

## How Can Movement Quality Be Promoted in Clinical Practice? A Phenomenological Study of Physical Therapist Experts

Liv Helvik Skjaerven, Kjell Kristoffersen, Gunvor Gard

**Background.** In recent years, physical therapists have paid greater attention to body awareness. Clinicians have witnessed the benefits of supporting their patients' learning of movement awareness through the promotion of their movement quality.

**Objective.** The aim of this study was to investigate how physical therapist experts promote movement quality in their usual clinical settings.

**Design.** A phenomenological research design that included a sampling strategy was devised. Using specific criteria, 6 lead physical therapists nominated a group of physical therapist experts from the fields of neurology, primary health care, and mental health. Fifteen informants, 5 from each field, agreed to participate.

**Methods.** In-depth interviews were conducted with a semistructured interview guide. The informants were invited to simply describe what they had experienced to be successful therapeutic processes for promoting movement quality. Each interview was audiotaped and transcribed. The data analysis was based on a multistep model.

**Results.** Three main themes emerged from the data. First, the physical therapists' embodied presence and movement awareness served as a precondition and an orientation for practice. *Embodied presence* is a bodily felt sense, a form of personal knowing that evokes understanding and fosters meaning. Second, creating a platform for promoting movement quality revealed implementation of psychological attitudes. Third, action strategies for promoting movement quality suggested a movement awareness learning cycle and components for clinical use.

**Conclusions.** This study demonstrated specific attitudes and skills used by physical therapist experts to promote movement quality in their clinical practice. These results may serve as a therapeutic framework for promoting movement quality in clinical physical therapy, although further research is needed.

L.H. Skjaerven, PT, MSc, is Associate Professor, Department of Physiotherapy, Faculty of Health and Social Sciences, Bergen University College, Møllendalsvei 6, 5009 Bergen, Norway. Address all correspondence to: liv.skjaerven@hib.no.

K. Kristoffersen, DSSc, is Psychiatric Nurse and Professor, Faculty of Health and Sport, University of Agder, Kristiansand, Norway.

G. Gard, PT, PhD, is Professor, Department of Health Sciences, Luleå University, Luleå, Sweden, and Associate Professor, Department of Health Sciences, Lund University, Lund, Sweden.

[Skjaerven HL, Kristoffersen K, Gard G. How can movement quality be promoted in clinical practice? A phenomenological study of physical therapist experts. *Phys Ther.* 2010;90:1479–1492.]

© 2010 American Physical Therapy Association



Post a Rapid Response to this article at:  
[ptjournal.apta.org](http://ptjournal.apta.org)

Clinical physical therapy is a practical process that includes motivating patients to become involved in the learning process.<sup>1</sup> Physical therapists must have specific attitudes and skills to be able to present effective treatments in such a way that patients become personally involved.<sup>2</sup> This statement is supported by important knowledge gained from research on expertise in physical therapy.<sup>3</sup> In recent years, physical therapists and researchers have paid greater attention to body awareness.<sup>4</sup> Consequently, there is a need to study the process of promoting movement quality from an awareness perspective, especially with regard to the therapeutic components and action strategies that are used in clinical settings.

Awareness theory reveals a problem of definition because it is derived from human consciousness and experiences. Consciousness encompasses both awareness and attention.<sup>5</sup> *Awareness* can be defined as an attentive, relaxed, and alert presence, not analogous to concentration. Being aware means continually monitoring internal and external environments; it is possible to be aware of stimuli without making them the center of attention. Attention is a process that includes focusing on conscious awareness, thereby providing heightened sensitivity to experiences.<sup>5,6</sup>

Within philosophy, the holistic view developed in a variety of theoretical directions, as evident in the litera-

ture of Husserl,<sup>7</sup> Fromm,<sup>8</sup> Pearls,<sup>9</sup> Buber,<sup>10</sup> Sartre,<sup>11</sup> and Merleau-Ponty.<sup>12</sup> Merleau-Ponty viewed the body as the center of all human qualities, such as perception, thoughts, and feelings, characterizing the perceptual processes as belonging to the body. For him, perception was the prereflective background for any analytic thought. Particular emphasis was placed on the opportunity for a person to learn through an increased ability to become aware and to experience. Every practical experience was a physical interaction with the world, and every practical understanding was states of consciousness, as well as states in the body.<sup>12</sup>

A similar development is found in the theory and practice of awareness training within modern dance, through the work of Duncan,<sup>13</sup> Laban,<sup>14,15</sup> Wigman,<sup>16</sup> and Graham,<sup>17</sup> and within actor training, through the work of Stanislavski,<sup>18</sup> Chekhov,<sup>19</sup> Grotowski,<sup>20</sup> and Lecoq et al.<sup>21</sup> Gaining awareness is described as the gateway to movement learning.<sup>22</sup> The theory and practice of movement awareness therapies have developed for more than 100 years in Western culture. A review of the literature reveals a variety of modalities, the most influential being those of Alexander,<sup>23,24</sup> Feldenkrais,<sup>25</sup> Gindler,<sup>16</sup> and Selver.<sup>16</sup> Movement principles derived from these modalities are used in medical and psychotherapeutic contexts.

The French movement educator and psychotherapist Dropsy presented the hypothesis of the 3-fold contact problem.<sup>26,27</sup> A review of the literature on movement traditions reveals a similar hypothesis.<sup>16,23,25</sup> Dropsy described the 3-fold contact problem as a lack of awareness of the physical body and internal life, of the physical environment, and of the relationship to other people. It represents a part of reality from which a person is cut off and of which a person is not

aware. According to this theory, a lack of awareness is expressed in the body and can be observed as dysfunctional movements, that is, movements lacking vitality, flow, rhythm, and unity.<sup>26,28</sup> Clinicians have experienced the benefits of dealing with the 3-fold contact problem, although further research is needed.

Basic body awareness therapy has been used in physical therapy in Scandinavia for more than 30 years.<sup>29-32</sup> Basic body awareness therapy is a movement awareness modality consisting of a structured rehabilitation program<sup>33</sup> with valid and reliable assessment tools.<sup>30,34,35</sup> It is used in multiple clinical settings, including primary health care, pain rehabilitation, and psychiatric physical therapy, and in health promotion. Qualitative studies of basic body awareness therapy have identified factors important for the relationship between patients and physical therapists.<sup>36-39</sup>

Randomized controlled studies showing positive effects of basic body awareness therapy have been performed in different physical therapy contexts, for psychiatric disorders,<sup>40,41</sup> and for chronic pain treatment.<sup>42-45</sup> A qualitative study focusing on perceived main treatment effects of basic body awareness therapy in patients with schizophrenia showed positive treatment effects.<sup>46</sup> A cross-sectional study rating body awareness in people with eating disorders concluded that basic body awareness might be offered as a therapeutic tool in establishing a realistic body image.<sup>47</sup> An effect study investigating a training program with basic body awareness therapy for violinists and a reference group showed that the musicians might benefit from the program.<sup>48</sup> An effect study of basic body awareness therapy for patients with irritable bowel syndrome showed that improved body awareness had a favorable influence on their ability to take

 Available With  
This Article at  
[ptjournal.apta.org](http://ptjournal.apta.org)

• [Audio Abstracts Podcast](#)

*This article was published ahead of print on August 5, 2010, at [ptjournal.apta.org](http://ptjournal.apta.org).*

care of their own resources.<sup>49,50</sup> Applied research in a primary care setting showed that basic body awareness therapy had a positive effect on the fundamental experiences of women with chronic muscular pain.<sup>51,52</sup> Research on basic body awareness therapy in a group context revealed positive effects for patients with personality disorders<sup>53,54</sup> and fibromyalgia.<sup>55</sup> In a literature study, Gard reviewed basic body awareness therapy for patients with chronic pain and concluded that the therapy can reduce pain and increase health-related quality of life.<sup>56</sup>

Important elements for promoting the quality of functional movements in clinical practice have been presented as part of a process that includes the gradual awareness of how to relate to the ground, the vertical axis, centering, breathing, and flow.<sup>29</sup> Quality of movement has been described as involving posture, breathing, coordination of movement, flexibility, and centering.<sup>32</sup> A case study revealed a structure for the phenomenon of movement quality.<sup>33</sup> In later qualitative studies, 4 perspectives of the phenomenon—biomechanical, physiological, psycho-socio-cultural, and existential—emerged and demonstrated the richness and complexity of human movement.<sup>57,58</sup>

Because human movement is a core aspect of physical therapy, the phenomenon of movement quality was further investigated with a phenomenological study design. A movement quality model, comprising an overview of basic movement elements and aspects, was formulated from the data.<sup>59</sup> Promoting movement quality in accordance with the movement quality model revealed that more therapeutic components and differentiated strategies are needed for physical therapists to promote the biomechanical, physiological, psycho-socio-cultural, and existential aspects of movement.

A shift in health care toward a person-centered approach has led to people assuming a greater responsibility for their own health.<sup>60</sup> Clinicians have witnessed the benefits of encouraging patients to become aware in order to learn about and gain insight into their conditions.<sup>55,61</sup> Scientific evidence for movement awareness as an integral part of physical therapy is scarce. It is therefore necessary to identify the therapeutic components relevant to movement guidance through a phenomenological design before scientific research can be conducted. Because we believe that physical therapist experts possess tacit knowledge of a variety of therapeutic components and strategies (knowledge based on empirical evidence),<sup>62</sup> we consulted them in order to access this knowledge and find explicit answers to our research questions. Accordingly, the aim of this study was to investigate the clinical experiences of a group of physical therapist experts by inviting them to describe, through interviews, how they promote movement quality in their usual clinical settings.

## Method

A phenomenological approach was chosen to study the clinical experiences of physical therapists in promoting movement quality. Phenomenological research aims for simple descriptions of a universal essence.<sup>63</sup> It is directed toward components of which the informants may not be conscious.<sup>64</sup> The focus of phenomenology is the everyday world in which people are living in the phenomenon.<sup>64</sup> A phenomenological approach is useful for deepening the understanding of clinical processes.<sup>65,66</sup> As researchers, we were interested in obtaining descriptions of how physical therapist experts promote movement quality in clinical settings. Such descriptions are best obtained through interviews.<sup>67</sup> The ability to recognize what is significant is one of the characteristics of

an expert.<sup>1,68</sup> Our aim in using phenomenology was to transform clinicians' experiences into textual expression.<sup>65</sup>

## Sampling Strategy

A selection process for gathering a group of physical therapist experts as informants was designed. Lead physical therapists from a university hospital and primary health care centers in the southwestern part of Norway were invited to nominate experts from 3 fields: neurology, primary health care, and mental health. Two lead physical therapists from each of those 3 fields were included in the nomination committee.

The mandate for the committee was to nominate clinician experts on the basis of the following 4 criteria: a record of successfully promoting movement quality when treating patients with complicated diagnoses, known to have developed a professional ability for recognizing movement detail, a professional attitude about using his or her own movement awareness, and more than 3 years of practice in the field. The committee would nominate informants of both sexes who were treating patients of all ages.

Fifteen physical therapists, 5 from each of the 3 fields, agreed to be informants (Table). Three informants worked with children: 1 with children born prematurely, 1 at a child psychiatric unit, and 1 at a school or preschool unit. The informants had postgraduate education in the Bobath system (4 physical therapists), the Feldenkrais and Laban systems (1 therapist), Norwegian psychomotor physical therapy (3 therapists), basic body awareness therapy (3 therapists), the Pikler concept (1 therapist), treating patients with chronic pain (2 therapists), and training athletes at a high level (1 therapist). On the basis of the sampling strategy, nomi-

**Table.**  
Characteristics of Participating Physical Therapists

Variable	No.	Approximate %	Median	Range
Age at interview (y)			48	38–68
30–39	2	13		
40–49	8	53		
50–59	2	13		
60–68	3	20		
Years as physical therapist			24	12–38
10–19	5	33		
20–29	7	47		
30–39	3	20		
Years in 1 of the 3 fields considered			16	6–28
3–9	5	33		
10–19	6	40		
20–29	4	27		
Sex				
Men	2	13		
Women	13	87		

nation criteria, and 15 informants from 3 specialties, the sample was considered to be sufficient for the study.

### Data Collection

In-depth interviews were conducted with an interview guide consisting of semistructured questions (Appendix).<sup>69</sup>

Before the interviews, all informants were given written information about the main focus of the interview, that is, the experts' descriptions of how they promoted movement quality in clinical settings. In the one-to-one interview situation, the informants were initially invited to describe their clinical experiences. They were encouraged to deepen aspects of the initial descriptions. The situation was an open-ended communication between a researcher and an informant.<sup>67</sup> It was important for the interviewer to exhibit openness to new and unexpected phenomena.<sup>69</sup> The informants were invited to express themselves without any preconcep-

tions from the interviewer. They were encouraged to restrict their descriptions to their actual clinical experiences and to simply describe what they experienced to be successful therapeutic processes that promoted movement quality.

Each interview lasted about 90 minutes and was audiotaped and transcribed by the first author.<sup>69</sup> Analysis began shortly after the initial collection of data and revealed new aspects.<sup>67</sup> The interviews were completed in 8 months. Two thirds of the interviews were conducted at the informants' workplaces, and one third were conducted at the first author's workplace. As a reliability check, the informants read the transcribed interviews and were encouraged to provide any additional information. All confirmed the accuracy of the content.

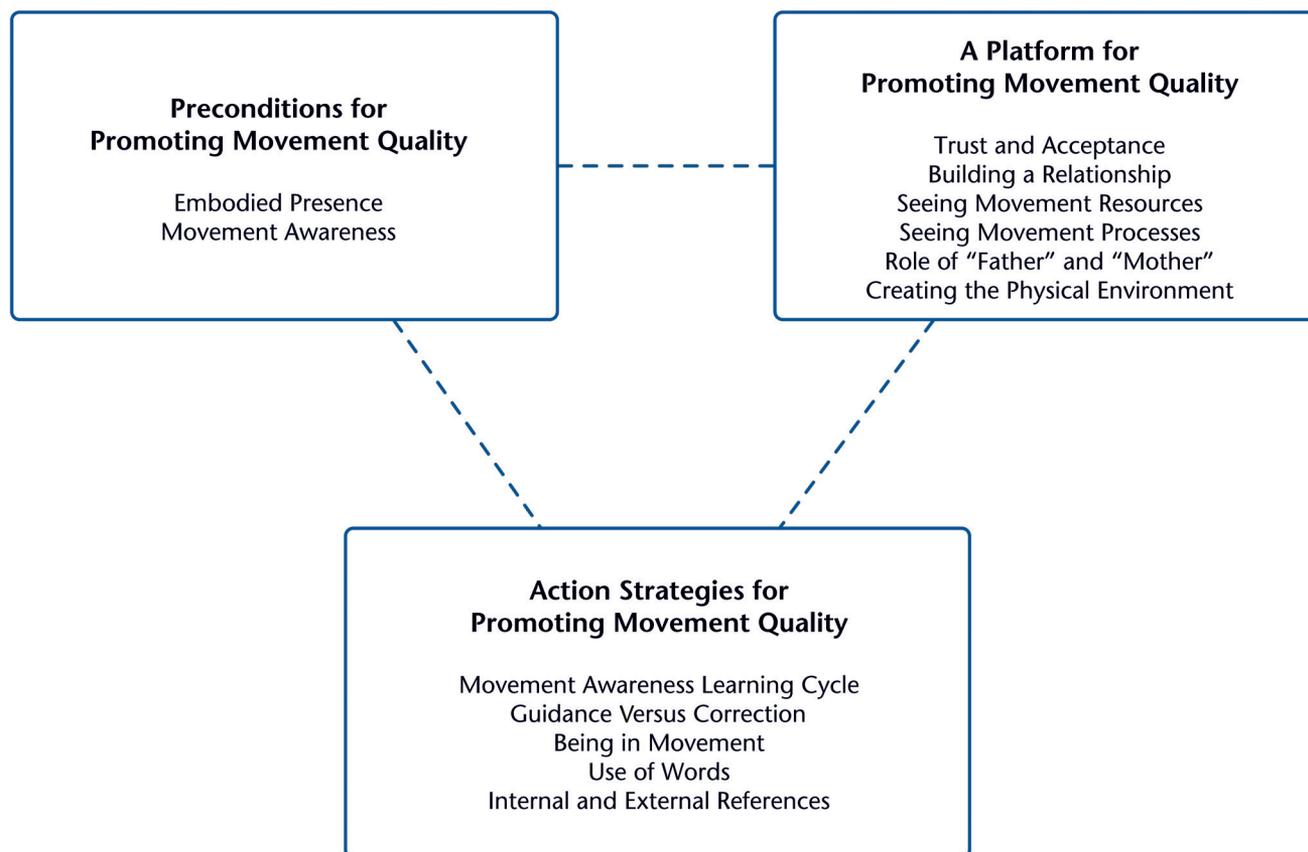
All informants were healthy. In accordance with ethics considerations, their willingness to participate was confirmed and ensured before the

interviews through written informed consent.<sup>70</sup>

### Data Analysis

Data analysis was based on the model described by Giorgi<sup>64</sup> and modified by Malterud.<sup>65,66,71</sup> The analysis consisted of 4 steps. In step 1, each interview was read several times to obtain an overall sense of the content. Step 2 involved identifying discrete meaning units in every line of each interview, with a focus on the phenomenon under study. As the researchers became aware of a change in the meaning of the text, it was broken down into a new meaning unit and identified by marks in the text. In step 3, the meaning units were coded and grouped into themes by examination of the original text. Main themes and categories were identified on the basis of the informants' expressed experiences. The movement awareness learning cycle category emerged at this step. Step 4 consisted of a synthesis of themes and underlying categories, producing a consistent structure of the phenomenon being studied. During the analytic process, the authors constantly and systematically returned to the original text, initially alone and then together, to achieve a consensus.

Validation was integral to the whole study.<sup>69</sup> Validity is the part of qualitative research that pertains to the extent to which observations reflect the phenomenon being studied.<sup>69</sup> During the analytic process, the researchers sought to bracket preunderstanding to achieve distance from what was already known. *Bracketing* is the process of setting aside or suspending presuppositions about the phenomenon being studied.<sup>64</sup> Validation was carried out by continually checking, critically reviewing, questioning, and interpreting the findings for movement awareness traditions from a theoretical point of view. Structured situations were cre-



**Figure 1.**  
Main themes and underlying categories for promoting movement quality.

ated for appropriate dialogue on validity with patients, graduates with a bachelor of science degree, post-graduate physical therapist students, and physical therapist clinicians, teachers, and researchers.

### Role of the Funding Source

The Faculty of Health and Social Sciences, Bergen University College, provided the funding for this study. No restrictions were connected with the funding.

### Results

The results presented here include the data actually obtained on how a group of experts promote movement quality. The data were developed directly from the experts' statements and included 3 main themes and underlying categories. The presented quotations

were developed by systematically analyzing and coding the text as one unity.<sup>67,70</sup> The quotations are examples of statements made, and the strongest and most meaningful quotations are presented. Data from all informants were included.

The 3 themes revealed by the data were as follows: a therapist's own movement awareness—a precondition for promoting movement quality, a platform for promoting movement quality, and action strategies for promoting movement quality. All of the themes are illustrated in Figure 1.

### A Therapist's Own Movement Awareness—a Precondition for Promoting Movement Quality

Theme 1 consisted of 2 categories: the physical therapist's embodied

presence and own movement awareness (Box 1). *Embodied presence* is a bodily felt sense, a form of personal knowing that evokes understanding and fosters meaning.<sup>71</sup>

The study revealed that the physical therapist's embodied presence was of considerable therapeutic importance. The ability to be mentally and physically attentive, here and now, was considered to be the basis for professional communication. The therapist's own movement awareness was considered a precondition for observing, understanding, and promoting movement quality. A personal process of movement awareness learning for therapists that was similar to the process for patients provided basic support for clinical observation, reasoning, and action.

### Box 1.

Theme 1: Physical Therapist's Own Movement Awareness—A Precondition for Promoting Movement Quality

#### **Category 1: Physical Therapist's Embodied Presence**

Quotation:

Being present in my whole body, in the movements, is fundamental for helping others to search for movement quality. The patient's learning requires the physical therapist's bodily presence, being here and now. If I am not present, it is impossible to capture what happens in the patient's movements. Being stable and grounded in my own movements affects the communication and the patient's movements.

#### **Category 2: Physical Therapist's Own Movement Awareness**

Quotation:

I communicate movement through being in movement and by being in rhythm. I influence the patient through my own closeness to movement. This requires a different pedagogy than training from a biomechanical point of view. It is not possible to help the patient's process further than your own understanding. The therapist's degree of movement awareness informs the guiding skills. It is what makes it possible to provide appropriate words or actions in the situation.

### A Platform for Promoting Movement Quality

Theme 2 consisted of 6 categories: attitudes of trust and acceptance, building a relationship, seeing movement resources, seeing movement processes, the role of "father" and "mother," and creating the physical environment (Box 2). By "platform," we mean a base for promoting movement quality; by "movement resources," we mean movement potentials (already in the patient); and by "physical environment," we mean the physical conditions in the treatment room, including space for free movement.

The physical therapist's attitudes of trust and acceptance in relation to the patient were important throughout therapy. The physical therapist had to be open, unbiased, and non-judgmental to create and build a relationship and to communicate with the patient. A focus on movement resources was a means of involving and motivating the patient. The informants described the importance of being able to recognize even small changes in movement quality and how these changes determined further development. Two roles of the physical therapist were identified. In one role, the therapist provided direction and advanced the therapeutic process, a role as "father." In the other role, the therapist provided empathetic support, a role as

"mother." The physical environment and the atmosphere in the room were important for facilitating movement quality, for both the patient and the therapist.

### Action Strategies for Promoting Movement Quality

Theme 3 consisted of 5 categories: the movement awareness learning cycle, being in movement, guidance versus correction, use of words, and internal and external movement references.

The first category represented the strategy of movement awareness learning, consisting of 7 interrelated and overlapping steps (Box 3).

Gaining closer contact with the body was considered to be essential for developing movement quality and provided a basis for exploring new ways of moving. Encouraging exploration was found to be important for stimulating the patient's curiosity and involvement in learning. Silence was important for learning when the patient was exploring new ways of moving and was a means of strengthening the experience. Movement experiences were found to be essential for integrating new ways of moving, gaining understanding, and becoming consciously aware. Creating meaning and being able to translate movement experiences by integrating them into daily life situations

were identified as separate and important learning steps for the patient. The informants underlined the importance of strengthening the patient's experience of mastery in everyday situations. Therapeutic dialogue, conceptualization, and reflection about the newly acquired movement quality were highlighted as being important for further learning and preparing for the next step in the process. The relationship of the steps is illustrated in Figure 2.

The remaining 4 categories (being in movement, guidance versus correction, use of words, and internal and external movement references) were action strategies found to be important for learning (Box 4).

Being in movement, repeating, and focusing on the exercises over a certain time period helped the patient become increasingly aware. In this way, the patient became familiar with the movements. The therapeutic challenge was to make the repetition meaningful for the patient. The data showed that the physical therapists acted as guides, coaching and guiding movements toward health and function rather than correcting and stressing movement perfection. It was important for the therapists to introduce an optimal amount of learning aspects when guiding movement quality; introducing too many aspects would interfere with learn-

ing. Words of encouragement, including metaphors and deliberate use of the therapist's voice, facilitated learning. The informants described situations in which they could observe the patient's lack of contact with the body and determine when it was necessary for them to act on the patient's need for contact by using internal and external movement references.

### Summary of Results

The data were synthesized into 3 main themes: the physical therapist's own movement awareness as a precondition and an orientation for promoting movement quality, a platform for promoting movement qual-

ity, and action strategies for clinical implementation (Fig. 1). The movement awareness learning cycle was identified as a strategy used by the clinician experts (Fig. 2).

### Discussion

The focus of the present study was observing how a nominated group of physical therapist experts promote movement quality. In recent years, greater attention has been paid to movement awareness. Thus, it was necessary to clarify the therapeutic components and action strategies that are used by physical therapists. The therapeutic approach used for promoting movement quality through awareness requires competence. The

theory has a phenomenal aspect, and clinically it involves the senses that play a dominant role in how therapists perceive and use information.

A phenomenological research design was chosen to study the complexity of therapeutic components used by a group of clinician experts.<sup>67</sup> A sampling strategy was designed to include the nomination of a group of experts according to specific criteria. None of the researchers were involved in the nomination process. This strategy was considered to strengthen the study. Half of the informants had undertaken postgraduate education that included training in movement awareness. However,

### Box 2.

Theme 2: Platform for Promoting Movement Quality

#### Category 1: Attitudes of Trust and Acceptance

Quotation:

It is a challenge to accept the patient fully and to carry this throughout therapy, still bringing the patient forward. I must accept what happens. I ask myself: What is the need for this particular person to proceed in therapy in a positive direction? Trust and acceptance are psychological aspects important for bringing therapy forward.

#### Category 2: Building a Relationship

Quotation:

Creating a relationship is vital for the outcome of therapy. In the first meeting, I create a platform for a further relationship. I search to see the unique human being, learning how she is acting and relating. Creating trust and calmness in the patient, I am simultaneously doing the same in me. If I find inner calmness, I am in harmony with myself, and I communicate this. I choose simple movements from everyday life to help the patient to experience trust and calmness when moving.

#### Category 3: Seeing Movement Resources

Quotation:

We have a professional challenge: In education, the main focus is on the illness. We learn mostly about pathology, deviations from the norm, illness, and dysfunction. We focus on "red" all the time. It is my experience that we need to highlight the patient's own resources. We need to have "green" in our focus, learn to observe, and act on it. It gives the patient motivation and bodily trust: "There is something inside me that can be found." What is important for the patient is that I also act on the movement resources, not only on pathology.

#### Category 4: Seeing Movement Processes

Quotation:

I give a seed and look for a movement response, inviting the emergence of a new quality. I nourish any positive change, guiding the person to find more control. I prepare body and mind, coordinating them. This requires listening from both of us. I search for what might be "buried" in the body, to bring it forth and to reintegrate it. I do this by guiding movement processes step by step—helping the patient to become aware.

#### Category 5: The Role of "Father" and "Mother"

Quotation:

We have to listen, being calm and accepting, in the role of "father" and "mother" and . . . at the same time, bring the therapy forward, bringing the patient into a new terrain, supporting the patient to try new ways and habits of moving; this is like being in the role of a "father"; as [a] therapist, it is necessary to balance between the two.

#### Category 6: Creating the Physical Environment

Quotation:

The physical environment and the atmosphere are important. If the training room is too noisy—a radio that interrupts the attention with too much happening—it distracts the patients and disturbs their movement quality. When I help the patient to establish inner references in the body, it demands a bodily focus and awareness both in the patient and therapist.

## Promoting Movement Quality in Clinical Practice

### Box 3.

Theme 3: Action Strategies for Promoting Movement Quality—Steps in the Movement Awareness Learning Cycle (Category 1)

Step	Description
1: Contact	The patient is unable to apprehend how to perform the movements if her attention is directed outward, away from the body. It is as if she is not bodily present, as if keeping a distance from the body. The patient needs guidance to come into contact with how she is moving. The first step is to create contact with the body, for example, to contact the vertical axis.
2: Explore	As [a] physical therapist, you teach the patient the process of exploring and searching—it is basic for making new movement experiences. The exploration is in itself important for the learning when it is done in silence.
3: Experience	Movement experience is a strong learning factor. What you have experienced you remember; it reaches the patient at a deeper level; . . . suddenly she is experiencing a lightness in the movements she had not found before—and just then, she finds a beautiful rhythm. She was playing with the balloon, and the movement was so beautiful; it was a new firmness in the movement. I had never seen the girl move like this. She had a sense of rhythm and was experiencing it; it became part of her consciousness, and she could repeat it . . . re-create it. I think it was because it became a special experience for her.
4: Integrate	You need involvement from the patient for the movement to become more integrated; integration develops gradually. The person needs to practice to learn details in a slow tempo first in order to keep the same level of integration in a faster speed. When the movement is integrated, it becomes harmonious. I am helping the patient to connect between the parts and the whole, body and mind. The aim is to integrate the movement in the person, even in relation to feelings.
5: Create meaning	I invent situations to help the patients to connect the awareness training to daily life. It lends meaning for the patient to see the connection between the therapeutic situation and daily life, and it helps the patient to transfer what she has learned into everyday life. Then we do not only exercise for the benefit of the physical body, but we add meaning to training, which gives a bodily understanding.
6: Master	When she (the patient) gained the experience of moving in a light and easy way, she had a sense of being. She reported that she was mastering in a new and improved way; this became a personal reward; being in movement became a valuable experience by itself—she gained the ability to recognize that she could master, herself.
7: Reflect and conceptualize	Finding words, talking, and reflecting on the movement experiences follows after the movement training. The two go hand in hand: movement and reflection. It is important to give the patient time, first to experience movement, then to find words to express the experiences in order to learn how to move more efficiently.

none of the informants were interviewed about their postgraduate education or their movement awareness development. The interviewer saw their background data after all interviews were completed, so as not to be influenced by the information.

The aim of the present study was to search for key therapeutic components with a potential for promoting movement quality. In-depth interviews were used to gather the experts' unique descriptions to capture perceptual experiences.<sup>72</sup> A phe-

nomenological approach was considered relevant as the basis for further research because of the use of interviews.<sup>69</sup> A possible limitation of the present study was that no observations of treatment sessions or interviews with patients were performed.

The approach used for the systematic analysis of qualitative data depends on the research aim and material.<sup>64,65,67,70</sup> For the present study, we followed the recommendations made by Giorgi<sup>64</sup> and modified by Malterud.<sup>65</sup> The aim was to extract

an essence, not to search for differences between the fields included in the study. The first author has investigated movement quality through self-experience, clinical practice, reviewing literature, teaching, and academic discourse in various professional settings for many years. This depth of experience was considered to strengthen the quality of the interviews and consequently the data, but might have represented a limitation had a stringent analytic process not been followed. We attempted to bracket earlier studies to maintain

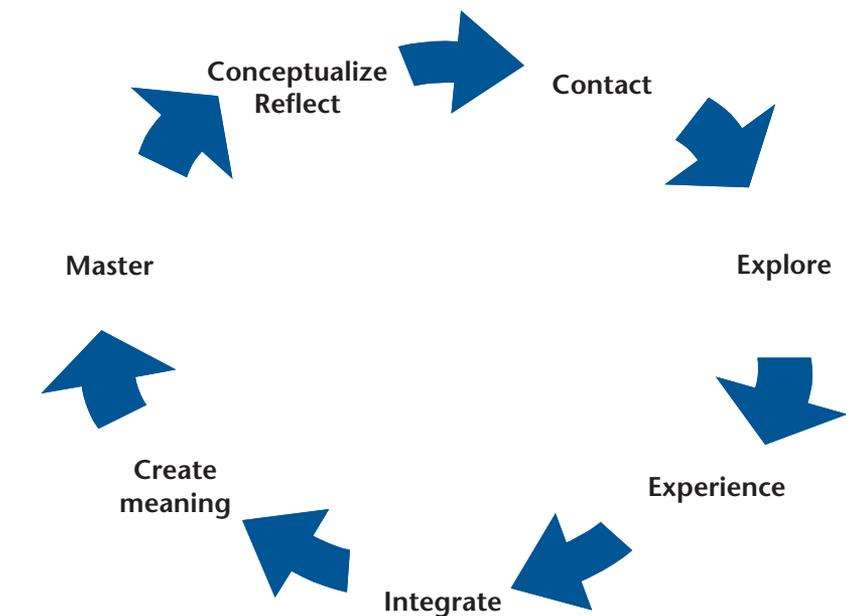
distance and a critical view throughout the study.<sup>64</sup>

The transcribed interviews contained rich and nuanced data consisting of detailed examples describing therapeutic experiences. All of the experts were deeply involved in their patients' search for enhanced movement quality, and they showed great therapeutic creativity in guiding movements. Three main themes were related to the promotion of movement quality (Fig. 1).

### A Therapist's Own Movement Awareness—a Precondition for Promoting Movement Quality

The physical therapist's embodied presence was found to be important for promoting movement quality. Embodied presence brings the possibility of intimacy or familiarity between mind and body and of the coordination between them.<sup>28,72</sup> It is an expanded attention where being and knowing meet.<sup>72</sup> Embodied presence is different from knowledge that creates abstract explanations and is less easily brought into practice.<sup>72</sup> Presence has been described as a hidden agent for learning.<sup>73</sup> Through presence, the therapist focuses attention on the patient and on what is going on at that moment.<sup>5,74</sup> When physically present, the therapist makes himself or herself available to the patient; doing so has a positive treatment effect.<sup>22,74</sup> The patient has to understand what the therapist proposes to learn how to take an active role and to take responsibility during treatment. Presence improves the dynamics of the relationship, the communication, and the movement dialogue.<sup>74</sup> Research supports the importance of the physical therapist's embodied presence in treatment situations.<sup>31,40,41</sup>

The therapist's own bodily awareness is important for the effectiveness of therapy.<sup>5,73,75</sup> It is the foun-



**Figure 2.** Movement awareness learning cycle.

dation on which the therapist builds support for the patient,<sup>72</sup> and it offers the therapist a way of sharing aspects of movement with the patient. If the therapist lacks sensitivity to movement nuances, it is difficult to observe such delicate nuances in others.<sup>14,26,59</sup> Sensitivity to nuances can be strengthened by developing the physical therapist's own sense of movement quality.<sup>58,76</sup> It can be learned from situations in which theoretical knowledge meets experiences.<sup>26,77</sup>

The present study showed that the physical therapist's embodied presence and own movement awareness were preconditions for guiding patients. These are central components in movement therapy traditions.<sup>14-16,22,23,25,78</sup> Several of the experts in the present study had been involved in education in which self-experience was integral.

### A Platform for Promoting Movement Quality

The present study showed that physical therapists created learning situa-

tions for patients that served as a platform for promoting movement quality. It is well known that therapist-patient encounters are important for learning.<sup>79</sup> The physical therapist's genuineness, acceptance, trust, and empathetic understanding are basic facilitators for learning.<sup>80</sup> With increased awareness of the way in which the therapeutic process is perceived by the patient, the therapist increases the likelihood of significant learning.<sup>79,81</sup> It is important to provide the patient with opportunities to experience learning situations that give rise to trust and acceptance. Doing so will establish a good relationship and simultaneously strengthen curiosity, initiative, and motivation, all important components of a successful interaction.<sup>37</sup> This form of learning differs markedly from an evaluative and technical approach.<sup>81</sup> It is a resource-oriented approach that empowers the patient.<sup>82</sup> The present study showed that therapists promoted movement quality by supporting patients' personal control, self-reliance, and abil-

### Box 4.

Theme 3: Action Strategies for Promoting Movement Quality—Components for Clinical Use (Categories 2 Through 5)

#### Category 2: Being in Movement

Quotation:

Awareness training is different from training the physical body, counting repetitions. Look at the child: She repeats the movement a hundred times. It is as if by repetition the learning gets to the core. She explores, experiences, and enjoys the repetition. I teach her to stay in the movement, to find rest and become familiar with the new quality. This gives respect for the movement. It must not be a superficial experience but a true recognition of what is happening. Sometimes I rush too quickly to the next exercise. As physical therapists, we are action oriented, wanting to bring in “this and that.” But the patient needs time to digest, develop, and understand in order to learn.

#### Category 3: Guidance Versus Correction

Quotation:

It is a trap to think that this quality is not good enough and to correct it. Then I easily intervene, correcting the movement from outside. Instead, I need to help the person to become aware and to find what she is carrying inside, directing the attention to different movement aspects. I am guiding so that the person can catch it—becoming bodily and consciously aware and to understand.

#### Category 4: Use of Words

Quotation:

It is easy to give too many learning aspects at the same time and to use too many words. If I talk too much, I can disturb a movement sensation. Detecting when to be active and when to wait requires a therapeutic awareness. I use some key words to let the patient move, “taste,” and experience, also using my voice. This is an important aspect. The language I use must be specific and differentiated when guiding movement experiences. I use metaphors from life or nature to stimulate the movement quality.

#### Category 5: Internal and External Movement References

Quotation:

Patients may have few internal and external movement references. The body needs a motor stability in order to move in space and, at the same time, a perceptual experience of how to move in relation to the environment. Moving is an interplay between internal and external references; both are necessary for the movement to be functional and the training to be effective. I choose between the two, depending on the patient’s response. I offer time and opportunity for the patient to receive feedback from inside. In my experience, teaching the patient to gain internal feedback is underestimated, as in the example of staying in touch with the ground and being stable in the vertical axis.

ity to change, in keeping with a health-oriented perspective.<sup>83</sup>

The physical therapist is in charge of providing a developmental direction during therapy. The present study identified 2 therapeutic roles. In one role, the therapist is responsible for the choice of exercises, insight, and understanding; involvement, learning, and growth are the goals. In the other role, the therapist provides empathetic support for the patient, listens, observes, and accepts.<sup>26,80,82</sup> These 2 roles are described in the literature as the roles of “father” and “mother.” The different roles allow patients to expand their physical and mental potential and support the physical therapist’s clinical choices. Both are important in therapy because they represent different aspects of the pedagogical initiative.<sup>26</sup> The therapist makes a reasoned

choice when deciding which role is appropriate.<sup>33</sup> Research on the function of these roles is needed.

Creation of the physical environment in treatment situations is underestimated in physical therapy. The physical conditions and atmosphere in the room are influential in facilitating movement quality. It is important for the patient to be given physical and emotional conditions to explore, experience, and integrate aspects of movement. The physical environment is an integral component in movement therapy traditions.<sup>22,25</sup> It is our view that such components are equally relevant in physical therapy.

#### Action Strategies for Promoting Movement Quality

Physical therapists are involved in guiding patients to learn. The identification of action strategies to facili-

tate change in patients permeates the profession, and different philosophical orientations and theories exist to support this statement.<sup>2</sup> Figure 2 shows the 7 identified steps of movement awareness learning and how they relate to each other in a cyclical form. Periodically recurring phenomena can be described as cyclical, meaning that the output of one set of processes often serves as the input of another. Figure 2 shows that the therapists’ view of therapy is not linear but is a cyclical process. The result is seen in the light of the movement awareness tradition.<sup>14–16,23,25,78</sup> Similar therapeutic processes have been described by Dropsy.<sup>26</sup> A parallel is found in the learning model described by Kolb,<sup>85</sup> building on the work of Dewey and his theory of experiential learning.<sup>86</sup> The therapist acts as a coach, shifting the focus to facilitate movement

awareness and guiding the patient to explore, experience, integrate, and become aware and conscious of what strategies to use. Inviting the patient to explore is different from using external correction and focusing on perfection.<sup>17</sup> The therapist asks for patient involvement through internal and external feedback.<sup>87</sup> This form of learning cannot be achieved through formal instruction.<sup>79</sup>

The therapist's choice of words for movement guidance is seldom discussed. There is a difference between academic concepts and concepts for clinical use.<sup>53</sup> Metaphors can be used in therapeutic situations to make abstract knowledge meaningful and bridge the gap between theory and practice.<sup>88,89</sup> In metaphors, an object or idea is referred to by means of another, thereby illustrating possible new aspects.<sup>69</sup> The use of metaphors in physical therapy can lead to new movement experiences and meanings and therapeutic change.<sup>88</sup> They can help patients understand and learn. The data in the present study indicated that the therapeutic use of metaphors can facilitate learning, although research is needed to discover which metaphors are useful and in what therapeutic situations they can be used.

According to theory, there are 3 types of movement learning: learning through movement, learning about movement, and learning while being in movement.<sup>90</sup> Learning through movement is accomplished by teaching physical activities to stimulate specific achievements. Learning about movement is accomplished by teaching movement as an academic subject. In learning by being in movement, the emphasis is on movement development as a process to be experienced by and integrated in the person. This type of learning is valuable for changing movement habits and improving self-

awareness.<sup>14,90</sup> In the present study, several of the therapists reported that they chose to repeat the exercises by moving along with the patients while providing guidance. The therapists mirrored the patients, showing them how to develop the movement. This approach provides the patients with an internal image of the quality of the movement, which is often difficult for them to discover.<sup>26</sup> The therapists function as nonverbal communicators.<sup>62</sup> As patients and physical therapists explore movements together, therapists suggest the direction and patients endeavor to find, develop, and become conscious of it. The informants in the present study created situations in which patients could explore, repeat, and experience movements by truly participating in them and then reflect on the experience.<sup>85</sup>

### How Can Movement Quality Be Promoted in Clinical Practice?

Physical therapists are mostly educated to focus on physical training and sports, and their identity is firmly rooted in this concept of education.<sup>91</sup> It has a strong hold on the profession. The phenomenon of movement quality is comprehensive and complex, involving essential elements and aspects of movement.<sup>59</sup> It is connected to movement resources and to a person's experience and ability to perceive.<sup>59</sup> Movement awareness is not given much attention in physical therapy education. One major factor contributing to the lack of value placed on this practical knowledge is the difficulty in making it explicit.<sup>91</sup> The challenges for the physical therapist are to learn reliable tools for identifying the patient's needs and to acquire specific attitudes and skills for providing movement guidance. It is important to foster reflective attention to how to promote movement quality and to further develop the necessary therapeutic strategies to achieve this goal.

To transfer basic movement elements and aspects in such a way that the patient becomes aware of them and can use them in daily life is a challenge for the physical therapist. The movement pedagogy is considered crucial in the movement traditions, as in basic body awareness therapy.<sup>13-18,21-23,25,78,92,93</sup> Specific guidance helps the patient find new movement patterns from within the body rather than imposing new movement patterns on the patient from outside. The therapeutic approach is not aimed at mechanical, mindless movements. Promoting movement awareness involves physical and mental processes; it involves the entire person. Such an approach places high demands on the physical therapist's own movement awareness. To be aware of patients' reactions to movements and where patients are in the process, therapists must be aware of how they communicate their own movements. Therefore, it is considered crucial for therapists to become familiar with and develop movement awareness in order to provide appropriate guidance for patients and to pursue professional development. The results of the present study suggest a basis for a discourse on which therapeutic components are effective and on the education of physical therapists.

### Conclusion

In this article, we define movement awareness, present qualitative descriptions, and provide data from interviews regarding clinician experts' views of how they facilitate movement quality in their patients. In recent years, physical therapists have witnessed the benefits of supporting their patients' learning of movement awareness. Consequently, there is a need to clarify what is required of therapists when promoting movement quality. The data from the present study revealed 3 main themes: the physical therapists' embodied presence and movement

awareness served as a precondition and orientation for practice, a platform for promoting movement quality revealed implementation of psychological attitudes, and action strategies suggested the movement awareness learning cycle and components for clinical use. Our intentions were to provide a firsthand view of the components and strategies used by a group of physical therapist experts to promote movement quality and to prompt a discussion about the important constructs of this type of intervention. This topic warrants further research.

All authors provided concept/idea/research design, writing, data analysis, and consultation (including review of manuscript before submission). Skjaerven provided data collection, participants, facilities/equipment, and institutional liaisons. Skjaerven and Dr Kristoffersen provided project management. The authors thank the Department of Physiotherapy, Faculty of Health and Social Sciences, Bergen University College, Bergen, Norway, for supporting the study. They also thank G. Austrheim, Librarian, Faculty of Health and Social Sciences, Bergen University College, for providing detailed data searches.

This study was approved by and carried out in accordance with the policies and regulations of Bergen University College.

An abstract of this study was presented at the International Congress of the World Confederation for Physical Therapy; June 2–6, 2007; Vancouver, British Columbia, Canada.

The Department of Physiotherapy, Faculty of Health and Social Sciences, Bergen University College, provided the funding for this study.

This article was submitted February 22, 2009, and was accepted May 17, 2010.

DOI: 10.2522/ptj.20090059

## References

- 1 Jensen GM, Gwyer J, Shepard KF, Hack LM. Expert practice in physical therapy. *Phys Ther*. 2000;80:28–43.
- 2 Shepard K, Jensen GM. *Handbook of Teaching for Physical Therapists*. 2nd ed. Boston, MA: Butterworth-Heinemann; 2002.
- 3 Jensen GM, Gwyer J, Hack LM, Shepard KF. *Expertise in Physical Therapy Practice*. Boston, MA: Butterworth-Heinemann; 1999.
- 4 Ryding C, Rudebeck CE, Mattsson B. Body awareness in movement and language: concordance and disparity. *Adv Physiother*. 2004;6:158–165.
- 5 Brown W, Ryan RM. The benefits of being present: mindfulness and its role in psychological well-being. *J Pers Soc Psychol*. 2003;84:822–848.
- 6 Siegel DJ. *The Mindful Brain: Reflection and Attunement in the Cultivation of Well-Being*. New York, NY: WW Norton & Co; 2007.
- 7 Husserl E. *Phenomenological Psychology*. The Hague, the Netherlands: Nijhoff; 1977.
- 8 Fromm E. *Att Ha eller att Vara [To Have or to Be?]* Stockholm, Sweden: Natur och Kultur; 1978.
- 9 Pearls F, Hefferline R, Goodman P. *Gestalt Therapy, Excitement and Growth in the Human Personality*. London, United Kingdom: Penguin Books; 1973.
- 10 Buber M. *Pointing the Way*. New York, NY: Harper & Row; 1957.
- 11 Sartre JP. *Being and Nothingness*. London, United Kingdom: Methuen Ltd; 1969.
- 12 Merleau-Ponty M. *Phenomenology of Perception*. London, United Kingdom: Routledge & Kegan Paul Ltd; 1962.
- 13 Daly A. *Done Into Dance: Isadora Duncan in America*. Bloomington, IN: Indiana University Press; 1995.
- 14 Laban R. *The Mastery of Movement*. London, United Kingdom: McDonald & Evans Ltd; 1960.
- 15 Redfern B. *Laban Art of Movement*. London, United Kingdom: MacDonald & Evans Ltd; 1965.
- 16 Johnson DH. *Body: Recovering Our Sensual Wisdom*. Berkeley, CA: North Atlantic Books; 1983.
- 17 Horosko M. *Martha Graham: The Evolution of Her Dance Theory and Training, 1926–1991*. Chicago, IL: A Cappella Books; 1991.
- 18 Stanislavski K. *An Actor Prepares*. 10th ed. London, United Kingdom: Methuen Drama; 1992.
- 19 Chekhov M. *On the Technique of Acting*. New York, NY: HarperCollins Publishers; 1985.
- 20 Richards T. *At Work With Grotowski on Physical Actions*. 3rd ed. London, United Kingdom: Routledge; 1996.
- 21 Lecoq J, Carasso J-G, Lallias J-C. *The Moving Body: Teaching Creative Theatre*. New York, NY: Routledge; 2001.
- 22 Alon R. *Mindful Spontaneity: Moving in Tune With Nature—Lessons in the Feldenkrais Method*. Dorset, United Kingdom: Prism Press; 1990.
- 23 Jones FP. *Body Awareness in Action: A Study of the Alexander Technique*. New York, NY: Schocken Books; 1976.
- 24 Barlow W. *The Alexander Principle: How to Use Your Body Without Stress*. 2nd ed. London, United Kingdom: Victor Gollancz; 1990.
- 25 Feldenkrais M. *Awareness Through Movement: Health Exercises for Personal Growth*. San Francisco, CA: Harper San Francisco; 1990.
- 26 Dropsy J. *Leva i Sin Kropp: Kroppslig Uttryck och Mänsklig Kontakt [The Living Body: Bodily Expression and Human Contact]*. Stockholm, Sweden: Natur och Kultur; 1987.
- 27 Dropsy J. Body attunement: the conditions for body use. In: Skjaerven LH, ed. *Quality of Movement: The Art and Health—Lectures on Philosophy, Theory and Practical Implications to Basic Body Awareness Therapy*. Bergen, Norway: Skjaerven; 1998:21–34.
- 28 Dropsy J. Human expression: the coordination of mind and body. In: Skjaerven LH, ed. *Quality of Movement: The Art and Health—Lectures on Philosophy, Theory and Practical Implications to Basic Body Awareness Therapy*. Bergen, Norway: Skaerven; 1998:8–20.
- 29 Roxendal G. *Body Awareness Therapy and the Body Awareness Scale: Treatment and Evaluation in Psychiatric Physiotherapy* [doctoral dissertation]. Göteborg, Sweden: University of Göteborg; 1985.
- 30 Skatteboe U-B. *Basal kroppskjennskap og bevegelsesharmoni. Videreutvikling av undersøkelses-metoden Body Awareness Rating Scale, BARS-Bevegelsesharmoni (Body Awareness Therapy and Movement Harmony: Development of the Assessment Method Body Awareness Rating Scale)*. Oslo, Norway: Oslo University College; 2000;12:150.
- 31 Mattsson M. *Body Awareness Applications in Physiotherapy* [doctoral dissertation]. Umeå, Sweden: Umeå University; 1998.
- 32 Lundvik Gyllensten A. *Basic Body Awareness Therapy* [doctoral dissertation]. Lund, Sweden: Lund University; 2001.
- 33 Skjaerven LH. *Å Være Seg Selv—Mer Fullt og Helt: En Tilnærming til Bevegelseskvalitet [Being Oneself—More Fully: A First Approach to the Phenomenon of Movement Quality]* [master's thesis]. Bergen, Norway: Bergen University; 1999.
- 34 Lundvik Gyllensten A, Ekdahl C, Hansson L. Validity of the Body Awareness Scale—Health (BAS-H). *Scand J Caring Sci*. 1999; 13:217–226.
- 35 Lundvik Gyllensten A, Ovesson MN, Lindström I, et al. Reliability of the Body Awareness Scale—Health. *Scand J Caring Sci*. 2004;18:1–7.
- 36 Lundvik Gyllensten A, Gard G, Salford E, Ekdahl C. Interaction between patient and physiotherapist: a qualitative study reflecting the physiotherapist's perspective. *Physiother Res Int*. 1999;4:89–109.
- 37 Lundvik Gyllensten A, Gard G, Hansson L, Ekdahl C. Interaction between patient and physiotherapist in psychiatric care: the physiotherapist's perspective. *Adv Physiother*. 2000;2:157–167.

- 38 Gard G, Lundvik Gyllensten A. The importance of emotions in physiotherapeutic practice. *Phys Ther Rev*. 2000;5:155-160.
- 39 Gard G, Lundvik Gyllensten, A. Are emotions important for good interaction in treatment situations? *Physiother Theory Pract*. 2004;20:1-13.
- 40 Lundvik Gyllensten A, Hansson L, Ekdahl C. *Outcome of Basic Body Awareness Therapy: A Randomised Controlled Study of Patients in Psychiatric Outpatient Care*. Lund, Sweden: Lund University; 2003.
- 41 Lundvik Gyllensten A, Ekdahl C, Hansson L. Long-term effect of basic body awareness therapy in psychiatric outpatient care: a randomized controlled study. *Adv Physiother*. 2009;11:2-12.
- 42 Malmgren-Olsson E-B, Armelius B-Å, Armelius K. A comparative outcome study of body awareness therapy, Feldenkrais and conventional physiotherapy for patients with nonspecific musculoskeletal disorders: changes in psychological symptoms, pain and self-image. *Physiother Theory Pract*. 2001;17:77-95.
- 43 Mattsson M, Wikman M, Dahlgren L, et al. Body awareness therapy with sexually abused women, part 2: evaluation of body awareness in a group setting. *Journal of Body Work and Movement Therapies*. 1998;2:38-45.
- 44 Malmgren-Olsson EB, Bränholm IB. A comparison between three physiotherapy approaches with regard to health-related factors in patients with non-specific musculoskeletal disorders. *Disabil Rehabil*. 2002;24:308-317.
- 45 Malmgren-Olsson E-B, Armelius B-Å. Non-specific musculoskeletal disorders in patients in primary care: subgroups with different outcome patterns. *Physiother Theory Pract*. 2003;19:161-173.
- 46 Hedlund L, Gyllensten AL. The experiences of basic body awareness therapy in patients with schizophrenia. *J Bodyw Mov Ther*. 2010;14:245-254.
- 47 Thörnberg U, Mattsson M. Rating body awareness in persons suffering from eating disorders: a cross-sectional study. *Adv Physiother*. 2010;12:24-34
- 48 Fjellman-Wiklund A, Grip H, Andersson H, et al. EMG trapezius muscle activity pattern in string players, part II: influences of basic body awareness therapy on the violin playing technique. *International Journal of Industrial Ergonomics*. 2004;33:357-367.
- 49 Eriksson E, Nordwall V, Kurlberg G, et al. Effects of body awareness therapy in patients with irritable bowel syndrome. *Adv Physiother*. 2002;4:125-135.
- 50 Eriksson EM, Möller IE, Söderberg RH, et al. Body awareness therapy: a new strategy for relief of symptoms in irritable bowel syndrome patients. *World J Gastroenterol*. 2007;13:3206-3214.
- 51 Steihaug S, Ahlsen B, Malterud K. From exercise and education to movement and interaction: treatment groups in primary care for women with chronic muscular pain. *Scand J Prim Health Care*. 2001;19:249-254.
- 52 Steihaug S, Ahlsen B, Malterud K. "I am allowed to be myself": women with chronic muscular pain being recognized. *Scand J Public Health*. 2002;29:1-7.
- 53 Skatteboe UB, Friis S, Hope MK, Vaglum P. Body awareness group therapy for patients with personality disorders, 1: description of the therapeutic method. *Psychother Psychosom*. 1989;51:11-17.
- 54 Friis S, Skatteboe UB, Hope MK, Vaglum P. Body awareness group therapy for patients with personality disorders, 2: evaluation of the Body Awareness Rating Scale. *Psychother Psychosom*. 1989;51:18-24.
- 55 Mannerkorpi K, Gard G. Physiotherapy group treatment for patients with fibromyalgia: an embodied learning process. *Disabil Rehabil*. 2003;25:1372-1380.
- 56 Gard G. Body awareness therapy for patients with fibromyalgia and chronic pain. *Disabil Rehabil*. 2005;27:725-728.
- 57 Skjaerven L, Gard G, Kristoffersen K. Basic elements and dimensions to quality of movement: a case study. *Journal of Body Work and Movement Therapies*. 2003;7:251-260.
- 58 Skjaerven L, Gard G, Kristoffersen K. Greek sculpture as a tool in understanding the phenomenon of movement quality. *Journal of Body Work and Movement Therapies*. 2004;8:227-236.
- 59 Skjaerven LH, Kristoffersen K, Gard G. An eye for movement quality: a phenomenological study of movement quality reflecting a group of physiotherapists' understanding of the phenomenon. *Physiother Theory Pract*. 2008;24:13-27.
- 60 Grahn E, Stigmarm GK, Ekdahl C. Motivation for change and personal resources in patients with prolonged musculoskeletal disorders. *Journal of Body Work and Movement Therapies*. July 2001:160-172.
- 61 Gustafsson M, Ekholm J, Öhman A. From shame to respect: musculoskeletal pain patients' experience of a rehabilitation programme: a qualitative study. *J Rehabil Med*. 2004;36:97-103.
- 62 Polanyi M. *The Tacit Dimension*. New York, NY: Peter Smith; 1983.
- 63 van Manen M. *Researching Lived Experience: Human Science for an Action Sensitive Pedagogy*. London, Ontario, Canada: The Athlone Press; 1997.
- 64 Giorgi A. *Phenomenology and Psychological Research*. Pittsburgh, PA: Duquesne University Press; 1985.
- 65 Malterud K. Qualitative research: standards, challenges and guidelines. *Lancet*. 2001;358:483-488.
- 66 Malterud K. The art and science of clinical knowledge: evidence beyond measures and numbers. *Lancet*. 2001;358:397-400.
- 67 Crabtree BF, Miller WL. *Doing Qualitative Research*. 2nd ed. Thousand Oaks, CA: Sage Publications Inc; 1999.
- 68 Eisner EW. *The Enlightened Eye: Qualitative Inquiry and the Enhancement of Educational Practice*. New York, NY: Macmillan Publishing Co; 1991.
- 69 Kvale S, Brinkmann S. *InterViews: Learning the Craft of Qualitative Research Interviewing*. 2nd ed. Thousand Oaks, CA: Sage Publications Inc; 2009.
- 70 Malterud K. *Kvalitative Metoder i Medisinsk Forskning: En Innføring [Qualitative Methods in Medical Research: An Introduction]*. Oslo, Norway: Tano Aschehoug; 2003.
- 71 Malterud K. Shared understanding of the qualitative research process: guidelines for the medical researcher. *Fam Pract*. 1993;10:201-206.
- 72 Todres L. *Embodied Enquiry: Phenomenological Touchstones for Research, Psychotherapy, and Spirituality*. New York, NY: Palgrave Macmillan; 2007.
- 73 Yalom I. *The Theory and Practice of Group Psychotherapy*. 3rd ed. New York, NY: Basic Books; 1995.
- 74 Arnesen A-L. *Det Pedagogiske Nærvær [The Pedagogical Presence]*. Trondheim, Norway: Abstrakt Forlag; 2004.
- 75 Rønnestad M, Reichelt S. *Psykoterapi-veiledning [Psychotherapeutic Guidance]*. Oslo, Norway: Tano Aschoug Forlag; 1999.
- 76 Knudzon D, Morrison C. *Qualitative Analysis of Human Movement*. New York, NY: Human Kinetics; 1997.
- 77 Martinsen K. *Care and Vulnerability*. Oslo, Norway: Akribes; 2006.
- 78 Brooks C. *Sensory Awareness: The Rediscovery of Experiencing*. 2nd ed. New York, NY: The Viking Press Inc; 1976.
- 79 van Manen M. *The Tact of Teaching: The Meaning of Pedagogical Thoughtfulness*. New York, NY: State University of New York Press; 1991.
- 80 Rogers CR, Freiberg HJ. *Freedom to Learn*. 3rd ed. New York, NY: Macmillan College Publishing Co; 1994.
- 81 Thorne B. *Person-Centered Counseling: Therapeutic and Spiritual Dimensions*. 8th ed. London, United Kingdom: Whurr Publishers Ltd; 2000.
- 82 Anderson LA, Funnel MM. Patient empowerment: reflections on the challenge of fostering the adoption of a new paradigm. *Patient Educ Couns*. 2005;75:153-157.
- 83 Langeland E. *A Salutogenic Approach* [doctoral dissertation]. Bergen, Norway: University of Bergen; 2007.
- 84 Hummelvoll J. *HELT-Ikke Stykkevis og Delt: Psykiatrisk Sykepleie [Whole-Not Split: Psychiatric Nursing]*. 5th ed. Oslo, Norway: Ad Notam Gyldendal; 2000.
- 85 Kolb DA. *Experiential Learning: Experience as the Source of Learning and Development*. Englewood Cliffs, NJ: Prentice-Hall Inc; 1984.
- 86 Dewey J. *Experience and Education*. New York, NY: Collier Books; 1934.

---

## Promoting Movement Quality in Clinical Practice

---

- 87 Larsson I, Gard G. Conceptions of physiotherapy knowledge among Swedish physiotherapists: a phenomenographic study. *Physiotherapy*. 2006;92:110-115.
- 88 Røysund E. Eksplisitt og implisitt bruk av metaforer [Explicit and implicit use of metaphors]. *Tidsskrift for Norsk Psykologforening*. 1993;30:443-454.
- 89 Danish State Institute of Physical Education. The transformation of body experience into language. In: 15th International Human Science Research Conference; August 14-17, 1996; Nova Scotia College of Art and Design, Halifax, Nova Scotia, Canada.
- 90 Duesund L. *Kropp, Kunnskap og Selvpåfatning [Body, Knowledge and Self-experience]*. Oslo, Norway: Universitetsforlaget; 1995.
- 91 Higgs J, Richardson B, Dahlgren MA. *Developing Practice Knowledge for Health Professionals*. Edinburgh, Scotland: Butterworth-Heinemann; 2004.
- 92 Au S. *Ballet and Modern Dance*. London, United Kingdom: Thames and Hudson Ltd; 1997.
- 93 Parviainen J. *Bodies Moving and Moved: A Phenomenological Analysis of the Dancing Subject and the Cognitive and Ethical Values of Dance Art* [doctoral dissertation]. Tampere, Finland: Tampere University; 1998.

---

## Appendix.

### Semistructured Interview Guide

---

#### *Introductory Questions:*

Can you tell me how you promote movement quality in your clinical practice?

Do you remember a clinical story or an occasion when you had success with promoting movement quality, treating a patient with a complicated diagnosis?

Can you describe, with as much detail as possible, a situation in which you realized that your patient became aware and acquired learning?

What happened in that particular episode?

How did you act when guiding the process toward a change in movement quality?

Can you describe, in detail, how you started and proceeded?

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.