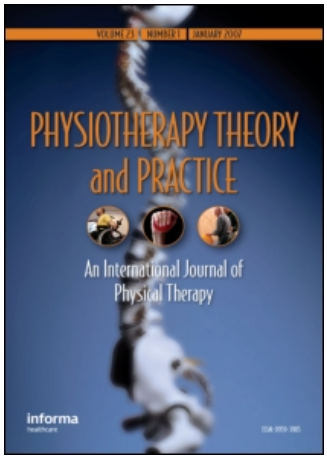

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An eye for movement quality: A phenomenological study of movement quality reflecting a group of physiotherapists' understanding of the phenomenon

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An eye for movement quality: A phenomenological study of movement quality reflecting a group of physiotherapists' understanding of the phenomenon

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Movement quality is a phenomenon frequently used by physiotherapists in oral language, written text, and clinical practice, with little clarification. The purpose was to investigate the lived experiences of a group of expert physiotherapists, searching for essential features and characteristics of the phenomenon. A phenomenological study, using in-depth interviews was chosen. Ten copies of Fine Art were used to stimulate the description of the phenomenon. The informants were 15 peer-designated physiotherapists, five from each field of neurology, psychosomatic/psychiatry and primary health care. They were nominated by physical therapist leaders in the region. The interviews were audiotaped and transcribed. Giorgis' recommendation concerning analysis of the interview data was followed. Four main themes were developed, seeing movement quality as biomechanical, physiological, psycho-socio-cultural, and existential, all interacting processes. Each theme includes preconditions to movement quality and movement characteristics. Movement quality in general was seen as a unifying phenomenon, representing a synthesis of the four themes. The outcome of the study is the Movement Quality Model (MQM) illuminating essential features and characteristics of the phenomenon. Further research is needed for clarification and application in clinical practice.

Introduction

Movement quality is a phenomenon frequently used by physiotherapists in oral language, written text, and clinical practice, with little clarification. The purpose of this study was to explore the understanding of movement quality based on clinical descriptions of a group of expert physiotherapists.

Expertise can be defined as having the ability to do the right thing at the right time (Jensen, Gwyer, Shepard, and Hack, 2000; Resnik and Jensen, 2003), acknowledging the deep well of information that always has been available in clinical practice. Examining what kinds of knowledge experts in human movement use and their view on human movement is important for understanding how expert clinicians work and reflect on their practice (Jensen, Gwyer, Hack, and Shepard, 1999; Jensen, Gwyer, Shepard, and Hack, 2000).

The physiotherapist's primary role is dealing with human movement. The assessment of movement dysfunction through observation or guiding the patients' movement is a core aspect. Physiotherapists have long debated the role of

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movement dysfunction as the unique aspect of the discipline of physiotherapy. This article aims at developing the concept of human movement from a health perspective focusing on features and characteristics of movement quality.

Background

Movement quality has been described as an important diagnostic aspect of psychopathological disorders both in German expression psychology and in psychiatric literature (Wallbott, 1985; Wallbott, 1989). This is demonstrated in a historic overview on movement quality aspects as indicators of psychopathological state as well as on measurement for describing movements (Wallbott, 1989). Movement quality is described as the way in which human movements are executed with respect to the dimensions of time and space. In a study of hand movement quality, the phenomenon includes circumference, velocity, and acceleration (Wallbott, 1985). Psychiatric literature, dance studies, and expression psychology reveal a large number of descriptions of movement quality, including poetic and impressionistic aspects of movement (Wallbott, 1985).

According to Prohl (1986), movement quality includes both bodily and mental characteristics. Its description includes objective-physical characteristics as well as subjective-psychological (aesthetical) characteristics of motor (internal) and movement (external) perception (Prohl, 1986, s 532). This work underlines that the nature of a person is expressed in the quality of the movement (Prohl, 1986).

In the treatment of children with cerebral palsy, several studies have searched for appropriate evaluation instruments in the area of quality of movement (Boyce, Gowland, Hardy, Rosenbaum, Lane, Plews, Goldsmith, and Russel, 1991; Beauregard, Thomas, and Nelson, 1998; Hickey and Ziviani, 1998). Ten measurements of quality of movement, or gross motor performance, were published between 1965 and 1990, including description of quality of movement components (Boyce, Gowland, Rosenbaum, Lane, Plews, Goldsmith, Russel, Wright, and Zdrobov, 1991). Investigations of upper-limb motor function, including items of movement quality, such as target accuracy, grasp, release, and fluency have been made (Boyce, Gowland, Hardy, and Rosenbaum, 1991; Bach et al, 1994; Johnson et al, 1994). The Gross Motor Performance Measure (GMPM) was developed to evaluate quality of movement, including five attributes of quality: alignment, coordination, dissociated movements, stability, and weight shift (Boyce et al, 1995; Gowland et al, 1995). Control, speed, and smoothness are presented as vital aspects in relation to quality (Hickey and Ziviani, 1998). Although assessing movement quality is difficult and is arguable, it is documented that the development of the GMPM has facilitated the process (Thomas et al, 2001).

Influential literature concerning preterm infants' quality of general movement has shown to have considerable power in predicting neurological outcomes in preterm infants with brain damage (Geerdink and Hopkins, 1993a; Geerdink and Hopkins, 1993b; Geerdink, Hopkins, and Hoeksma, 1994). The term "general movements" means observing the whole body: arms, legs, trunk, and head in one. The assessment of movement quality was based on a global impression of the child. Optimal quality was assigned when an integrated (organized) appearance of complexity, fluency, variability in speed, amplitude, and elegancy was observed (Geerdink and Hopkins, 1993a; Geerdink, Hopkins, and Hoeksma, 1994). Attainment of a midline position in supine was found to be indicative of a marked improvement in postural stabilization and movement quality (Geerdink, Hopkins, and Hoeksma, 1994). The neurological investigation was based on the Precthls' Method (Kakebeeke, von Siebenthal, and Largo, 1997; Kakebeeke, von Siebenthal, and Largo, 1998). Assessing the quality of spontaneous general movement in newborn infants has been a focus of attention in research and in clinical practice (van Kranen-Mastenbroek et al, 1994; Bos, 1998; Bos, Martijn, Okkne, and Prechtl, 1998; Bos et al, 1998; Hadders-Algra and Groothius, 1999; Hadders-Algra, 2004; Einspieler and Prechtl, 2005).

The phenomenon of movement quality has been frequently referred to by the French psychotherapist and movement educator Dropsy (Dropsy, 1987; Dropsy, 1988; Dropsy, 1998; Skjærven, 1999). He emphasizes the mind's influence on movement quality, stating: "It is the mind that gives the quality to movement" (Skjærven, 1999, p 88). Within the psychiatric and psychosomatic physiotherapy, movement quality is used in Basic Body Awareness Therapy.

The descriptions refer to grounding, stability in the central line, centering, breathing, flexibility, and flow (Roxendal and Nordwall, 1997; Lundvik-Gyllensten, 2001). Movement quality has been further described on that background (Skjærven, Gard, and Kristoffersen, 2003).

The literature review illustrates attempts to isolate features and characteristics influencing the understanding of the phenomenon of movement quality. The literature shows two levels in the phenomenon. The first level represents a general term referring to movement quality as a global impression of the whole movement coordination in the body: how arms, legs, trunk, and head moves as one unity. The second level represents a differentiation of elements and aspects. We see elements such as alignment, midline position, and postural stabilization and a variability of characteristics such as fluency, target accuracy, and elegancy. Although physiotherapists appear to have an internal sense for movement quality, explicit description and grasping the nature of it appears to be difficult. Because movement quality is an important aim in physiotherapy, the purpose of this study is to investigate content and complexity of the phenomenon.

The aim of the study was to generate descriptions of the phenomenon based on clinical experiences from a group of expert physiotherapists. The focus was directed toward essential features and movement characteristics, to search for a pattern of interaction, of parts and the whole of the phenomenon, and to fill the phenomenon with meaning. The research question was: What are the essential features and characteristics of movement quality reflecting a group of expert physiotherapists' understanding of the phenomenon?

Methods

A phenomenological approach was chosen to investigate lived experiences to come in contact with as many features and characteristics of the phenomenon as possible (van Manen, 1997). Phenomenology is useful when searching for a development of knowledge to broaden the understanding of clinical processes (Malterud, 2001). In this project, the physiotherapists' descriptions of experiences of movement quality within treatment processes were searched for. The aim of using phenomenology was to transform lived experiences into textual expression of its essence (van Manen, 1997).

Informants

A selection process for gathering a group of physiotherapists as informants was designed. This was done by making a nominee committee of local chief physiotherapists, covering the three professional fields within physiotherapy of neurological physiotherapy, primary health care, and psychiatric/psychosomatic physiotherapy. Two physiotherapists from each field were included, all women. The fields were based on the researchers' knowledge of the span of clinical competence in the region. The mandate of the committee was to nominate a group of expert clinicians based on three main criteria: 1) that the physiotherapist had practiced more than 3 years in the field; 2) was known to be expert, treating patients with complicated diagnoses; and 3) was known to have a special movement awareness. The nomination committee was asked to include both sexes and also therapists working with children.

A sample size of 15 informants, 5 in each field, was chosen to ensure information from each. They ensured their willingness to participate by giving a written informed consent. The informants who agreed to be included in the study were 13 women and 2 men; 7 worked at the university hospital and 8 in the primary health care. Twelve of the informants worked with patients in all ages and a variety of medical diagnosis. Three of the informants, one from each of the three fields, worked with children: one with premature children, one at a psychiatric unit for children, and one at a school/preschool unit. The informants had different postgraduate education, in the Bobath system, the Feldenkrais and Laban system, Norwegian Psychomotor Physiotherapy, Basic Body Awareness Therapy, a variety of courses for chronic pain patients, training athletes at a high level, and in the Pikler concept.

The interviews

A semistructured interview guide with open questions was made in advance of the research. The main part of the interview was directed toward searching for essential features and characteristics of the phenomenon. In the one-to-one

interview situation the informants were first invited to associate freely to describe the intuitive understanding of the phenomenon, in general. The informants were further invited to deepen their first description staying in contact with their own experiences and view. The interviewer encouraged them to describe clinical situations concerning how they acted when promoting and observing movement changes in the person. The descriptions were discussed in relation to what they associated to movement quality.

The last 10 minutes of the main part of the interview the informants were exposed to Fine Art. It was chosen to be integrated because in phenomenology it is possible to borrow experiential material from other artistic media to increase understanding and validity of the phenomenon (Sævi, 2005). A collection of 10 copies of Fine Art had been chosen in advance of the study. It consisted of five pictures of Greek sculpture: The Lacoon group (Laisnè, 1995), Venus de Milo (Laisnè, 1995), The Discus thrower (Charbonneaux, Martin, and Villard, 1972), The Nike (un)tying her sandal (Charbonneaux, Martin, and Villard, 1970) and The Charioteer (Laisnè, 1995), all selected on the basis on an earlier study (Skjærven, Gard, and Kristoffersen, 2004). Four pictures of Rodin were chosen, two sculptures, The Awakening and Danaid (Jarrassè, 1995) and two drawings: Cambodian dancer (Jarrassè, 1995) and Six studies of Cambodian dancers (Lampert, 1986). One picture of van Gogh, The Reaper (Walther and Metzger, 2006), was included. The Fine Art was used to stimulate the informants' description of the phenomenon. Informants were invited to select two or three pictures and associate and describe what they saw. All but one informant used the pictures for the description.

Finally, the informants were asked to reflect on the idea that movement quality was a phenomenon for use in physiotherapy.

Two-thirds of the interviews were conducted at the informants work, the rest at the first author's work, all in a quiet room. The interviews were held during 8 months by the first author of the study. Each interview lasted about 1½ hour. They were audiotaped and transcribed. A reliability check was carried out by letting the informants read the transcribed interviews. All confirmed the content, and five of the informants returned clarifying comments to the text. All comments were added to the material before the data analysis.

Data analysis

The data reduction and analysis were based on Giorgis' model (Giorgi, 1985). The first analytic stage was the initial reading and examination of each interview as a whole to gain an overall sense of the interviews. The second stage was dividing the interview data into parts, involving meaning discrimination. The data text was organized into meaning units. The content of the meaning units was transformed to themes. The third stage was to express the structure of the phenomenon by combining meanings of data. During the organization of meaning units transforming them to themes, a fourth analytic step was made to extract, analyze, and list words that were used to describe movement quality from the main part of the interview. Descriptive words from the Fine Art observation were also extracted, analyzed, and listed. The fifth step made it possible to have an overview of the descriptions. The two sets of descriptions were brought together and became a basis to the presentation of the essence of the phenomenon. Stage six produced the final summary, including quotes.

The whole analytic process included multiple levels of interpretations, going back and forth between parts and the whole to eliminate inconsistencies. The first author, who was the most experienced within the field of movement quality, bracketed the knowledge by taking a conscious distance to former research (Giorgi, 1985). By bracketing we refer to the process of setting aside or suspending presuppositions surrounding the phenomenon of movement quality. The analytic process was done by the three researchers, first individual and then together, searching for clarification and consensus, constantly returning to the original text. The first author made the movement quality model as a final summary.

Results

Four main themes were developed from the data, seeing movement quality as biomechanical, physiological, psycho-socio-cultural, and

existential, all seen as interacting processes. The themes are presented one by one, by quotes in boxes (Box 1–4). Each theme consists of essential features and characteristics, presented as precondition to movement quality and movement characteristics. The preconditions represent elements that were found to be fundamental to integrate in any physiotherapeutic treatment process. The characteristics represent aspects expressed in movement. The phenomenon was further seen as a general phenomenon, representing a unifying synthesis of the four interacting themes. This is presented in Box 5.1–5.4. The data material led toward a model of movement quality, summarizing the data in Figure 1. The presentation includes quotations from all 15 informants; the three fields are equally represented.

Movement quality as biomechanical, physiological, psycho-socio-cultural, and existential

Theme 1: Seeing movement quality as biomechanical

Theme 1 is related to a biomechanical perspective and represents a spatial aspect to human movement. The theme consists of two categories: 1) postural stability and 2) the movement characteristic of path and form in movement.

Postural stability as a precondition to movement quality

Postural stability was described as a precondition to movement quality, Box 1.1.

Box 1.1 Precondition to movement quality: Postural stability

The stability in the vertical axis is a precondition to movement quality. The balance gives a back-ground stability; it is a kind of inner control which they need. It is an inner reference physical as well as perceptual; it is basic to move in space. You must have the motor stability, postural stability and postural orientation and at the same time a perceptual experience; this is not cognitive, but an inner

contd.

experience – to come in contact with the ground, the relation to the floor – how to orient oneself in space – how is the extremities in contact with the center in the body; this is to strengthen the experience of the body orientation. It is difficult to separate the two; on the one side to search for the core stability, that gives the necessary background possibility for movement and the perceptual – the experience of being in equilibrium; then you can find the qualitative aspects in the movement.

Seeing the path and form in movement

From a biomechanical point of view the informants described movement quality as how the path and form were expressed in movement, Box 1.2.

Box 1.2 Movement characteristic: Seeing the path and form in movement

We have all these natural movements in the body; we are born with the joints and muscles, that makes it possible for us to flex, to stretch, to rotate, to move in the axis and the diagonals; you can observe the lines through the body; to be high and low, to crawl, to flex and extend, there are an endless richness of movements; there are movements that are round and others that are straight; there are movements that are close to the body and others that are distant from the body, there are movements that opens and closes the body. We always move in relation to space and we relate to the surroundings. Much in physiotherapy is to make sure that the bodily framework is attuned in a harmonic way in relation to axes.

Theme 2: Seeing movement quality as physiological

Theme 2 is related to a physiological perspective, representing a time aspect to human movement. The theme consists of two categories: 1) free breathing and centering and 2) the movement characteristics of flow, elasticity, and rhythm.

Free breathing and centering as a precondition to movement quality

Free breathing was described as a precondition to movement quality and basic to how movement quality could originate from a central region in the trunk, Box 2.1.

Box 2.1 Precondition to movement quality: Free breathing and centering

How the breathing is, effect the movement quality. If the breathing is not integrated in the movement, there will be no movement quality. Breathing is like an inner movement. It has its own rhythm. Breathing and tension is interrelated: if the breathing is with-held, it colors the movement quality. If you experience freedom in the movements, it affects the breathing; there is such a mutual interplay. When the breathing is integrated in the movements the breathing gives life to movement; it is like the life is coming to the surface in the movement. The breathing adds the flow to the movements; it is like waves that comes and goes and it is expressed as flow in the movement.

Movement quality originates from the movement center in the trunk:
This center in the trunk is a key area to movement quality. You always move in relation to this centre. I observe that people that are tense do not have much contact with this centre; then the movements are peripheral and stiff and the center is blocked. I intend the movements to originate from the movement center; the human being can come into contact with it and when it happens it gives more freedom in the movement. When the violinist plays from the center in the body, you can observe it; the movement spreads from the center and out into the arms; this affects his way of playing; there is something deeper in the movement quality as well as in the feelings. It is as if the movement harmony comes from this center. The centre in the body is an inner reference.

Seeing flow, elasticity, and rhythm in movement

From a physiological point of view the informants described movement quality as how flow, elasticity, vitality, and rhythm were expressed in movement, Box 2.2.

Box 2.2 Movement characteristic: Seeing flow, elasticity and rhythm in movement

Flow and rhythm is central to the movement quality; they are like music and pauses in the movements. The pauses in the movements are the most difficult to make; to start a movement and to end it, a pause and then a new movement originates; you can observe a kind of elasticity in the movement and the patient experiences it. I think of flow and rhythm as basic characteristics, the two makes the expression in movement more alive. Flow makes the movement more even and helps the patient to control the alternation without letting the movement be staccato or uncoordinated. I see it as a special quality that gradually can be built up and descend; you can change without stopping, without using to much power and the movement is even; you can change the range and strength and the transition is smooth.

contd.

Theme 3: Seeing movement quality as psycho-socio-cultural

Theme 3 is related to a psycho-socio-cultural perspective and represents the use of energy. The theme consists of two main categories: 1) the awareness and 2) emotional, cognitive, intentional, and socio-cultural aspects.

Awareness as a precondition to movement quality

Awareness was presented as a precondition to movement quality, Box 3.1.

Box 3.1 Precondition to movement quality: Awareness

Awareness is central to the movement quality; it is a precondition. If you are present in the body, it will be expressed in the movement quality. If you are not present, then you move more careless using your automatic pilot; if you are not in contact with the body, you dissociate from the body, there is no interconnection between one part of the body and the rest. If the awareness is directed outward, you cannot be aware how you move; the awareness is a precondition to come into contact with the body. The awareness has to be directed to the body, or oneself, to include what they become aware; it is as if the body is inhabited or not. If the gaze is distant, you can observe that the patient is not in contact with

contd.

the body and then suddenly you can observe the patient is there, the contact between the eyes and the belly is there; it is expressed in the movement. It is the process of centering the mind in the body – I think of.

Seeing emotional, cognitive, intentional, and socio-cultural aspects in movement

From a psych-socio-cultural point of view the informants described movement quality as how emotional, cognitive, and socio-cultural aspects were expressed in movement, Box 3.2.

Box 3.2 Movement characteristic: Seeing emotional, cognitive, intentional and socio-cultural aspects in movement

Movement quality includes emotional, cognitive and intentional factors; they are expressed in the movements. You cannot see movement as something isolated; movements are dependent on your thoughts, emotions, your intention. The human being has a range of feelings that are expressed in the movements; this is also why the movement quality changes all the time. If you are in pain and you close yourself in, the movement quality is appropriate for the situation, defending you when you are vulnerable.

To have an intention with the movement is important. You can observe movements that are without any intention; they are flickering and different from movements with a clear intention. The best movement quality is connected to having a clear aim, a motivation for moving and plan that are your own, not imposed upon you. If the patient becomes too cognitive, the movement quality is stiff and disharmonic, too energy-demanding and often blocked. Too much thinking can be a hindrance to movement quality.

Socio-cultural aspects expressed in the movement quality:
We always relate to other people; you move differently when being professional rather then being private. The movements are different being close to another than being distant. This tells something about the variation when moving. The

contd.

movement quality is affected by outer circumstances. It is interesting to see movement quality in relation to culture; it is different in the US then in Africa. Movement quality comes from the interplay between the person and the environment.

Theme 4: Seeing movement quality as existential

Theme 4 is related to an existential perspective and represents personal and unifying aspects. The theme consists of two categories: 1) self-awareness and 2) personal and unifying aspects expressed in movement.

Self-awareness as a precondition to movement quality

The self-awareness was seen as a precondition to movement quality, Box 4.1.

Box 4.1 Precondition to movement quality: Self-awareness

This self-awareness, has something do with me as a person; it is the experience of the "I am"; if you have a strong "I", then you can lead your awareness to see more of you. You can observe the "I" expressed in the child; it is not only that the child starts to crawl or to rise, but you can see the expression of the experienced "I" in movement. Without involving yourself when moving there will be no movement quality. When the involvement in the movement is increased, the energy is also increased; it is as if it flows out in the body – it is like beams or presence. Being in the movement or not being in the movement: it is not difficult to observe if the patient is or is not present in the movement. This has an extraordinary effect on the movement quality; the self-awareness and the ability to "being in" or embody yourself, is decisive. The patient must search to find how to rest in the movement, not only doing it mechanically. The two ways are very different.

Being self-aware includes the ability to reflect upon oneself:
I think of all four dimensions of existence, the fourth includes the reflection: What do I want?

contd.

What is important for me? I am and I have my needs; We can say: 'I have one eye out and one eye in'. I can ask: Who am I; Do I want to have it this way? The ability to see and to be responsible for myself and to question: do I want to have a life like this, I can make a choice.

Seeing the present and unified person in movement

From an existential point of view the informants described movement quality as how personal and unifying aspects were expressed in movement, Box 4.2.

Box 4.2 Movement characteristic: The present and unified person in movement

Every human being has a personal characteristic in the movement; I can recognise you from a long distance because of the way you walk. The characteristic of that specific person is expressed in the way the person moves. There is a meaning in every movement, something that connects you to the real life. If you do a movement connected to the real life, something YOU really will do, and you are present, here and now, it will be expressed in the movement. In all human movement there is a meaning that goes beyond the joints and muscles.

Movement quality mirrors a sense of being whole and unified:
Through the contact with the body – there is something in the integration between mind and body and the coordination between them. To promote movement quality has much to do with becoming conscious of a whole. To contact and sense the body as a whole is important: then you develop a sense of a unity.

Movement quality as a general and unifying phenomenon

The data revealed that movement quality also was seen as an umbrella phenomenon, giving a global impression of the whole moving person. It was described as a general and unifying phenomenon, representing a synthesis or a whole dynamic and interacting system, Box 5.1.

Box 5.1 Movement quality as a general and unified phenomenon

Movement quality has with the unified movement impression to do; then you can split it up. The phenomenon, in general, is a sum of all aspects. Movement quality is seeing how the whole person moves; how the movements are coordinated; the timing. When you have the quality, you are steady, you involve the whole body, from the toes to the top, even the mimic and gestures are integrated, you have enough muscle tone and you observe that everything is in place. Movement quality expresses physical, physiological, psychological and existential aspects. They are equal and interacting. Movement quality is how flexible and adjustable the movements are. It represents a dynamic system; when you influence one aspect, other aspects in the movement coordination will be affected; it is being powerful and calm at the same time.

Movement quality in general was described as representing movements that were functional, practical, energy-saving, aesthetic, and harmonic, all at the same time, Box 5.2.

Box 5.2 Movement quality as functional, practical, energy-saving, aesthetic and harmonic

It is goal-directed at the same time aesthetic; it is beautiful to observe, at the same time it is functional, effective, including an interplay between the person and the surroundings. It is harmony, unity, wholeness, power, not only physical power, but an inner power. It is connected to an aesthetic feeling, both observing and experiencing. It is the whole physical body moving, rhythmical and flowing; seeing the person being in what they do. It is the beautiful functional interplay, all organized around a center; it is the variability, the suppleness, the functionality that are beautiful. It is soft, quick and strong; the quality is all in one; it is connected to presence, not too much power, but an awareness; the whole body possesses the presence in space; it carries a rhythm that travels to the soul, still it is biomechanical: all axis and muscles and the persons expression in movement;

contd.

even the social culture is mirrored in the movement, emotional sides as well as the self-identity. Movement quality is connected to the living human being: moving with grace, it is energy-saving, aesthetic, functional and practical.

The inner state of the person is expressed in the movement quality, Box 5.3.

Box 5.3 Movement quality expresses the inner state of the person

There is no doubt; the inner state is expressed in the movements. The mental functions and the physical body are so deeply interconnected. Movement quality includes how you express yourself.

Movement quality in general was associated with the experience of well-being and healthy resources, Box 5.4.

Box 5.4 Movement quality as experience of wellbeing and health

Movement quality includes the experience of wellbeing. Movement quality has implications to life itself – it represents a conscious ability to create a more healthy existence through becoming aware the way you move. To sense a living, moving body is to realize that I have resources in me.

All informants expressed that movement quality was considered to be a core in the profession. They underlined that the profession is totally dependent on a deeper understanding and a precision of the content of the phenomenon.

The Movement Quality Model (MQM)

The data developed from the study are synthesized into Figure 1, the Movement Quality Model (MQM).

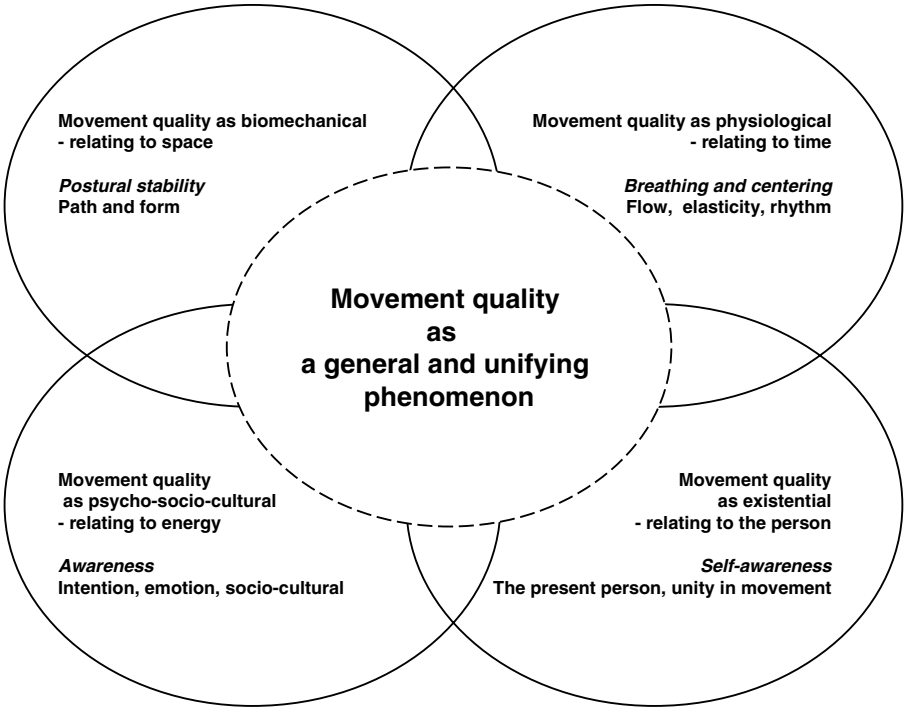

Figure 1. The Movement Quality Model (MQM): Seeing movement quality as interacting processes.

Figure 1 illuminates what was found to be an essence of the phenomenon. The figure illustrates two layers, the four themes, and the synthesis of the whole. Each of the four themes includes the precondition to movement quality and the movement characteristics. Precondition refers to fundamental elements that were important to integrate in movement to make the action functional and practical. By characteristics is meant an aspect or a particular quality experienced and expressed in movement. The study shows that movement quality in general represents a global impression of how the person moves. It covers preconditions and a range of movement characteristics. They are all interacting and interconnected processes that cannot be separated. The Movement Quality Model intends to give an overview of the essence of a whole.

Discussion

In the development of scientific knowledge in physiotherapy, it is necessary to describe and structure observable phenomena. The aim of this study was to investigate the lived experience of movement quality as phenomenon to identify features and characteristics considered important in a physiotherapeutic context. The informants' descriptions of experiences transformed into textual expressions represent an understanding of movement quality limited to this study. The data developed concerning movement quality support to a multidimensional ground as basic category in physiotherapy. This is analogous with a holistic view on human movement.

Movement quality through four perspectives

Seeing movement quality as biomechanical is connected to how the person relates to space and how this relation affects postural alignment and the path and form in movement based on the anatomical structure of the body. When we think of lived space in relation to movement, we refer to how gravity and space are experienced and expressed in movement. This has to do with how the person experiences and handles balance, relates to the ground, to the vertical axis and moves in relation to the sphere. Balance control, which entails the ability to maintain equilibrium by controlling the center of body mass over its base of support, is a complex sensory and motor skill necessary for all standing, sitting, and walking actions (Horak, 1997; Horak, Henry, and Schumway-Cook, 1997). We do not ordinarily reflect on it, yet we know that the space in which we find ourselves, affects the way we sense and the way we move (Shumway-Cook and Wollacott, 2001). In the present study, postural stability was described as a fundamental factor to be integrated in movement training, promoting a more functional form and path in movement.

Seeing movement quality as physiological is connected to how the person relates to time and how this relation affects movement quality with reference to the physiological processes. When we think of lived time in relation to human movement, we refer to how the experience of time is dealt with and expressed in movement. Time is the carrier of the external rhythm as well as internal rhythm in the human being. Internal circulation and the rhythm of breathing are organic elements that affect movement quality. To free the breathing is earlier described as an important element in relation to treatment of patients suffering from of long-lasting muscle tension (Bunkan et al, 1999; Kvåle, Johnsen, and Ljunggren, 2002). In the present study, increased freedom in the breathing was described as a fundamental factor to be integrated in movement training, promoting a more flowing, elastic, and rhythmical movement quality.

Seeing movement quality as psycho-socio-cultural is connected to how the person relates to energy, to internal mental processes as well as external socio-cultural factors and how these processes influence human movements. When we think of lived energy, we refer to how the interconnection of internal and external processes, relations, communication, and interaction with society and the environment are handled by the person and expressed in movement. In a psychosomatic disorder, the psychological processes play a substantial role for somatic symptoms (Brodal, 2004). Most disease processes are more or less influenced by mental attitudes of the patient. In conditions such as fibromyalgia and chronic fatigue syndrome, the influences of psychic factors are important, although a causative relationship has not yet been explained (Brodal, 2004). This should be

kept in mind when regarding the interplay between emotions, cognitive functions, socio-cultural factors, aiming at promoting the movement quality.

Seeing movement quality existentially is connected to the self-awareness, to the ability of the person of being present, here and now, and how this aspect influences the movement quality. This is related to the function of the mind, how the mind is used, and where it is directed (Skjærven, Gard, and Kristoffersen, 2003). Self-awareness is the coordinating function, integrating the psychomotor and perceptual aspects in movements (Dropsy, 1998). When the self-awareness is integrated into movements, personal characteristics, unity, and clarity are expressed in movement (Dropsy, 1998). Strengthening the self-awareness increases the opportunities to self-experience and self-reflection in all areas of life (Dropsy, 1988; Mattsson, 1998). Refining movement quality can be understood as a process of formation of coherence in the person. In a larger existential sense, human beings search to develop a relation that opens to contact with a sense of purpose and meaningful grounds for living. A sense of coherence, perceiving events in life as meaningful, is health promoting (Antonovsky, 1987). In this study, the self-awareness was described as fundamental to promote unity and personal aspects in the movement quality.

A person who is functioning well is rooted in reality and expresses herself through body movements (Roxendal and Wahlberg, 1992). Under normal circumstances the world is perceived as we perceive it through our bodies: we exist in the world through our bodies; from this perspective the body cannot be reduced to a mere object (Merleau-Ponty, 1989). The lived body is present in every action and movement, and it is the unity of body and mind that completes every moment of existence (Merleau-Ponty, 1989). Existence can be seen as a shift in focus between the physical, physiological, psycho-socio-cultural, and the personal actions. They all interact because there is no single movement in a living body that does not carry some aspect of all.

The concept of movement quality

Models in physiotherapy where the concept of movement is in focus are developed from different perspectives (Cott et al, 1995). Physiotherapists are mostly trained to attend to certain bodily aspects focusing the particularity of separate joints and limbs (Higgs, Richardson, and Dahlgren, 2004). Human movement has more seldom been explored from a psychosocial or existential perspective (Higgs, Richardson, and Dahlgren, 2004; Öberg, 1998; Wikström-Grotell, 2000). A semantic analysis of the concept of movement describes more than 60 different meanings included in the concept. It points to a relation between movement, emotions, and an existential movement dimension (Wikström-Grotell, 2000). A study of the concept of movement experiences in a non-professional context showed the concept to be multidimensional (Wikström-Grotell, Lindholm, and Eriksson, 2002). An existential dimension are discussed and developed in physiotherapy (Lundvik-Gyllensten, 2001; Mattsson, 1998; Roxendal, 1985; Roxendal and Nordwall, 1997; Skjærven, Gard, and Kristoffersen, 2003).

The literature review shows influential work in relation to the phenomenon of movement quality. It is described as a diagnostic aspect of psychopathological disorders, of preterm, newborn infants, in relation to treatment of children with cerebral palsy and within the field of psychiatric and psychosomatic physiotherapy. The studies represent a basic step in clarifying the phenomenon. They point at a general phenomenon, relating to the whole coordinated person and at specific elements concerning posture and a differentiation in movement characteristics much in line with the findings in this study.

Observation of Fine Art was integrated in the study to stimulate description of movement quality. Historically, movement teachers, dancers, and actors have studied Greek sculpture and Fine Art to become aware of the richness of human movement and expression (Chekhov, 1985a; May, 1985; Horosko, 1991; Daly, 1995). An important aspect of art is its function as a door opener of a tacit knowledge (Heidegger, 1996). Fine Art communicates a sense of movement with extraordinarily delicate energy (Dewey, 1934). It helps us see features and characteristics we were previously unaware because it provides a perspective on the knowledge that we derive from our senses (Heidegger, 1996). All pictures were used in the descriptions. The informants gave, however, the richest

descriptions observing the Six studies of Cambodian dancers. It is the authors' experience that close observation of Fine Art offers a unique opportunity of clarifying aspects of the phenomenon of movement quality (Skjærven, Gard, and Kristoffersen, 2004).

Movement quality is a commonly used term in the literature of the European movement traditions. It reveals, however, a difficulty in capturing the nature of it (Feldenkrais, 1949; Laban, 1960; Bartennief, 1963; Laban and Lawrence, 1965; Redfern, 1965; Brooks, 1976; Johnson, 1983; Alon, 1990; Barlow, 1990; Feldenkrais, 1990; Horosko, 1991; Parviainen, 1998). The same is found in the literature of actors' training (Chekhov, 1985a; Chekhov, 1985b; Stanislavski, 1988; Stanislavski, 1992; Stanislavski, 1996; Oida and Marshall, 1997; Lecoq, Carasso, and Lallias, 2001). There seems, however, to be common traits incorporated in the phenomenon such as awareness, freeing of the breathing, balance and postural refinements on the one hand and on the other hand a variety of movement characteristics.

Criticism to movement quality

Criticism has been raised on the use of the phenomenon of movement quality associating it with training from a neuro-physiological perspective, stressing normal movements and movement perfection (Ketelaar et al, 2001). Through this perspective, movement quality is associated with techniques connected to a passive view of motor learning (Ketelaar et al, 2001).

Our sensory system is the instrument through which we experience aspects that constitute the inner and outer environment in which we live (Eisner, 1991). This phenomenological study illuminates the expert physiotherapists' perception of essential features and characteristics of movement, which they connect to healthy resources in the person. The ability to experience movement aspects requires more than their presence. Experience is a form of human achievement and depends on how we see, hear, feel, and move. It depends on perceptual differentiation and the ability to verbalize what is subtle but significant in human movement. This has implications for what we search for in the clinical meeting and how the therapeutic process is.

The Movement Quality Model

The Movement Quality Model (MQM) introduces an understanding of movement quality and provides a professional discourse of what movement quality is. The four themes allow us to perceive an immediate richness in and differentiation of the phenomenon, all included in the general phenomenon. The interacting processes can be understood as factors that surges through movement (Thornton, 1971). To describe movement quality is comprehensive and complex. The study shows that movement quality is multifaceted and contains resources important to cover for health in connection to movement. The consequence of such a model leads to an interpretation of health more broadly (Higgs, Richardson, and Dahlgren, 2004). The four themes can be differentiated, but not separated, though they were seen as an intricate unity, which we can call the life-world (Merleau-Ponty, 1989). The MQM offers a set of fundamental elements and characteristics to be included in promoting movement quality. It can give indications for what a patient lacks or the patients' resources. It can be a guide for the physiotherapist in clinical practice working with the suggested themes. It also offers a movement vocabulary for use in physiotherapy, in communication, and research.

We believe that it is important for the physiotherapist to have a discursive awareness in relation to the phenomenon. This set of processes can be integrated in the physiotherapists' awareness of movement, views, and thinking and can change their daily professional actions. It is necessary to validate the MQM and further stimulate to qualitative and quantitative research concerning the model.

Conclusion

The importance of clarifying phenomena in physiotherapy builds on the articulation of basic values in physiotherapy and to develop theoretical models from clinical practice. The study shows the expert physiotherapists use of the phenomenon of movement quality in daily clinical reasoning, describing a rich and nuanced seeing. Four main themes were developed from the data, seeing movement quality

as bio-mechanical, physiological, psycho-socio-cultural, and existential. The phenomenon in general was a synthesis of the themes, covering a whole impression. The outcome of the study is the development of the Movement Quality Model. There is a need for further clarification, especially how the features are brought out therapeutically and pedagogically in physiotherapy.

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