"Learning and knowing bodies: Norwegian psychomotor physiotherapists' reflections on embodied knowledge"

Kirsten Ekerholt og Astrid Bergland, 2018.

INTRODUCTION

This paper focuses on Norwegian psychomotor physiotherapists' reflections on their experiences of "embodied information" in clinical practice. A person understands information from various sources and with various kinds of content through the body's ability to sense or feel. Bodies are not just material things or physical containers of minds. Bodies are carriers of major attributes and it is of importance for physiotherapists to participate with the patients in the exploration, translation and interpretation of embodied message. Bondi (2014) is quoting Harrison (2007) and McDougall (1992) when stating that there is an inevitable inarticulacy to feelings, which is lost when they are described in words, and that people's accounts of their feelings are profoundly shaped by the conditions in which they are rendered or performed (Bondi, 2014).

An embodied phenomenon is expressed in experiences, which the therapist can gain access to, in all the ways people can express their experiences. People who are expressing their embodied information may also be experiencing a powerful therapeutic act, where listening and therapeutic conversation might become healing experiences (Dragesund & Råheim, 2008; Ekerholt et al 2014; Ekerholt & Bergland, 2004, 2006, 2008; Seikkula & Trimble, 2005;;).

In NPMP, the body is understood as an integrated social- psychological-physiological phenomenon and the center for experiences (Thornquist & Bunkan, 1995).

This is an Accepted Manuscript of an article published by Taylor & Francis in Physiotherapy Theory and Practice on 02 Feb 2018, available online: http://www.tandfonline.com/10.1080/09593985.2018.1433256 The Norwegian physiotherapist Aadel Bülow-Hansen and the Norwegian psychiatrist Trygve Braatøy developed NPMP, during the period 1946–52. Braatøy was a psychoanalytical psychiatrist, while Bülow Hansen was a skilful orthopaedic physiotherapist. Braatøy was concerned with how physical and emotional stress affected the body, and wanted Bülow-Hansen to use her empirical knowledge to reduce the patients' bodily resistance, thus giving access to feelings during psychoanalytic therapy (Bunkan, 2010).

They found that a local examination exploring the patient's symptoms was not enough; the whole body had to be examined. The person's biographic story was of importance, and Bulow-Hansen recognized the importance of the integrated relation between the body, the feelings and the patient's social situation, in her treatment. She saw the body as an interconnected whole where one part could have an impact on the functioning of the other parts (Bunkan 2010). One main difference between NPMP and so-called traditional physiotherapy is that the former always includes observation, evaluation and adjustment to the patient's breathing during examination and intervention. Changes in breathing could signal that the patient is reacting emotionally, also involving changes in the activation of the autonomic nervous system (ANS) (Bunkan, 2010). Bodily reactions and verbal dialog, as well as emotional and cognitive changes, are fundamental to both the examination and the treatment (Bunkan 2010; Thornquist & Bunkan 1995).

According to patients' experiences, the NPMP physiotherapists concentrate on being "present", confirming that the physiotherapist's ability to be present is essential if the patients are to feel that they have been 'met' and understood (Ekerholt & Bergland 2004; 2006; 2008). This therapeutic alliance is vital to create a "safe enough" environment for the patients to become

present within their own experience, thus allowing for deeper therapeutic work to occur (Martin, Garske & Davis, 2000).

Most qualitative research in NPMP is based on information about the patients' experiences of NPMP (Dragesund & Råheim, 2008; Ekerholt & Bergland, 2004; 2006; 2008; Thornquist, 2006; Sviland, Råheim & Martinsen, 2012; Øien, Iversen & Stensland, 2007; Øien, Råheim, Iversen & Steihaug, 2009; Øien, Steihaug, Iversen & Råheim, 2010;), and how the physiotherapists adjust and perform their therapeutic interventions (Thornquist, 1990; 1991; 1994; 1995; 2001a; 2001b: 2010). There is a lack of research concerning the documentation of expert knowledge in NPMP. As far as we know, there is only one study, which primarily focus on the experts' reflections on their patients' experiences in NPMP (Ekerholt, Schau, Mathismoen & Bergland, 2014). In this study, a psychomotor physiotherapist and a clinical psychologist were interviewed in order to investigate the therapists' understanding of their patients and the therapeutic processes they had been involved in. The study also intended to develop concepts in order to understand the concurrent therapeutic processes.

The aim of the present study is to contribute to the existing literature by providing a new and deeper understanding of and insight into NPMP physiotherapists' knowledge of and experiences with how their patients seemed to relate to embodied sensations and reactions, i.e. different kinds of embodied information. We wanted to explore the physiotherapists' experiences with attentive "listening to the body" in their clinical work. We also wanted to explore the therapists' opinion whether there could be too much "listening to the body."

To the very best of our knowledge, previous studies have not reported on these aspects of NPMP.

Theoretical framework

As we wrote in the introduction, the focus of the study is on embodied information, thus the main theoretical approach we intend to use is phenomenology. The phenomenological idea of going to the things themselves might mean to do full justice to the experience in all its variety. For phenomenology, things are things of experience. The term experience denotes the relationship we have with the world in which we are engaged and phenomenology accordingly turns to the world as it is experienced. Phenomenological expressed, "going to the things, means that, as researchers, we should position ourselves so the things can show themselves to us, and thus "the thing" is understood as a phenomenon (Dahlberg, 2007) . The lived body gives us a home in the world and emphasizes the mutuality between humans and the world. Fuchs, Sattel and Henningsen (2010) state that from a phenomenological point of view, subjective experience and brain processes might be regarded as being dynamically linked with the organism and the environment. It is only as part of embodied interactions that neuronal activities can serve as carrier processes of conscious experience. In this way, it is the living body itself that unites mind and brain.

Stelter (2008) suggests that in therapeutic practice, body experience is established as the attentive focus on the therapeutic process, where awareness of this is seen as the source of reflections on the individual's mental status quo and as the basis for developmental processes during therapy. The concept of the first-person perspective has a clear connection to the lived and experiencing body, which is theoretically based on phenomenology and which is the key to the understanding of body-anchored learning. First-person perspectives are "lived experiences associated with cognitive and mental events", as originally stated in 1999 by Varela and Shear

(Stelter, 2008). This perspective is an embodied perspective, which means that cognition is situated in the body, concrete and bodily based. The lived experience is irreducible, and can give access to pre-reflective and implicit, embodied knowledge. This perspective can be seen as the basis for creating a personal understanding evolving from the interplay between the self and one's environment (Stelter, 2008).

Meaning is based on the person's interpretation and understanding of the concrete situation. The person perceives and creates his or her personal reality by relating to the world and by giving specific meaning to the context, – a meaning which arises out of previous experiences and personal history, and which evolves as the result of the person's concrete action in relation to the specific environmental context. For others to get access to this first-person perspective, the other person should be an active listener, in order to help and support the person in the first-person position to sharpen the awareness of the interplay between himself or herself and the situation (Stelter, 2008).

From a phenomenological standpoint, Merleau-Ponty (1994), defines the body as a mediator to the world and "our anchor in the world". He states that "External perception and the perception of one's own body vary in conjunction because they are the two facets of one and the same act." And he continues (p. 206): "Every external perception is immediately synonymous with a certain perception of my body, just as every perception of my body is made explicit in the language of external perception." Merleau-Ponty (1994) is conscious of the ambiguity between inner and outer world, when stating: "The union of soul and body is not an amalgamation between two mutually external terms, subject and object, brought up by arbitrary decree. It is enacted at every instant in the movement of existence" Movement or action is an integral part of perception (Merleau-Ponty, 1994). Gallagher and Zahavi (2012, p. 5) stated that "phenomenology as a philosophical-scientific approach was the advent of embodied approaches to cognition. The phenomenologist would, according to Gallagher and Zahavi (2012) say that perceptual experiences are embedded in contexts that are pragmatic, social and cultural. Phenomenology is about describing the world and how it appears in such experiences, also taking "being-in-the-world" as part of the subject matter to be investigated. Phenomenology is not just about consciousness, as if consciousness could be considered in isolation from everything else in our lives. It is about how we are immersed in our everyday situations and projects, how we experience the world, relate to others, and engage in the kinds of actions and practices that define our lives (Gallagher and Zahavi, 2012).

One of Merleau-Ponty's ideas is the thesis on primacy of perception states to which we have direct access through our perceptual experiences. Merleau-Ponty brings into discussion the embodied situation of the experiencing and perceiving subject. We are in the world through our bodily existence, and this relation cannot be annulled or ignored by any theory of living and conscious beings. All objective thoughts are based on pre-established notions of the world. The task is to consider this fundamental situation in all accounts of human life: reality has to be described, not constructed or formed. Thus, the primacy is in the lived experience of the world. Since the world is given to us originally via perception, it is the task of the phenomenologist to investigate the constitution of the perceptual world. This approach can be characterized as a "return" to the lived experiences. Since all perception involves functioning sense organs, the

phenomenology of perception is by necessity a phenomenology of the body (Merleau-Ponty, 1994).

The question of perception is not only a technical question of the senses. As Renaud Barbaras (2004) writes: "It merges in reality with the ontological question in its simplest sense, namely as an inquiry into the meaning of the being of what is." Through our experience, we have access to being, and thus in order to question being, we need to examine the ways we open up to the world, namely perception. The body might be considered the physical platform of the learning process (Spitzer, 2006). Information is perceived by the autonomic nervous system (ANS) and processed by the cortex selectively and interpretively. Through processing sensory information from the environment and from the viscera, the ANS is continuously evaluating risk, i.e. when we are feeling safe, the ANS is regulated to dampen sympathetic activation, but when we are feeling unsafe, the physiological states will support fight, flight, or freeze behavior (Porges, 2009). This mobilization is adaptive in the short term, but costly and damaging to the organism if maintained. (Porges, 2009). Feelings have an important impact on the interpretation of stimuli , and neurobiological research has shown that embodied learning enables cognitive items and concepts to be correlated with feelings (Lewis & Haviland-Jones, 2008).

MATERIAL AND METHODS

This article will present some results from a qualitative follow-up study entitled "Norwegian Psychomotor Physiotherapy: NPMP physiotherapists' clinical experiences".

To get access to relevant subjects, 12 specialists in Norwegian psychomotor physiotherapy, (11 women and one man) were asked to participate in this study. They were 12 out of 36 NPMP

physiotherapists who had recruited participants to a parallel randomised clinical study which examined the effect of Norwegian Psychomotor Physiotherapy on patients' quality of life, social support, coping, self-esteem and pain. These twelve physiotherapists were chosen to form a purposeful sample, i.e. representing different ages and working situations in different parts of Norway.

The informants were aged between 42 and 61 years. They had worked in clinical practice for 17–43 years, and the time since graduating NPMP master program ranged from five to 28 years. Most of them (nine) were working full time; three were working 50–85%. Nine of the informants ran their own clinical practice, while three were working partly in specialized mental health care.

Interviews

All the physiotherapists were interviewed individually, in their clinics in various Norwegian cities by the first author. She is a NPMP physiotherapist who has done clinical work for ten years, followed by twenty years of teaching NPMP in Scandinavia. Each interview lasted approximately one hour. There was no precisely formulated pre-prepared interview guide. The conversations between the physiotherapists and the interviewer were more like professional dialogues where the physiotherapists could speak freely and the interviewer could encourage the physiotherapists to go on with their reflections. Since the interviewer is an experienced NPMP physiotherapist, she could easily ask follow-up questions, all the time being aware of the fact that it might be easy to take things for granted when doing research in a familiar field. Consequently, the interviewer asked the informants to clarify and expand their statements as much as possible.

All interviews were audio recorded. The first author transcribed the interviews.

The questions were based around the following themes:

What do you think about the concept of "listening to the body" and what are your experiences and thoughts about your patients' way of "listening to the body"? Related to these central questions, follow-up questions were: "It is sometimes said, "One should not listen to the body". What are your experiences and thoughts about statements like this? Could you describe the challenges met within interpreting bodily information?

What could it mean for patients receiving NPMP to "listen to their bodies"? How could such "listening" create motivation for further exploration?"

Data Analysis

Data collection was terminated when the material reached "saturation point", (Strauss & Corbin, 1998), i.e. the interviewer began to recognize statements, stories and elements which had been presented earlier. In analyzing the interview transcripts, we used Systematic Text Condensation (Malterud, 2012). Systematic Text Condensation is a modified version of Giorgi's phenomenological analysis (Giorgi, 1985). The perspective of phenomenology was used to gain insight from the therapists' understanding of their patients. Phenomenology seeks to describe the experience of the phenomenon under study. There are various phenomenological approaches, but what they all have in common is a focus on exploring how human beings make sense of experience and transform that experience into consciousness. A researcher undergoing phenomenological description seeks to understand the participant's perspective of an experience, role or process (Spiegelberg, 1976). Phenomenological research assumes that there are

commonalities or structures involved in people's interpretation of events, and uses the analysis of significant statements, the generation of meaning units and the development of an 'essence' description (Creswell 2014).

In the analysis the four designated steps of Systematic Text Condensation were followed (Malterud, 2012): (1) To ensure transparency and dependability, the transcripts were read both individually and together with the other author to gain a contextualized impression of the interviews, and previous preconceptions were highlighted. Our previous clinical practice might have had an impact on our preconceptions, and we were both focused on the transcripts and on what this text told us. Both authors are NPMP physiotherapists, and our professional skills helped us in the analyzing process. (2) In reading the transcripts closely, we identified and coded units of meaning. A unit of meaning is a text section that discriminates an aspect of meaning in relation to the interviewee's experience. Such units are contextual and highly individual accounts (Giorgi, 1985). Identified units of meaning were coded. Coded units were actively negotiated until a general agreement was achieved. Kvale & Brinkmann (2009:201-202) characterize a coded unit as a text segment with a keyword attached. The same keyword may appear on several text segments enabling later retrieval and grouping. At this point the final categories and their content were established.

(3) The meaning in each of the coded groups was interpreted and condensed in brief fragments, thus, abridging meanings into shorter formulations ((Malterud, 2012). (4) The condensed fragments were generalized to an overall reflection of the most important patterns and themes appearing in the analysis. A pattern surfaces when an experience is shared and it is enriched when a certain degree of variation or contrast is visible in the experiences (Malterud, 2012). Thus, generalized condensations provide an overview of condensed meaning and tie them

together as a theme. Quotations are used as illustrations to exemplify how meaning is expressed by the participants.

We present the results under four descriptive summaries showing important characteristic features of the physiotherapists' experiences: "The negative imperative of the body", "The embodied traumatic experiences", "The process of creating meaning", and finally, "The embodied person emerges -who am I and what choice do I have?" Further analysis revealed that the main theme in the material is "Learning and knowing bodies", which is part of the title of this publication.

Consensus regarding categorization of statements was reached by discussion. In terms of trustworthiness and to develop plausible interpretations throughout the systematic analysis of the material, two NPMP physiotherapists read the results of the qualitative analysis in order to act as "critical friends" (Norris, 1997).

The informants are presented by numbers (1-12, see table 1). Quotation from the individual informant presents his or her individual experiences. Most often, the quotation is representative for corresponding experiences expressed by other informants. Quotations from the informants are presented in italics.

Table 1. Ethical conditions The Regional Committee of Ethics approved the study. All the participants signed forms to give their informed consent.

RESULTS: LEARNING AND KNOWING BODIES

According to the physiotherapists' experiences, one of the main aspects of NPMP is the creation of meaning for the patients, which means getting access to their understanding of the interplay of their own situation and their specifically recognized embodied experiences. In NPMP, the physiotherapist stimulates *perceptual attention training* to focus on the present moment, on the immediate experiences of the situation, and on embodied action in the here and now. In this process, the physiotherapist, together with the patient, notices whether a bodily shift can be observed during the therapeutic session. This shift might indicate a change in the patient's attitude towards the various topics. The bodily felt sensation needs time to grow and the creation between the patient and the physiotherapist is based on the patients' bodily sensations as the first step to a broader understanding of personal experiences. Attention is on specific parts of the body, on breathing, on specific movement sequences, or on environmental conditions. The physiotherapists seemed to be able to draw the patient's attention to bodily information that has been revealed during the therapy, creating the basis for the making of personal and social meaning. The new experiences became gradually integrated into the everyday life of the patients. These experiences became a kind of reflective, goal-oriented and intentional process that was perceived by the patients, and which seemed to facilitate coping with daily life activities.

The negative imperative of the body

The physiotherapists had often worked with patients who had systematically overshot their personal limits, who had apparently handled everything, and who were regarding it as nonsense to pay any attention to the body. When they had to describe how they related to their bodily impulses and sensations, the focus would be on the painful and negative bodily experiences. The physiotherapists felt as if the patients' longstanding diseases and pains seemed to increase the patients' bodily alertness; accordingly, the physiotherapist believed that the patients would easily interpret every bodily sensation as something "dangerous", thus diminishing their confidence in trusting their own bodily experiences. The following quotation from physiotherapist 1) is representative of experiences reported from most of the physiotherapists.:

"It is rare for there to be too much listening to the body and feelings, but there can be too much listening to anxiety and symptoms that say "do not do this and do not do that." A focus that is too intense on painful bodily sensations can easily increase the feelings of stress and anxiety, i.e. the patient is continuously focusing on "Is anything negative going to happen?". Then it is easy to withdraw from personal matters, to avoid challenges, to be passive and defensive.

The physiotherapists described how they have very often met patients who had problems with describing any aspects of body awareness and body image other than pain and anxiety, which could imply that other bodily sensations had become tacit, and were hardly recognized or attended to. According to the physiotherapists, it could seem as if the patients had taught themselves not to pay any attention to emotional reactions, generally by controlling their breathing patterns. This is clearly stated by physiotherapist 6).

Many do not know that they have a body; they often say, "I only live in the head". They are exhausted; they have gone on autopilot for so long, they have taught themselves to control their breathing, so nothing will affect them. "Pain is not dangerous, just grit your teeth and get on with it."

The physiotherapists wanted to explore the patients' personal view of their own embodied situation, especially sorting out the patients' view on pain, anxiety, breathing problems etc. The physiotherapists were wondering about questions they had often asked themselves during therapeutic encounters, and these questions might have helped them to search for the patients' cognitive and emotional view on themselves, and whether their bodily reactions might impose on the patients' daily life. Physiotherapist 9) presented the following reflection:

What is this person's way of thinking and reflecting about feelings and bodily reactions? Do they have good or poor access to their feelings? If the patient has too much focus on the limitations and restrictions imposed by the symptoms, it is important to ask: "How do you interpret these symptoms?"

The embodied history of traumatic experiences

Some of the physiotherapists described their meeting with people with serious health problems, but with no medical diagnosis. The physiotherapists described how they met patients who had paid no attention to themselves and their stressful lifestyle, finally becoming very exhausted. The physiotherapists explained how they paid close attention to any autonomic reactions or feelings, which might arise during the body examination and treatment, and how the patient's reactions formed the guidelines for their therapeutic approaches. The following statement, expressed by physiotherapist 8) could be an illustration of how the physiotherapists described this group of patients and how the physiotherapists adjusted the therapy according to the patient's reactions:

Quite often, we get patients referred from the hospital, who have been given a diagnosis of "functional disorders", who reveal a mixture of neurological or other somatic symptoms, but with no positive medical findings. They are usually rather young people, highly educated, belonging to higher income-groups and they are regularly doing rather extensive physical training. During the examination, I look especially for their way of breathing and their bodily alertness. If the autonomic reaction is very strong, I will start the therapy on the most basic level, with body awareness, stabilizing and strengthening exercises.

Sometimes the patient could show strong autonomic reactions, being confused or appearing to be numb in the therapeutic setting. The physiotherapists explained how they often saw a connection between these reactions and previous traumatic experiences, which the patient might report later on. Regardless of the event, the individual might exhibit poor tolerance for an arousal in the autonomic nervous system, resulting in increased bodily stress reactions. The physiotherapists reported that they were constantly looking for changes in the patients' way of breathing, changes in the muscular tension, or observable autonomic reactions, which could expose the patient's struggle with strong feelings. The physiotherapists also described how they constantly tried to make the therapeutic situation as tolerable as possible for the patient, as expressed by physiotherapist 4):

The patients may dissociate mentally and can think they are being "left alone in the trauma." As a physiotherapist, I must help patients to be aware of being here-and-now, and that I am there, intending to help them to return from the state of mental dissociation.

"Please notice that I'm sitting here, you are not left alone." Both being able to contain the extreme discomfort of the memory, and being able to focus on the here-and-now situation are vital elements in such processes.

With traumatized patients, the physiotherapists were attuned to the patient in a kind of joint focused attention in order to help the patient to stay for a moment with the memory of the trauma. Equally important was the process of guiding the patient away from the traumatizing memories. In such cases, their focus was to remind the patients that the stressors were temporary and would pass, and that they should not be lingering too long in the emotional state. The following quotation presents experiences done by physiotherapist 4):

Some patients seem to be frozen and stuck in horror, shock and anxiety, but emotional reactions can suddenly arise. If the patient wants to work with these previous experiences, the limit for venturing into the anxiety and discomfort must be taken most seriously. "Do not go too far into the traumatic memory, just try to endure a short period of the discomfort, then you must concentrate on being situated here, in this room, then you can release the tension and relax." I have to be very attentive to a nuanced way of recognizing bodily sensations if the patient has experienced traumatic events. In some cases, I prefer to work with a psychologist or a psychiatrist. It feels safer for me, when we are both helping the patient. Some of the physiotherapists described how they had elaborated techniques to help traumatized patients to endure strong reactions, when the patient may have been revealing signs of fight or flight reactions, of mental dissociation or of bodily numbness. As experienced physiotherapists, the informants seem to have learned how to meet such situations, and how to create strategies for calming down the patient's intense emotional arousal. In some cases, the physiotherapists could establish a cooperative effort with other health professionals, preferably a psychologist or psychiatrist, in order to be able to give the necessary treatment.

The process of creating meaning

The NPMP physiotherapists say that their intention was to increase the patients' contact with the array of bodily sensations, thus making the patients acquainted with other nuances in bodily sensations than from the painful areas. The physiotherapists described how they were constantly focusing on any observable bodily changes, and how they could make the patients attentive to any bodily sensations that might emerge during the therapy. The initial focus could be on attention to simple movements, trying to notice any changes in their body awareness, as expressed by physiotherapist 3).

From the first physical examination and during the therapeutic process, body awareness is a vital element. I constantly observe this in relation to the patient's relaxing ability, their way of breathing and moving, paying attention to whether they can move a little better or whether they manage to relax on the bench – are they having a pleasant experience? Achieving a feeling of being grounded and more stabilized, may allow the patient to breathe more deeply, which might

give glimpses of bodily resources. Do they become a bit curious and want to explore such experiences any further?

If the patient had great pain in one part of the body, then the physiotherapist would massage other parts, thus shifting the patient's attention from the painful areas, to the not so painful parts of the body. These changes, could give the patient the chance to notice the difference between tension and relaxation, comfort and discomfort, thus becoming a cornerstone in the process of increasing body awareness. Physiotherapist 12) described her experiences in this way:

If there is massive and intense pain everywhere, I often massage the patient's feet, if this is a pleasant experience for the patient, rather than the whole body. I do not talk too much, but I am very aware of the non-verbal communication and any bodily changes. Will there be any relaxation in the muscle tension, in their way of breathing? Are there changes in the color of the face? Do they become more restless and unfocused? The leg might get heavier or warmer, the intestine might start to make noises, and the patient might seem to become more relaxed. Such short flashes of something pleasant are very precious and valuable. Sometimes I will ask for the patient's experiences, sometimes not, that depends on the patient.

The physiotherapists reported that some patients felt "their minds were in chaos", and that their feelings were vague and unknown impulses, consequently not verbally accessible. The physiotherapists' stories indicated that they were aware of the patients' emotional activation or emotional state, and gave their patients sufficient time to react through a combination of verbal and bodily approaches.. If the feeling of being chaotic was very dominant, the therapy could

focus on movements designed for stability and strength, often by doing these movements in the standing position. The physiotherapists describe how such therapeutic intervention could be the basic element in the NPMP approach when hands-on techniques turned out to be too demanding for the patients. Physiotherapist 4) gave the following statement:

Being touched by the physiotherapist can be very challenging for some patients, because they have to realize that they have a body, and that thoughts and feelings are connected to the body. If they cannot endure this connection, "the chaos in their minds" may easily increase. An increased contact with their bodily strength may increase the access to their own resources, thus building up their own power.

The embodied person emerges -who am I and what choice do I have?

During the therapeutic processes, the patients and the physiotherapists searched for health promoting and pleasant experiences, without creating any sense of "being clever" in the therapeutic setting. The physiotherapists encouraged the patients to try to pay attention to their bodily and emotional reactions in different social and relational contexts, using their bodily sensations as available bodily resources. The physiotherapists said that they had noticed that if the patients managed to become aware of themselves as embodied persons, the patients seemed to act with an increased bodily trust, which could help them to identify and use these bodily sensations as vital resources in their daily life. Physiotherapist 2) expressed her experiences as follows:

It is important to become aware of the fact that we respond through the body when something affects us, thus becoming familiar with feelings, desire, and determination. What do I want? What makes me feel alive, how do I retrieve vitality and energy? This is often unclear and remote, because the negative symptoms, not the positive element, have been the primary focus. 'Sensitivity' means to notice more than the negative sensations.

Physiotherapists conveyed that the bodily sensations and feelings of the patients could have been chaotic, unexpected and incomprehensible, but during therapy, the patients had gradually become more familiar with their bodily sensations and reactions, which made the sensations more comprehensible and more cognitively understandable. Physiotherapists 7) stated that:

It can be quite demanding to try to integrate what happens through body sensations, associations, memories, thoughts, understanding and meaning. Each of these pieces must make sense and the patient must see them as connected to each other and to every current life experience.

Stressful life events as well as pleasant experiences will be reflected in the patients' bodies and the following statement from physiotherapist 3) might exemplify most of the other physiotherapists' experiences:

Patients should have the experience of diversity and richness when we talk about "listening to your body." Usually they understand the logic of the "body's voice" as their health improves. It becomes easier to recognize how "daily demands will influence my well-being", thus making it easier to realize the connection between previous and present life events. Seeing things in context might help the patients to listen to the body's deep, fresh voice when it speaks: "What do I want? What is comfortable?" It can be difficult for patients to obtain this ability as adults, if it was not obtained during childhood, in particular if their focus during childhood was to survive.

The therapists reported that they had noticed that their patients could gradually manage to develop new perspectives and become more aware of which events might trigger their feelings i.e. to be able to recognize and acknowledge their problems as well as their own choices in life. Life events can be stressful or pleasant, and as living beings, people cannot avoid all stressful events, but sometimes have to stay in stressful relationships. Physiotherapist 2) stated it clearly:

"Sometimes you cannot just stay in your comfort zone or move away, you have to recognize and challenge the discomfort. Sometimes you will have to stay in the situation, sometimes you can choose to withdraw from the situation. I work a lot with this way of dividing different situations – what choice do I have, what shall I choose to engage with – who am I?

The quotation implies that the physiotherapists had realized that the patients gradually had realized that their bodies were a source of making it possible to become aware of the variety and complexity of their past and present lives. Furthermore, the therapists' statements indicate that their patients had more possibilities and options to make conscious choices than they had believed at the onset of the therapy.

DISCUSSION

A main theme emerging from the data is 'learning and knowing bodies' as an important resource for the patients and the physiotherapists in NPMP. That means that resources concerning learning from embodied knowledge in their everyday lives earlier might have remained unused and often unnoticed. Embodied knowledge seems, according to the physiotherapists, to be a complex process and the physiotherapists seem to have encouraged their patients to be engaged in the embodied bodily learning, which can be understood as acquiring new, or modifying and reinforcing existing bodily knowledge, skills and preferences.

The physiotherapists reported that it seemed for them that many of their patients were not very conscious of their bodies and that it seemed as if many of the patients had until then used rather few possibilities to reflect upon and be able to verbalized and learn from their embodied knowledge. Learning concerns the cognitive domain, as well as domains like feelings, personality and identity, including social and cultural processes (Fuchs, Sattel and Henningsen, 2010). The first-person perspective can be seen as the basis for introducing personal and social meaning and as an important dimension for the understanding of experiences, thoughts, reflections, values, motives and aims, allowing us to build up learning and everyday life functions that increase the feeling of empowerment and coping (Stelter, 2008). The first-person perspective in the NPMP therapeutic approaches seemed to have mobilized the patients' resources and supported their process of coping.

From the beginning of the NPMP therapy, i.e. from the first physical examination, the physiotherapists focused closely on the patients' autonomic reactions, on their body awareness and their ability to breathe and move freely. They also inquired after the patients' experiences,

all the time aiming for a common understanding of what might happen during the body examination and therapeutic sessions. Fuchs, Sattel and Henningsen, (2010) state that the concept "embodiment" refers both to the embedding of cognitive processes in brain circuitry, as well as to the origin of these processes in an organism's sensory-motor experience in relation to its original environment. This concept is now becoming a major paradigm of psychosomatic and psychiatric medicine as well as of NPMP, and will be discussed further in the next section.

The body: "our anchor in the world"

Body-anchored experiencing and learning is closely connected to the concept of the lived body, which can be seen as the basis for the individuals' deeper understanding of the interplay with one's individual environment or specific context. This understanding is theoretically based on phenomenology, which is the key to the understanding of body-anchored learning (Stelter, 2008). In our study, the patients, according to the physiotherapists, seemed to have struggled with feelings of stress, anxiety and hopelessness. The physiotherapists had also noticed that it seemed as if the patients had systematically over-stretched their limits, becoming increasingly tensed up and stressed, resulting in pain and psychosomatic diseases. Rudebec (2001) stated that bodily experiences related to strain, or conflict, might turn into symptoms when the obvious tie of meaning between them and the external situation is cut off, or when discomfort or disability is perceived to be intolerable. The physiotherapists reported that the patients described how they related to the painful and negative bodily experiences, and on the elements that were decreasing their habitual actions. Accordingly, the physiotherapists rather often felt that the patients would easily interpret every bodily sensation as something dangerous, thus decreasing their confidence in trusting their own embodied experiences. This could be understood as if the patients' firstperson reality consisted of negative experiences both in relation to the world and to their specific inner and outer contexts. The findings reveal that many of the physiotherapists through their body examination, found that the patients were constantly "clenching their teeth", in order to endure pain, anxiety or stress-related conditions. It would seem that the constant feeling of stress could be part of the reason why the patients usually paid close attention to the negative bodily sensations, such as pain and anxiety. This fits in with other reports of patients' experiences about how they have endured pain, being always on guard or holding back tears because of the constant feeling of pain (Dragesund & Råheim, 2008; Øien et al, 2011). Stelter (2008) states that a first-person perspective has a clear connection to the living and experiencing body in everyday activities and that the central orientation is not just person-centered, but rather oriented towards an interactive and circular concept, which blends the individual with the situation.

The physiotherapists and patients seemed to have worked together on the task of investigating the patients' lived experiences, recognizing the importance of creating meaning out of their perceptions. Since all perceptions involve functioning sense organs, the phenomenology of perception is a phenomenology of the body (Merleau Ponty, 1994). Consequently, he defines the body as a mediator in relation to the world and "our anchor in the world". External perception and the perception of one's body do not match because they are two different sides of the same coin (Merleau-Ponty, 1994). As experienced by the physiotherapists, it seemed that many of the patients were just "living in the head", it had been "safer" to ignore the perceived signals from the body, making these sensations tacit or hardly recognizable.

Even though the importance of emotional awareness is acknowledged very valuable, feelings associated with psychological distress are frequently suppressed or avoided. The physiotherapists describe this phenomenon as "the patients having poor access to their feelings". The process of accepting one's feelings and experiences is a vital element in the processes of change, containing both an increased emotional insight, and the challenge of "hot cognitions". This concept can be understood as thoughts that are emotionally charges and often connected to erroneous attitudes and thoughts (Coombs, Coleman and Jones, 2002).

Negative feelings are very often due to environmental problems, and can be automatically reactivated if a person is in a situation that is similar to a previous one (Nørby, 2008). In our material, the physiotherapists reported how they could observe excessive autonomic reactions during therapy, indicating previous traumatic experiences or abuse. In those cases, the patients' bodies seemed to have been kept numb and "homeless", which could be seen as a state of autonomic immobilization (Porges, 2009). Short term or long-term burdens, due to humiliation and scorn inflicted by societal structures or by significant others, can have both direct and indirect bodily effects and can fuel destructive personal ways of living. Kirkengen and Thornquist (2012) state that suffering people often are disturbed in their everyday life and usual tasks. The physiotherapists reported how their patients could seem to be passive and defensive, or demanding to be "left alone" with their bodily experiences. Meaninglessness is hard to endure, and so is the fear that very often accompanies it (Rudebeck, 2001). The physiotherapists reported that their patients needed information about their unconscious, autonomic reactions and they needed to be gently guided by the physiotherapists to release the bodily tension, becoming able to open up, slowly and gradually, to the immediate flow of their emotional and bodily reactions.

The physiotherapists reported how they did not talk too much in such situations, so the patient got sufficient time and silence to be able to notice what was going on in their bodies. These experiences correspond with the statement of Seikkula and Trimble (2005), about the importance of being able to create a calm and respectful therapeutic setting and to use sufficient time for the patient to create words for their feelings. "For the words to be found, the feelings have to be endured" (Seikkula & Trimble, 2005 p 468). Difficult and traumatic memories are stored in nonverbal bodily memory (van der Kolk, 1996). If the therapeutic conversation moves forward too quickly, there is a risk that it will take place solely at rational level (Seikkula & Trimble, 2005). In some cases, the physiotherapists preferred to cooperate with other health professionals, in order to give traumatized patients, the necessary treatment. This fits in with another report about NPMP treatment for traumatized people (Ekerholt et al., 2012), and reports from extensive therapeutic interventions to traumatized people in order to make them become able to cope with the demands of their daily life (Ford et al, 2005). During therapy, the patients may detect their own resources, which can show that it is possible to learn how to interpret and regulate one's own bodily reactions and feelings, i.e. to develop competence and insight into affective phenomena (Nørby, 2008).

This first-person perspective gives access to reflective and implicit knowledge and involves the view that the sense of meaning is created through involvement and action in the world, using the lived body as the central point of reference. Stelter (2008) suggests that such reflections would not produce a uniform level of body awareness, but varying degrees of conceptualization of body experiences within varying situations and contexts. Stelter (2008) is quoting Merleau-Ponty, who stated that "every external perception is immediately synonymous with a certain perception of

my body, just as every perception of my body is made explicit in the language of external

perception". The physiotherapists were very concerned about how their patients interpreted and understood their symptoms and bodily reactions, reporting that attentive focus on bodily experiences had been established from the first physical examination in NPMP. The physiotherapists considered awareness of the body as the source of reflection in the here- andnow situation, thus being an important aspect of the therapeutic process. The physiotherapists were very attentive to and focused on the patients' reactions all the time, trying to make the therapeutic situation as tolerable as possible for the patients. They were attuned to the patients, observing whether any muscular tension was released, whether any changes occurred in the way of breathing, or if any changes happened to the color of the face, in short, if it seemed that the patient became more relaxed or not. In this way, the physiotherapists could make the patient aware of any changes that would happen throughout the therapeutic session, also recognizing the patient's process of experiencing their feelings in a conscious way. Øien et al. (2010) report how physiotherapists stated that they were constantly sensitive to the patients' reactions, giving themselves enough time to become attuned to the patients. The physiotherapists encouraged and helped the patients to stay with their feelings and bodily reactions, but also helped the patients to release tension and breathe more freely. By working in a common attentive state, the physiotherapists experienced that this might be a learning process beneficial to the patients. This aspect of NPMP fits in with research on how human beings react in dangerous versus safe environments. When feeling safe, the sympathetic activation will be inhibited, thereby increasing the calm behavioural states and dampening hormonal stress activation (Porges, 2009).

Stelter (2008) states that most people are not very conscious of their body and its experiential resources in regard to learning. He suggests that the idea in personal and experience-based meaning making is to stimulate the patients into becoming aware of the implicit knowledge to which the individual actually can have access. Perceptual attention to and awareness of our body is a possibility we have, though we seldom make use of it (Stelter, 2008). However, the physiotherapists reported how they have focused on the body both as a source for and experience of subjectivity, making the patients more attentive to and aware of their bodily sensations. This process of getting access to the interplay between the patients themselves and their world could also imply that the patients' first-person experiences as "only living in the head, having no contact with my body" might be challenged. Such co-operation between patient and physiotherapist could be understood as a co-creation of narratives between them based on the patient's bodily sensations as a first step to a broader understanding of reality, - a reality which is based both on personal experiences and social relations (Stelter, 2008). He suggests that in therapeutic practice, body experience is established as embodied knowledge, i.e. the patients' perspective can be the basis for personal and social meaning making and as an important dimension for becoming aware of more bodily sensations than the negative ones, thus being able to focus on positive elements in their body-as-self as well. This fits in with the physiotherapists' reports of how they through massage, could help the patients to find areas of the body which were not so painful, then paying attention to possible differences between the tensed and relaxed parts of the body. In this way, the patients' connection to these areas could increase through the touch of the physiotherapists' hands.

The physiotherapists talked about the importance of stimulating the patients to become aware of the implicit embodied knowledge to which they might have access and of which they were unaware. The physiotherapists report how they resonate together with the patients about the felt sense, and how they noticed whether a bodily shift could be observed. Such changes could be connected to different life experiences and different environmental conditions. The patients were asked to pay attention to what happened to them in certain social contexts, what would increase the feeling of energy, which elements from their daily life did they have to take part in, and which elements could they just leave? This might be the first step to a broader understanding of reality – a reality, which is based on both personal experiences and embodied felt sense, and which is shaped in social relations (Dragesund & Råheim, 2008; Ekerholt et al, 2012; Ekerholt & Bergland, 2006: 2008: Øien, Iversen & Stensland, 2007; Øien, Råheim, Iversen & Steihaug, 2009; Øien, Steihaug Iversen & Råheim, 2011).

Through perceptual attention training, a method that has the attention on the immediate, sensuous experience of the present moment and on embodied awareness, this therapeutic approach became the key to pre-reflective or implicit knowledge (Stelter, 2008). Damasio (1999) notes that internal information flows are continuous because the living body constantly senses that it is alive and monitors its state. These sensations are fundamental bits of information that the body constantly signals to itself (ibid.). It can be quite demanding to try to integrate what happens through body sensations, associations, memories, thoughts, understanding and meaning. Each of these pieces must make sense and the patient must see them as connected to each other and to every current life experiences in order to become meaningful for the patients.

Strengths and limitations

This study has limitations and strengths in the establishment of its trustworthiness. Lincoln & Guba (1985) discuss four criteria for trustworthiness: credibility, dependability, confirmability and transferability. In this paper, credibility refers to the fit between the experiences of the physiotherapists and the researchers' presentation of them. A study is credible when it presents faithful descriptions and when co-researchers or readers confronted with the experiences can recognize them. In this study, credibility was enhanced by returning the transcription of individual interviews to the physiotherapists to make sure that the data were firmly grounded in their experiences and statements. We also had two colleagues to read the results of the qualitative analysis, asking whether the results seemed relevant and reasonable. Long and Johnsen (2000) define dependability as confidence in data collection. In this study data collection was undertaken in a consistent manner, and the researchers were aware of the fact that there in an interaction between the interviewer and the physiotherapists. The term confirmability deals with the researcher's ability to be neutral to data, not in the meaning of being a distanced and neutral observer, but showing the researchers' ability to reflect upon their previous preconceptions (Öhman, 2005). As NPMP physiotherapists ourselves, we were very aware of this aspect during the research process, continuously returning to the data searching for a deeper understanding of the material. Transferability refers to the extent to which findings can be applied to other contexts. The authors of this paper believe that the present descriptions are rich enough for other researchers to judge whether the findings would be transferable to other treatment settings or contexts, but we are not aiming for any generalization of our findings.

Doing qualitative research is a time-consuming, but also innovative and open-minded activity (Öhman, 2005). It could be argued that more time should have been used in the different parts of

the research process, and that the researcher should have been more open-minded and flexible. Since the physiotherapists already knew the interviewer, it might have had an impact on the physiotherapists' willingness to share all their experiences from their clinical practice with the colleague who interviewed them.

CONCLUSION

This article provides a description of NPMP physiotherapists experiencing how their patients utilized embodied flows of information, and how embodied information might be extracted, interpreted and received. The therapy had a first-person perspective, focusing on an intrapersonal affair in the form of experiences, thoughts, image or feelings. The physiotherapists reported how they had worked with the patients in order to find different ways of making the patients notice different aspects of bodily awareness, combining this sense of awareness with the patients' reactions in different social settings. The results revealed the importance of listening to more than painful, negative bodily sensations and that embodied knowledge can represent positive resources for the patients. Embodied knowledge and learning include acquiring new, or modifying and reinforcing existing embodied knowledge, skills and preferences and may involve synthesizing different types of embodied information.

The physiotherapists and patients focused on an increased awareness of embodied experiences, aiming at revealing and developing aspects in their patients' everyday lives, which might increase their feeling of mastery and self-confidence.

Declaration of Interest:

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of the paper.

Acknowledgements

We are very grateful to the 12 NPMP specialists who agreed to participate in the interviews.

REFERENCES

Barbaras R 2004 The Being of the Phenomenon: Merleau-Ponty's Ontology. Indiana University Press.

Bondi L 2014 Understanding feelings: Engaging with unconscious communication and embodied knowledge. Emotion, Space and Society 10:44-54.

Bunkan BH 2010 A Comprehensive Physiotherapy. In: Ekerholt K (Ed) Aspects of Psychiatric and Psychosomatic Physiotherapy. HiO report no 3 pp 5-10. Oslo, Oslo University College.

Coombs MM, Coleman D, Jones EE 2002 Working with feelings: The importance of emotion in both cognitive-behavioral and interpersonal therapy in the NIMH Treatment of Depression Collaborative Research Program. Psychotherapy: Theory/Research/Practice/Training.39: 3:233-244. Creswell JW 2014 Research design. Qualitative, quantitative & Mixed methods approaches. Los Angeles: SAGE

Dahlberg K 2007 Reflective lifeworld Research. Sweden: Student literature.

Damasio AR 1999 The feeling of what happens: body and emotion in the making of consciousness. New York: Harcourt Brace.

Dragesund T, Råheim M 2008 Norwegian Psychomotor Physiotherapy and patients with chronic pain. Patient's perspective on body awareness. Physiotherapy Theory and Practice 24: 243–254.

Ekerholt K 2011 Awareness of breathing as a way to enhance the sense of coherence: Patients' experiences in psychomotor physiotherapy. Body Movement and Dance in Psychotherapy 6: 103-115.

Ekerholt K, Bergland A 2004 The first encounter with Norwegian psychomotor physiotherapy: patients' experiences, a basis for knowledge. Scandinavian Journal of Public Health. 32: 403–410.

Ekerholt K, Bergland A 2006 Massage as interaction and a source of information. Advances in Physiotherapy 8: 137-144.

Ekerholt K, Bergland A 2008 Breathing: A Sign of Life and a Unique Area for Reflection and Action. Physical Therapy 88; 7, 832-9.

Ekerholt K, Schau G, Mathismoen KM, Bergland A 2014 Body awareness – a vital aspect in mentalization: experiences from concurrent and reciprocal therapies, Physiotherapy Theory and Practice 30: 312-318.

Ford J, Courtois C, Steele K, van der Hart O, Nijenhuis ERS 2005 Treatment of Complex Posttraumatic Self-Dysregulation. Journal of Traumatic Stress. Vol 18 No 5 pp 437 – 447.

Fuchs T, Sattel HC, Henningsen P 2010 In: Fuchs T, Sattel HC, Henningsen P (Eds) The Embodied Self. Dimensions, Coherence and Disorders, pp V –VII. Stuttgart: Schattauer GmbH.

Gallagher S, Zahavi D 2012. The phenomenological Mind. London and New York: Routledge. Giorgi A 1985 Phenomenology and psychological research: essays. Pittsburgh: Duquesne University Press

Kirkengen AL, Thornquist E 2012 The lived body as a medical topic: an argument for an ethically informed epistemology. Journal of Evaluation in Clinical Practice 18: 1095-1101.

Kvale S, Brinkmann S 2009 Det kvalitative forskningsintervju (The qualitative research interview). Oslo: Gyldendal Akademisk.

Lewis M, Haviland-Jones JM (Eds) 2008 Handbook of Feelings, 2nd Edition. NY:Guildford.

Lincoln YS, Guba EG 1985 Naturalistic inquiry. Beverly Hills, California: Sage Publication.

Long T, Johnsen M 2000 Rigour, reliability and validity in qualitative research Clinical Effectiveness in Nursing 4:30-37.

Malterud K 2012 Systematic text condensation: A strategy for qualitative analysis. Scandinavian Journal of Public Health 40: 795–805.

Martin DJ, Garske, JP, Davis MK 2000 Relation of the therapeutic alliance with outcome and other variables: A meta-analytic review. Journal of Consulting and Clinical Psychology, Vol 68(3), 438-450. <u>http://dx.doi.org/10.1037/0022-006X.68.3.438</u>

Merleau-Ponty M 1994 Kroppens fenomenologi (Phenomenology of the Body) Oslo, Pax.

Norris N 1997 Error, bias, and validity in qualitative research. Educational Action Research 5:172-176.

Nørby S 2008 Body, feelings and learning. In: Schilhab T, Juelskjær M, Moser T (eds) Learning bodies. Copenhagen: Danish University of Education Press.

Öhman A 2005 Qualitative methodology for rehabilitation research. Journal of Rehabilitation Medicine 37: 273-280.

Porges S 2009 The Polyvagal Theory: New insights into adaptive reactions of the autonomic nervous system. Cleveland Clinic Journal of Medicin. Volume 76:2: S86-S90.

Rudebeck CE 2001 Grasping the Existential Anatomy: The Role of Bodily Empathy in Clinical Communication. In: Toombs SK (ed.) Handbook of Phenomenology and Medicine, 1-26. Kluwer Academic Publishers.

Seikkula J, Trimble D 2005 Healing Elements of Therapeutic Conversation: Dialogue as an Embodiment of Love. Family Process 44; 4; 461–475.

Shore AN 2002 Advances in Neuropsychoanalysis, Attachment Theory and Trauma Research: Implications for Self Psychology. Psychoanalytical Inquiry 22: 3.

Spiegelberg H 1976 The Phenomenological Movement. Vol I and II. Martinus Nijhoff. The Hague.

Spitzer M 2006 Brain Research and Learning over the Life Cycle. Personalizing Education Chapter 3:ISBN-92-64-03659-8.

Stelter R 2008 Learning in the light of the first-person approach. In: Schilhab T, Juelskjær M, Moser T (eds) Learning bodies. Copenhagen: Danish University of Education Press. Strauss A, Corbin J 1998 Basics of qualitative research: Techniques and procedures for developing grounded theory (2nd ed.). Thousand Oaks, CA, US: Sage Publications.

Sviland R, Råheim M, Martinsen K 2012 Touched in sensation – moved by respiration.
Embodied narrative identity – a treatment process. Scandinavian Journal of Caring Sciences; 26; 811-819.

Thornquist E 1990 Communication: What happens during the First Encounter between Patient and Physiotherapist? Scandinavian Journal of Primary Health Care 8:133-8.

Thornquist E 1991 Body Communication is a Continuous Process: The First Encounter between Patient and Physiotherapist. Scandinavian Journal of Primary Health Care 9: 191-196.

Thornquist E 1994 Varieties of functional assessment in physiotherapy. Scandinavian Journal of Primary Health Care 12: 44-50.

Thornquist E 1995 Musculoskeletal suffering: diagnosis and a variant view. Sociology of Health and Illness. 17: 166-192.

Thornquist E 2001a Diagnostics in Physiotherapy – Processes, Patterns and Perspectives. Part I. Advances in Physiotherapy 3:140-150. Thornquist E 2001b Diagnostics in Physiotherapy – Processes, Patterns and Perspectives. Part II. Advances in Physiotherapy 3:151-162.

Thornquist E 2006 Face-to-Face and Hands-On: Assumptions and Assessments in the Physiotherapy Clinic. Medical Anthropology 25: 65-97.

Thornquist E 2010 Psychomotor Physiotherapy – principles, perspectives and potentials. In: Ekerholt K (ed.) Aspects of Psychiatric and Psychosomatic Physiotherapy. HiO report 3:203-217. Oslo University College.

Thornquist E, Bunkan BH 1995 What is Psychomotor Therapy? Oslo: Pensumtjenesten.

Van der Kolk 1996 Trauma and memory In: van der Kolk BA, McFarlane AC, Weisaeth L (Eds). Traumatic stress: The effect of overwhelming experiences on mind, body and society. pp 279-32. New York: Guildford Press.

Øien AM, Iversen S, Stensland P 2007 Narratives of embodied experiences – Therapy processes in Norwegian psychomotor physiotherapy, Advances in Physiotherapy 9: 31-39.

Øien AM, Råheim M, Iversen S, Steihaug S 2009 Self-perception as embodied knowledgechanging processes for patients with chronic pain. Advances in Physiotherapy 11,3: 121-129. Øien AM, Steihaug S, Iversen S, Råheim M 2010 Communication as negotiation processes in long-term physiotherapy: a qualitative study. Scandinavian Journal of Caring Sciences. 25:1:53-61.

Øien, AM, Steihaug S, Iversen S, Råheim M 2011 Communication as negotiation process in long-term physiotherapy: a qualitative study. Scandinavian Journal of Caring Sciences. 2 (5), 53-61.