Roessingh Res. & Dev.

Interview preferenties t.a.v. behandeling blad 12 respondentnummer

Vraag 17:

Als iemand u nu een bedrag (met onbeperkt limiet) zou geven en u zou vragen om de "ideale behandeling" voor patiënten met pijnklachten te ontwikkelen, hoe zou deze behandeling er dan uit komen te zien?

Vraag 18:

18a *Als u een eigen bijdrage zou moeten leveren voor uw behandeling, hoeveel zou u dan bereid zijn bij te dragen aan uw huidige behandeling?*

18b *En hoeveel zou u willen betalen voor een online behandeling?*

Afsluiting:

Dit was dan de laatste vraag.

Ik wil u hartelijk danken voor uw uitgebreide antwoorden.

We zullen uw antwoorden dus samen met die van andere patiënten van Het Roessingh gebruiken voor het opstellen van een vragenlijst waarmee we de voorkeuren t.a.v. een online versus de huidige behandeling verder willen onderzoeken.

We zouden het zeer op prijs stellen als u deze vragenlijst ook zou willen invullen zodra hij klaar is!