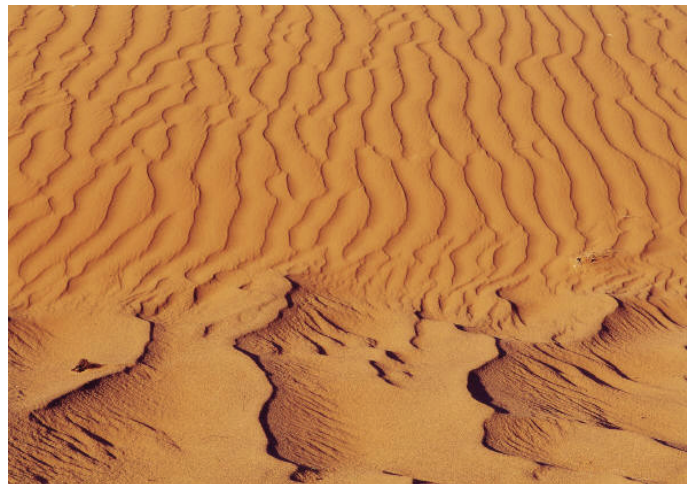UPPSALA
UNIVERSITET

LICENTIATE THESIS

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Competence of Physiotherapists Working in New Contexts

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A being who consciously reflects upon her/himself can as well manage acting consciously and through that raise her/him onto a higher level

<div style="text-align: center">Pierre Teilhard de Chardin</div>

Abstract

Many physiotherapists join new working contexts in their professional career. The overall aim of the licentiate thesis was to investigate how these physiotherapists understand and approach their work. In the two studies composing the thesis, they worked with health promotion in compulsory schools (Study I) and organizational developments in health care services (Study II). In Study I seven physiotherapists in primary care were interviewed. I used qualitative content analysis and found a main theme, described as Perceiving *and* supporting coherence. The concept of *coherence* refers to different resources interacting in a meaningful whole. In Study II, I interviewed twenty one physiotherapists, who worked on organizational and societal levels within health care organizations. I chose to analyse the material according to a phenomenographic approach. Three categories of descriptions emerged: Exploring and performing an assignment, Interactive learning and balancing support and Moving within a continually changing structure. These were logically interrelated and formed an outcome space. In both studies the physiotherapists understood their work as a meaningful whole. The results might in the future be used to help other physiotherapists who work in these new contexts.

List of Papers

This thesis is based on the following papers, which are referred to in the text by their Roman numerals.

I   Boll, M., Boström Lindberg, E. Physiotherapists' understanding and approach to health promotion work in compulsory school: perceiving and supporting coherence. Accepted in *Physiotherapy Theory and Practice*, 2009.

II   Boll, M., Rosenqvist, U. Variations in how physiotherapists understand their work on organizational and societal levels. Submitted.

Contents

Introduction

The focus of this licentiate thesis is on physiotherapists' competence of work in contexts of health promotion and organizational developments. Health promotion is an international strategy (Ottowa 1986; Jakarta 1997) within health care services. Here the biomedical perspective is complemented with supportive environments for the population. Another supportive environment around traditional clinical work is organizational development. Bergman (1989) found that some physiotherapists, the 'Innovators', were interested in combining developmental work on organizational levels, with patient work on clinical levels, as a way to develop the professional role.

Sandberg (1984) identified and described essential aspects of human competence at work, taking the workers conceptions of their work as the point of departure (1984, p.60), where he explored the structure of competence in engine optimization. He described this as a starting point for training and development activities, which aim to improve performance at work (1984, p.6). He found views of competence - depending on knowledge and skills, too limited (1984, p.20), and he discovered that understanding was a more suitable subject to study. How people understand their tasks seems to be a factor that determines how they value their knowledge and use their skills. This is supported in Marton and Booth, who described human competence and how it depends on how one understands his/her job (2000). They refer to a non-dualistic perspective, where the world is constituted as an internal relation between inner and outer (2000, pp. 29-30). They claim that there are qualitative differences in competence at the work place, where there in one and the same authentic activity are identified differences in competence and performance ability (2000, p.257). There are several examples of studies referring to ways of developing professional understandings, which correspond to variations of how people experience working within the health care services (Larsson 2004; Holmström, Larsson, Lindberg, Rosenqvist 2004; Boström Lindberg 2007). We can establish that physiotherapists move to new working contexts on organizational and societal levels. How do they understand and approach their work? In this licentiate thesis the first area to investigate was already completed interviews concerning health promotion work in compulsory schools. The second study regarding variations of understanding work on organizational and societal level, turned up through discussions in the research group.

Aims

The overall aim of the licentiate thesis was to investigate how physiotherapists understand and approach their work when working with health promotion and organizational developments in health care services.

Specific aims

Study I. To describe how physiotherapists working in a program of health promotion in compulsory school understand and approach their work.

Study II. To describe variations in physiotherapists' understanding of their work on organizational and societal levels within health care organizations.

Methods

Qualitative research approaches and methods

The two studies were qualitative studies of physiotherapists' understanding of their work on organizational and societal levels. Qualitative research aims at a deeper understanding of a phenomenon. A qualitative content analysis method was chosen in Study I, because of its possibilities to examine already existing data (Cavanagh 1997). The model of Graneheim and Lundman (2004) was used. Their focus on the subject and the context was through dealing with both manifest and latent content in a given text (2004, p.111). I used a phenomenographic approach in Study II, since I was interested in the variation of conceptions (Marton 1981; 1986; Sandberg 1984; Dall'Alba 1996). An overview of participants, data collection and analytical approaches is illustrated in Table 1:

Table 1. Overview of Participants, Data collection and Analytical approaches in the studies.

Study	Participants	Data collection	Analytical approaches
I	7 physiotherapists partly working in a program of health promotion work	In depth interviews	Qualitative content analysis
II	21 physiotherapists working on organizational and societal levels	In depth interviews	Phenomenography

Ethical considerations in the two studies

According to Swedish law (2003:460), approval from an ethics committee is needed for research that might have physical or psychological influence on the participants. This means that approval is not needed for the studies presented in this licentiate thesis. Ethical problems to be considered are problems related to interpretative awareness in the interviewing situation and throughout the analyzing process. I discussed the ethical aspect of the two studies with other researchers, individually and in seminaries.

The first study in the thesis started as a developmental program in primary care, followed by an evaluation study. Two years later it became a research project, where the head of the physiotherapists and the physiotherapists themselves were contacted. They agreed that their interviews became a part of the study. I then contacted five of the seven physiotherapists by mail, and two who had left primary care, by phone. In the second study, I sent a letter about the study and an informed consent document to the informants, and guaranteed them confidentiality and that they were free to withdraw from the study at any time.

Setting, Participants and Data collection

Study I

A health promotion program was implemented in several compulsory schools in a specific area of central Sweden. This was confirmed in a contract with the Department of Public Health in Primary Care. The program included lectures and consultations concerning physical activity and management of stress at group levels. It was carried out in cooperation with teachers, nurses, pupils and parents in a sample of schools that had shown interest. The physiotherapists had been given the task of managing their involvement regarding the initial terms of the contract and variations in the needs of the schools. A supportive

networking group allowed the participants to reflect on and discuss their work experiences in the new context. A total of 21 compulsory schools took part in the program and employed one full-time physiotherapist. The hours spent at each school varied, based on identified needs. One school could be given six to eight hours a week and another school, two. The evaluation of the local program included six of the schools. These schools had specific approaches to health promotion, and the physiotherapists therefore became more involved in the program at these schools over time. Seven physiotherapists worked or had worked at these schools. They all agreed to be interviewed as a part of the local evaluation of the program. All were women between 32 and 54 years of age. Six of the physiotherapists had worked more than ten years and one five years. The physiotherapists also had experience from other areas, such as habilitation, heart rehabilitation, public health education, teacher education and teaching, child and youth leadership, and leadership of physiotherapy units. One of the physiotherapists had worked part time as a school physiotherapist fifteen years earlier. I interviewed them during a period of four months in spring 2003. I initiated the program as head of the physiotherapy department in primary care, but had left this position in 2003. Some of the physiotherapists still worked in the program, two had stopped and another two had just started. Interviews lasted about one hour. The physiotherapists reviewed an interview guide in advance. The questions addressed how the physiotherapists characterized their interactions with the schools in different ways (1), their experiences of feedback processes (2), and how they viewed future work developments (3). Six of seven interviews were tape-recorded, and one documented by hand at the request of the informant.

Study II

Strategic selections of twenty-one physiotherapists currently working on organizational and societal levels within health care organizations were chosen. The sample included individuals from a number of positions in health care organization, ranging from managerial, educational, researching, health promotional and investigational questions. The sample also balanced the sexes in relation to the approximate distribution between the sexes within the total group of physiotherapists in Sweden. The informants lived in southern, middle and northern parts of the country. The selection started with two pilot studies and continued as a snowball selection related to the range of positions above. In Polit and Beck (2008), the snowball selection had an advantage during the process as the researcher could more readily specify the desired characteristics related to the strategic selection (2008, pp. 354-355), through questions like "Do you know a physiotherapist working on organizational and societal levels related to health promotion in southern Sweden"? The interviewees represented positions corresponding to the strategic selection above.

The first author [MB] conducted the interviews between May and December 2007. The interviews lasted between 45 minutes and 1 hour and 40 minutes, and were taped and transcribed verbatim. The focus in the interviews was on the informants' experiences of work on organizational and societal levels. The basic questions were: Can you describe a situation that has occurred and that you see as important, meaningful and valuable to you in your professional development process in your work"? Can you describe the "core" of your work? Probing questions were: Can you elaborate on what it is that makes this situation important? Is there anything else you want to describe about the situation? What impact did it have on you? What was your role in the situation? Is there a similar situation you want to describe?

Data Analysis

Study I

The first author [MB] read the interviews several times to obtain a sense of the whole. The initial impression was an immediate sense of coherence, related to the informants' way of thinking in theory *and* practice, or individual *and* group. She sorted the assembled text into three Content Areas referring to the interview questions, through discussions with the second author [EBL] and a researcher experienced in the method. This is illustrated in Table 2:

Table 2. Interview questions relating to Content Areas (CA)

Interview questions	Content Areas
2. Why did you start at your specific school? What was the first contact like? How did you progress in the work process? 3. What contacts did you have at school during the period? What contacts outside school did you have? 4. In which localities and with which equipment were activities carried out indoors, and if outdoors, where? 5. What kind of services did you supply and how did you relate them to the agreement with the Department of Health Care? 8. Have you had a system for reflecting on work, e.g. a diary?	1. The physiotherapists interact with their environment
6. What kind of feedback have you had from the school, from physiotherapist colleagues working in schools, from other physiotherapists within the unit, and from meetings within the network? 8. Have you somehow documented what you have done? 9. What kind of supportive and resistant forces have you experienced at school, at the health centre among physiotherapists, in the surroundings and in yourself?	2. The physiotherapists get close to their own and others' reactions
7. How have you been further educated in the area – have you read literature, attended seminars or educational days, or been to or participated in conferences? 8. How have you evaluated your work? 10. How do you look upon physiotherapy in schools from a five-year perspective?	3. The physiotherapists reflect upon the process

The background-related groups of questions 1 (What is your age? When did you graduate? What is your education? What is your work experience?) and the first question in "question group" 2 (Why did you choose to work in schools when asked to?), were separated from the CA and described in the demographics above. The three questions in "question group" 8, were divided between the three CAs (Have you had a system for reflecting on work, e.g. a diary? CA1, Have you somehow documented what you have done? CA2 and How have you evaluated your work? CA3).

The first author formulated meaning units, condensed meaning units and codes on the manifest level, related to the content of "What" – "What is this understanding of and approach to work about"? The codes formulated from the meaning units were compared based on similarities and differences and sorted into subcategories and categories. In this phase, the second author [EBL] was a co-researcher. She focused on specific parts of formulating meaning units and came to a similar conclusion, expressed in different words.

A part of the coding process was reflected upon with [EBL], which resulted in a more critical approach to my own pre-understanding of the field. I presented parts of the analyzing process for the research group and they reflected on them. Table 3 illustrates an example of the analyzing process from meaning units to categories on manifest levels:

Table 3. One example of the analyzing process from meaning units to category on manifest level What.

Meaning units	Condensed mean-ing units	Code	Subcategory	Category
I believe that our base should be in primary care. We can be a responsible clique, but every-body is to feel that this is something important we are doing and that we will see results further on (m.u. 12 CA3)	Believes the base lies in primary care/…/a clique can be responsible, but everybody is to feel that this is impor-tant and that we will see the result further on	Sees the base in primary care and provides a plan	Belonging	Organizing ques-tions

The first author [MB] continued through focusing on the underlying meaning, the latent content of rela-tion to the found "What" through asking "How" as a way to form themes, one for each Content Area. She took the step from category level to theme level by changing the question to "How do they understand and approach their work"? After pondering the themes, returning to earlier stages of coding and catego-rizing in the process, listening to the tapes, and reading the assembled texts many times, she discovered a main theme.

Study II

The first author [MB] was inspired by Dahlgren and Fallsberg (1991) in her analysing process. In the first step, familiarization, the interviews were carefully read through to get a sense of the whole. In the second step, condensation, she read five transcripts and made marks in the text, to find significant statements made by the subjects related to the research questions. This was analyzed and discussed with the second author [UR].Then the first author continued the condensation step with the rest of the transcripts. In the next two steps, comparison, and grouping and articulating, the first author grouped the descriptions into three groups according to similarities and differences in the whole material, and discussed this with the second author. This process involved a constant back-and-forth reading of the material (Dahlgren and Fallsberg 1991, p.152). In the labeling and contrasting steps, the first author denoted the various catego-ries by constructing a suitable linguistic expression, where she compared the categories obtained to find similarities and differences.

Results

Study I

We found a main theme Perceiving *and* supporting coherence, as an answer to the aim of the study. Here understanding refers to perceiving coherence and approaching refers to supporting coherence. The choice of the concept of coherence is defined in Latin as 'hold together'. Here coherence refers to different resources interacting in a meaningful whole, which in this study corresponds to the implementation of the program of health promotion in the specific school. How they understood and approached their work was described in the three sub themes oriented to the chosen CAs. The sub themes depended on what the physiotherapists were oriented to in their work, which referred to category level. The results of the main theme, sub-themes and categories are illustrated in Table 4:

Table 4. Findings on category, sub-theme and main theme levels

Main theme	Perceiving *and* supporting coherence						
Sub-theme	Improvising in dialogue CA1		Balancing structures of change CA2			Reflecting on the professional process CA3	
Category	Basis of agreement	Way of coping	Meeting the culture of school	Feedback in primary care	Surrounding focusing	Organizing questions	Professional developments

Understanding and approaching work as Improvising in dialogue, were oriented to the 'Basis of agreement' and 'Way of coping'. Here the informants had to meet different ways of understanding in their professional support. In the 'Basis of agreement' this rested on how the document of commitments had to be locally adapted at the start. In one example of 'Basis of agreement', understanding and approach was formulated as "I phoned the headmaster, met the headmaster and then the team of teachers and then it was very simple, because they have time for themes on Tuesday morning, so we can redistribute the hours to everyday instead. If you are free from timetable obligations, you have the whole school day for yourself, so they decided to redistribute the four hours to get movement every day they did not have physical education". In the 'Way of coping', they solved problems in an interactive way, using school environment and integrating movements of the pupils naturally. In one example of 'Way of coping', the physiotherapist joined a physical education lesson as a way to support pupils' interest in participating: "Especially girls thought it was unpleasant to get sweaty, did not want to join physical education. We discussed this in the teacher group and decided I would join, starting with a theory lesson about body basics, skeleton, muscles and heart and lungs and then I joined the physical education lesson and they took each others pulse and we talked about this coherence".

Understanding and approaching work as Balancing structures of change included handling internal and external feedback processes. There were examples regarding 'Meeting the culture of school', 'Feedback in primary care' and from 'Surrounding focusing'. One example in 'Meeting the culture of school' was about one's own responses, causing difficulties to change over in the new context: "I have difficulties separating things. When I am into something I want to stick to that. It costs a lot mentally to change over". In 'Feedback in primary care', the physiotherapists had to meet viewpoints from colleagues who did not work in the program and who said "It steals time from ordinary physiotherapy". Developmental support in primary care came from the networking group of colleagues working in the program: "I think the networking meetings have been necessary, to look back on what you have been doing and to listen to others; we don't all have the same concepts". In 'Surrounding focusing' they referred to the national de-

bate of moving, "The debate has helped us. There is a lot of talking about overweight that we do not move and are stressed. You read a lot in papers which people overhear. It is rewarding to build on, to give a little more facts and some concrete proposals what to do".

Understanding and approaching work as Reflecting on the professional process included 'Organizing questions' and 'Professional developments'. 'Organizing questions' were oriented to a sense of organizational belonging, the financing structure regarding who was going to pay for it and adaptation circumstances between the cultures of primary care and compulsory school. In organizational belonging two different positions were described: "I have had some individuals earlier, before I came to school, and now it is very exciting to see them in the groups. You understand why they have been feeling bad, and you understand why the group acts as it does. That is why I say it can be good to keep a foot in ordinary primary care". In the second position, the physiotherapist reflected on belonging from a need to be one of the gang as an employee of the school, related to cultural differences between the two contexts: "There are two different worlds". 'Professional developments' included reflections related to team-building, possibilities of future support and how to structure the continuing process of practice. This is exemplified as "You have to steer it up more, come up with a template what you can offer. Then it is easier to manage out there in school. But as well for us, that we know and can work together with the template and replace each other".

Study II

The sample included five men and sixteen women, aged from 41 to 66 years. The results showed a balanced distribution of informants between the different parts of Sweden. Furthermore five persons worked in rural districts and sixteen in urban ones.

We identified three ways of understanding work on organizational and societal levels: A. Exploring and performing an assignment; B. Interactive learning and balancing support; and C. Moving within a continually changing structure. In category A, the found preference is a theoretical and analytical approach to solve a given task. Category B contains descriptions oriented toward a relational approach, and category C describes an environmental-oriented approach within a given context. All the informants described situations related to all three categories, but there were individual variations related to which category was in focus. Six informants focused on category A, five on B and ten on C, which was the most comprehensive way of understanding. Males and females were represented in all categories. The translated quotations below were chosen because of their comprehensiveness:

A. In the work perceived as exploring and performing an assignment, the informants had a reviewing and analytical way of understanding the task. It included being supportive in developing awareness of perspectives, corresponding to concepts used in a specific work place. The focus was on surveying what the counties do if they measure "care loads" or "needs of personal welfare" in the care of the elderly, and which instruments they use. Here the informant found that the personnel were poking about on their own and that there was a need to facilitate through coordination and meetings for discussions: "You cannot just change one concept to another, which shows that you have really not thought this through entirely. Different concepts, meanings, influences and relationships ought to be investigated more clearly, to get familiar with what you are talking about".

B. In the work perceived as interactive learning and balancing support, the informants focused on building relationships related to professional responsibility through reflecting on processes in educational and developmental situations. Several of the informants here mentioned a wish to reach a better outcome for the patient in the end. This process involved being sensitive to the other person, finding the right respectful relational level. Also when needed, confronting the professionals as a way to support them in coming to a more comprehensive way of understanding. The focus in one example was on the health professionals in a learning seminar group, where a specific group had misunderstood the whole project. They were described as a little 'outside' when the group exchanged experiences at the first learning seminar. Here the informant, who was the leader of the learning seminar, had a particular approach in order to get them to the same level. His approach involved getting the seminar members to fall and through that fall, to lift them: "They did not have the staff with them. When that became clear, it was very painful. They looked

at their curves and saw - it won't happen. To get them to turn, to get people to grow from that change in point of view, something positive was born. To be in that process, successively diminishing my role, they own it themselves".

C. The work perceived as moving within a continually changing structure, concerns having an approach of preparedness regarding continual environmental changes. Further, it means supporting people in an organization through both giving trust and being available when needed. It involves being intuitive in starting developmental work, including contacting people at different levels of responsibility. It is to work in a transcending integrating perspective, and coordinating contradictory perspectives in a given environmental situation, as a way to achieve to a more comprehensive outcome. The focus in one example was to develop templates for self reviews, instead of sending their plans to the informant for checking. In this, people themselves would be able to check whether what they did was good. Here the informant described the self-review as very positive, because they could do it by themselves and the follow up could be done together: "I saw that it works when you do quality work in this way. I got the chairman in the quality group on my side and the central coordinator of the quality work on my side, checked with those persons with knowledge about this". Then the informant saw that it was possible to do quality reviews in more than one way and that there is more than one solution to the problem.

These qualitatively different ways of understanding work, were interrelated in an outcome space. The outcome space delineates an increasing complexity from category levels A to C. Here A and B are included in the more comprehensive perspective of C. Sandberg and Targama (2007) argue that results from phenomenographic studies indicate that people can keep the context of an earlier understanding as part of a new one [Marton and Booth, 1997]. The earlier view is now made sense of within the frame of the new understanding (2007, p. 119). Both A and B describe situations in C, but these descriptions are grounded in a way of understanding from the perspective of A or B. The outcome space is illustrated in Figure 1:
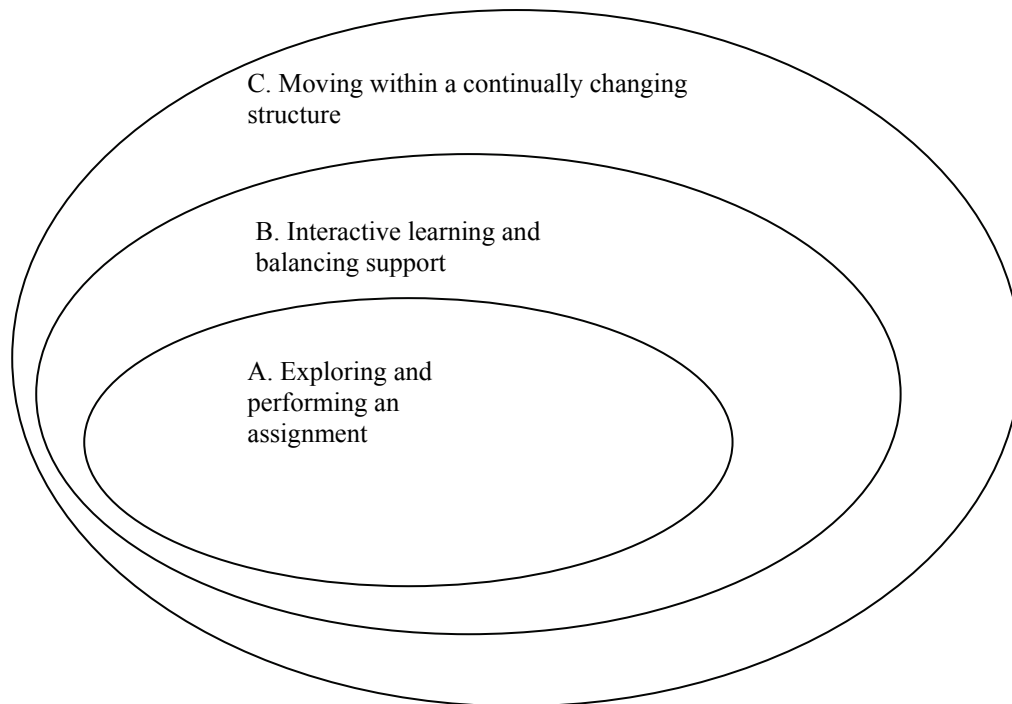

Figure 1. Outcome space of the varied understandings of professional work

Discussion

Main findings

The most striking findings in the two studies of this licentiate thesis were related to ways of understanding and approaching work as a meaningful whole. In Study I the physiotherapists described their ways of understanding and approaching work as Perceiving *and* supporting coherence. This included managing Improvising in dialogue, Balancing structures of change and Reflecting on the professional process. In Study II three different ways of understanding work were described in an outcome space of increasing complexity. Here each category: A. Exploring and performing an assignment; B. Interactive learning and balancing support; and C. Moving within a continually changing structure, represented a perceived meaningful whole on collective level, corresponding to qualitatively different ways of understandings.

In the sub-theme of Improvising in dialogue (Study I), one example resulted in redistributing hours in the schedule, to give more space for movement every day. Another example was to introduce a theoretical perspective, in combination with the practically-oriented physical education session, as a way to get the female pupils interested. These ways of understanding and approaching work were found similar to the example of Interactive learning and balancing support in Category B (Study II), where the leader of the learning seminar supported a specific group of the seminar to get into a turn. Ahlberg (2004), defined a view-turn as a changed way of experiencing something (2004, p. 5). All three examples were discussed, regarding how the informants' ways of understanding introduced possibilities to get into view-turns. In Gadamer (2006) a way of experiencing something is presented as a horizon of understanding the present, which is a limited standpoint (2006, p. 301). According to Gadamer, this cannot be formed without the past and understanding is always fusions of these horizons, supposedly existing by themselves (2006, p. 305). In the present study, a new fusion of horizons in the case of Category B (Study II) was supported by the leader of the learning seminar. In this situation his way of understanding went beyond the specific group in the learning seminar.

To leave traditional clinical levels to join working contexts on organizational and societal levels is to join environments grounded in other cultures. This was discussed as influencing self efficacy (Bandura 1997). Bandura describes self efficacy as what you believe you can do with what you have under a variety of circumstances. In the examples of Balancing structures of change (Study I), the physiotherapists were experiencing different feedback responses in the encounter with colleagues in primary care. In the networking group they found support of partners in the learning process of health promotion work, even if they did not all have the same concept. This is supported by Dall'Alba and Sandberg (2006), who claim that refinement of existing understanding, rather than transformation into a more complex understanding of practice, is likely to be the norm in the professions rather than an exception (2006, p. 396). The physiotherapists working with health promotion encountered resistance from colleagues, who did not work in the program and who told them that priority had to be placed on the patient. Some of the physiotherapists met their own resistance from within. They described this as a major mental cost to change over from working with patients to working with pupils. The professional challenges of a new working context are described in von Koch et al. (2000), as part of a learning process. They investigated physiotherapists who continued rehabilitation of patients at home after stroke. The rehabilitation process was pursued by the patient and the therapist in partnership. Here a learning process developed on the part of the therapists, in order to adjust to the patients' increased responsibility and to meet the demands of a wider scope of problems (2000, p. 582).

In both studies reflections were oriented to the ways of experiencing a meaningful whole. In Reflecting on the professional process (Study I), two qualitatively different ways of understanding future organizational belonging, regarding health promotion work in the compulsory school emerged. The first example

focused on belonging to primary care and of developing a new understanding of individuals. The other focused on belonging as "being one of the gang" in the culture of school. In Study II, the professional reflections were related to examples of Category A and C. The informant in Category A was oriented to Exploring and performing an assignment successfully. This was done through an analytical knowledge-based process of a whole, in supporting professionals on group levels to develop in a meaningful whole. This was formulated as "to get familiar with what you are talking about". In a more comprehensive way of understanding such as Moving within a continually changing structure, the informant of Category C was oriented towards an environmental whole. Here the focus was on professionals' resources in different positions regarding the development of a given task, which was approached in a creative openness, described as "you can do it in more than one way". These qualitatively different ways of understanding in the reflecting process were further discussed in relation to professional responsibility, where one responds to what one understands. Gerrewall (2008), who discusses professional responsibility, claims that acting with professional responsibility, presupposes openness in order to perceive different perspectives (2008, p.121). This leads to reflections upon the need to be aware of the present way of understanding, as a way to be open for possibilities, to develop in understanding and professional responsibility. Solbrekke (2007) argues that surprisingly little effort has been made to study how individual professionals conceive of and practice their professional responsibility. There are studies found related to the pharmaceutical profession. In Björkman (2006) different care ideologies were reflected in specific classification systems, where e.g. the patient role and cooperation with physicians related to drug prescriptions, differed related to perceptions (2006, p. 51-52). Further there is a study found of variations in how emergency and family physicians in Sweden understand drug prescribing (Bastholm Rahmner 2009).

One way of increasing awareness of professional responsibility is described in Schön (1983). He focuses on consciousness of tacit understanding through reflection. This is exemplified as "He recognizes that his actions may have different meanings for his client than he intends them to have, and he gives himself the task of discovering what these are (1983, p. 295). Regarding clinical reasoning as a systematic way to reflect on work, the learning process of home rehabilitation was further investigated in Wohlin Wottrich, von Koch and Tham (2007). They examined the therapists' clinical reasoning, which is based on knowledge gained from tacit understanding and through experience (2007, p.779). They found that ending a home rehabilitation program might be more of a problem for the team members because of their feelings of uncertainty, than for the patients (2007, p. 786). One difficulty in changing a way of understanding is pointed out in Dall' Alba and Sandberg (2006). They say that understanding of, and in, practice form the basis for professional skill and its development and that this way of understanding is embodied (2006, pp. 388-389). Kalman (1999), who discusses epistemological questions from a pragmatic perspective, asks "What is characteristic of knowing when it is investigated as being an activity of the lived body"? She found that existential trust is part of our daring to go forward in our actions in the world. Here she referred to Polanyi, and his functional relation in tacit knowing as attention from something to something (1999, p.137). Polanyi (1969/1958), further argued for tacit knowing being in fact the dominant principle of all knowledge (1969/1958, p.13).

Reflections on the tacit embedded dimension lead to the question how these working options correspond to the origin of the profession. Maybe one key issue in the search for new physiotherapy positions in health care services is that the obligation to work on referrals from physicians initiated in Sweden, in 1887, has been released. Referral-practiced physiotherapy is traditionally to work with patients. In the present study physiotherapists partly - or wholly - have left clinical level, for work with health promotion and organizational development. This was discussed referred to self-efficacy and tacit understanding, as offering new possibilities of being in contact with embodied dimensions generated from the origin of the profession. Here this was exemplified in the holistic gymnastic organism described by PH Ling (Ottosson 2005, pp. 64-65), which lay down that all humans need to move, the healthy as well as the sick. Ling had discussions with physicians about the need of balancing the mechanical movement perspective with the chemical, to get a harmonious healing process adjusted to the specific dynamic environmental situation (2005, pp.131-132). Raustorp (2005) and Kallings (2008) are examples of physiotherapists of today, advocating physical activity as a resource that supports health in the healthy and the sick, related to a specific environment. Furthermore, in starting his gymnastic institute in 1813, PH Ling started an organizational developmental process associated with high societal autonomy and capital, in light of the needs of

society at that time. Ling and his early efforts were discussed as a way to lay the foundations for physiotherapists to work in areas outside the directly medical context.

This can inspire ways to continue in reflections of how ways of understanding physiotherapy can reflect the complexity of the origin ideology of the profession. Reflecting on the tacit, embedded dimension of the findings in my two studies is just one way to proceed. Further analysis of the interviews of the two studies demonstrates that most of the informants had a comprehensive interest in reflecting upon their work. In this study, physiotherapists' way of understanding and approaching their work in contexts of health promotion and organizational development has been the issue. A reasonable assumption is that other professionals on these levels perceive their work in a similar manner.

Limitations

Trustworthiness in the research process of Study I and II can be strengthened by credibility, dependability, confirmability and transferability in the whole process (Lincoln & Guba 1985; Hamberg et al.1994; Graneheim and Lundman 2004). Regarding credibility, the aim of the studies and their research questions were highlighted in the process of analyzing (Graneheim and Lundman, 2004). Regarding the criteria of dependability, interpretative awareness (Sandberg 1994, pp.65-69) was used throughout the two studies. In Study I, there was a bias related to the first author [MB], who initiated the program as head of the physiotherapists and who was the interviewer in the evaluation. The advantage here was that it was easy to get close to the researched environment, but there was a risk of getting too close. There was a continuous movement between the empirical and theoretical levels. This was to preserve the integrity of the context, in the process of removing sentences, while minimizing the risk of altering meaning (Burnard, 1991). In the interview situation, the informants got the questions in advance. This was a way to have a low profile, related to the 'bias' of the researcher. To take care of the 'biased and the perspective subjectivity' in Study II, because [MB] was a physiotherapist working on organizational levels, she adopted the phenomenological attitude of "bracketing" (Uljens in Dall'Alba, 1996, pp.121-127). Regarding confirmability of the logical process, structuring of categories and discussions related to quotations, the second researcher [EBL], who was a nurse, offered valuable perspectives during the analyzing process in Study I. Critical support was given in seminars in a multi professional research group within Health Services Research. In the contextual analysis of Study II, the researcher's procedures for achieving faithful descriptions were drawn up by the first author [MB] on her own. When the conceptions were articulated as categories of descriptions, they were used as "intellectual tools" (Ottosson 1987, pp. 68-69), in discussions with the second author [UR]. Regarding the question of transferability, it is finally the reader who decides if the results are transferable to another context (Graneheim and Lundman, 2004). To facilitate this assessment, the researcher focused on every step in the process of the study, as a way to present the work in a clear and comprehensive way, oriented towards awareness of professional roles and comprehensiveness in existing ways of understanding.

Conclusions

The overall aim of the licentiate thesis was to investigate how physiotherapists understand and approach their work when working with health promotion and organizational developments in health care services. This was related to an interest of investigating physiotherapists already working in these roles. The findings in the two studies indicate, that competence of physiotherapists in these new working contexts, are related to a way of understanding the job as whole. In Study I this was related to the way of responding to possibilities of whole referred to working part time in school still grounded in primary care. In Study II it was related to variations of understanding work. Professional responsibility was found to depend on a specific way of understanding. The conclusions are that there is a need to develop professional awareness, of how the comprehensiveness of a given way of understanding work, influences practice regarding possibilities and limitations. The results might in the future be used to help other physiotherapists who work in these new contexts.

Future research

More studies are needed regarding the importance of how ways of understanding work is related to professional responsibility. Furthermore exploratory studies are needed related to the more or less embedded origin of the profession (Broberg, 1993; Ottosson, 2005) and its impact on tacit levels of understanding within present-day- professional developments. These future studies are to be considered as part of a continuing process of defining the boundaries of professional responsibility in society. This process includes developments in the professional role, as a way to indirectly support patients, clients or citizens needs.

Acknowledgements

Summary in Swedish

Introduktion

Intresset för att studera sjukgymnasters kompetens i nya arbetskontexter väcktes genom de förändringar som sker inom professionen idag. I kompetensbegreppet ligger ett icke-dualistiskt tänkande, där kompetens utvecklas i relationen människa och värld.

Mål

Det övergripande målet med licentiatavhandlingen var att utforska hur sjukgymnaster förstår och förhåller sig till sitt arbete, när de arbetar med hälsofrämjande och organisationsutvecklande arbete inom hälso- och sjukvården. De specifika målen är att beskriva hur sjukgymnaster som arbetar i ett hälsofrämjande program i grundskolan förstår och förhåller sig till sitt arbete (Studie I) och att beskriva variationer i sjukgymnasters sätt att erfara sitt arbete på organisations- och samhällsnivå inom hälso- och sjukvården (Studie II).

Metod och analys

I Studie I användes kvalitativ innehållsanalys av intervjuer med sju erfarna sjukgymnaster utifrån modell Graneheim och Lundman (2004). I Studie II analyserades intervjuer med tjugoen sjukgymnaster verksamma på organisations- och samhällsnivå inom hälso- och sjukvården, utifrån en fenomenografisk ansats genom Dahlgren och Fallsbergs modell (1991).

Resultat

Huvudtemat som framkom i Studie I var Uppfattar *och* stödjer sammanhang (Studie I). Studie II mynnade ut i tre sätt att förstå sitt arbete, A. Utforska och utföra ett uppdrag, B. Interaktivt lärande och balanserande stöd, C. Att röra sig inom en kontinuerligt förändrande struktur. De tre sätten att förstå sitt arbete formade ett utfallsrum av tilltagande komplexitetsgrad.

Diskussion

De mest framträdande fynden i de två studierna relaterades till sätt att förstå och förhålla sig till ett meningsskapande sammanhang, där möjlighetstänkande, professionellt ansvar och tyst erfarenhetskunskap traderat sedan professionens ursprung beaktades.

Slutsats

Där finns ett behov av att utveckla professionell medvetenhet om hur spännvidden i ett givet sätt att uppfatta arbetet, influerar praktiken avseende möjligheter och begränsningar. Men också att uppmärksamma professionella strategier, som tar avstamp i en meningsorienterad erfarenhetskunskap, framväxt ur det professionella ursprunget. Detta för att på bästa sätt svara upp mot de samhällsbehov som formuleras idag.

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Physiotherapists' understanding and approach to health promotion work in compulsory school: perceiving and supporting coherence

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Abstract

Gaining knowledge in the field of health promotion may help physiotherapists acquire a new understanding of the way movement promotes health, as related to environmental influences. The aim of the present study was to describe how physiotherapists working in a programme of health promotion in compulsory school understand and approach their work. Seven physiotherapists in primary care, working partly with health promotion in compulsory school, were interviewed. A descriptive design of qualitative content analysis was chosen to analyse interviews that had already been conducted in a local evaluation of the programme. This resulted in a main theme, described as *Perceiving* and *supporting coherence*. This understanding and approach were discussed in relation to challenges of a historically embedded constitution of physiotherapy when entering the area of health promotion in compulsory school.

Introduction

Higgs, Hunt, Higgs, and Neubauer (1999) point to the need to prepare physiotherapy graduates to meet the challenges of health promotion work in today's society. Health promotion is defined by the Ottowa Charter for Health Promotion (World Health Organizations, 1986) as "the process of enabling people to increase control over and to improve their health", which includes supportive environments. The strategies from Ottowa were continued in the Jakarta Declaration (World Health Organization, 1997), which states that health learning fosters participation. Supportive and learning environments are

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focussed on in different ways, such as in the new public health referred to in Baum (2008), whereby the medical model of changing behaviour has to be balanced against changes in the social context in which people live.

This is close to the concept of self-efficacy (Bandura 1997; Glanz, Rimer, and Lewis, 2002), which in Bandura (1997) is related to what you believe you can do with what you have under a variety of circumstances. According to Bandura (1997), self-efficacy is one of the most essential concepts in Social Cognitive Theory. In Glanz, Rimer, and Lewis. (2002), Social Cognitive Theory addresses both the psychosocial dynamics influencing health behaviour and the methods for promoting behavioural change. This predicts the initiation of a new health behaviour; Dunn, Andersen, and Jakicic. (1998) claim that "Lifestyle physical activity interventions are effective at increasing levels of physical activity". Furthermore, some studies have found that physical attributes of residential neighbourhoods such as the connectedness of streets can influence walking behaviour (Owen et al, 2004; Owen et al, 2007). Moreover, Sallis, Bauman and Pratt (1998) relate to ecological models of behaviour applicable to physical activity, and Gard (2002) describes high motivation, referring to the dynamic balance between individuals and their environment.

In a literature review, Perreault (2008) highlights conceptual and practical links between the fields of physiotherapy and health promotion. She finds that health education is the most frequently used promotion strategy in physiotherapy practice, and that gaining knowledge in the field of health promotion may help

physiotherapists acquire a new understanding of the concept of health and of their role in intervening with people who present potentially complex conditions. This stresses the historical perspective of Broberg (1993), in which she relates to the health-oriented origin of the profession and the need to reflect upon professional understandings of hereditary within tradition and history.

In compulsory school there are physiotherapists working within the system of pupils' health services for back pain, headache and other conditions associated with lifestyle and psychosomatic complaints (Berntsson, Köhler and Gustavsson, 2001; Leonardsson-Hellgren, Gustavsson and Lindblad, 2001; Noreng-Sjölie, 2002), but no studies have been found of physiotherapists working in compulsory school programmes of health promotion related to health education. Such a programme was implemented in a specific area in central Sweden from 2001 to 2003. The aim of the present study was to describe how physiotherapists working in a programme of health promotion in compulsory school understand and approach their work.

Materials and Methods

Design

A descriptive design of qualitative content analysis was chosen to subsequently analyse interviews that had already been conducted by the first author within a local evaluation of physiotherapists working in a programme of health promotion in compulsory school. A qualitative content analysis was used

because of its flexibility, which allows it to be used in a variety of settings (e.g., to examine already existing data), which was the case here. According to Polit and Beck (2008), qualitative content analysis is the analysis of the content of narrative data to identify prominent themes and patterns among the themes. In Graneheim and Lundman (2004), the units to be analysed are called Content Areas (CA) and are related to the areas of questioning. This was determined to be a suitable approach in this study, because the questions had already been formulated.

Setting and Participants

A programme of health promotion in compulsory school had been implemented in a specific area in central Sweden from 2001 to 2003, and was realized through a contract with the Department of Public Health in Primary Care. It included lectures and consultations concerning physical activity and management of stress at group levels. The programme was carried out in cooperation with teachers, nurses, pupils and parents in a sample of schools that had shown interest. Initially, nine physiotherapists working in primary care joined the programme at junior and intermediate levels on a part-time basis. Early in the process, the physiotherapists had been given the task of managing their process for the initial terms of the contract and variations in the needs of the schools. A supportive networking group was arranged for, to allow the participants to reflect on and discuss their work experiences in the new context. The programme, in which a total of 21 compulsory schools were involved, had financing for one full-time physiotherapist, with the hours spent at each school

varying based on identified needs. Here, one school could be given six to eight hours a week and another two. The evaluation of the local programme included six schools. These schools were chosen because they had specific approaches to health promotion related to physical activities, and because of these approaches the physiotherapists became more involved in the programme at these schools over time. Seven of the nine physiotherapists were working or had worked at these schools. The other two physiotherapists, working at other schools, were not included in the local evaluation. All seven physiotherapists who were invited to be interviewed in the local evaluation agreed to participate, and later gave their consent when it was to become a research project.

Data Collection and Analysis

The interviews were conducted during a period of four months in spring 2003, by the first author [MB]. She had been the initiator of the programme, as head of the physiotherapy department in primary care but had left this position by 2003. Some of the physiotherapists were still working in the programme, two had stopped and another two had just started. Interviews lasted about one hour. All seven physiotherapists were women between 32 and 54 years of age. All but one had been a physiotherapist for more than 10 years; the one with five years' experience was over 45 years old. The physiotherapists also had experience from other areas, such as habilitation, heart rehabilitation, public health education, teacher education and teaching, child and youth leadership,

and leadership of physiotherapy units. One of the physiotherapists had worked

part-time as a school physiotherapist 15 years earlier.

An interview guide was sent to the informants in advance. The questions were

oriented to how the physiotherapists characterized their experiences with

school in different ways; this is illustrated in Table 1:

Table 1. Interview questions.

1. Background questions: What is your age? When did you graduate? What is your education? What is your work experience?
2. Why did you choose to work in schools when asked to? Why did you start at your specific school? What was the first contact like? How did you progress in the work process? How often did you visit the school?
3. What contacts did you have at school during the period? What contacts outside school did you have?
4. In which localities and with which equipment were activities carried out indoors, and if outdoors, where?
5. What kind of services did you supply and how did you relate them to the agreement with the Department of Health Care?
6. What kind of feedback have you had from the school, from physiotherapist colleagues working in schools, from other physiotherapists within the unit, and from meetings within the network?
7. How have you been further educated in the area – have you read literature, attended seminars or educational days, or been to or participated in conferences?
8. Have you had a system for reflecting on work, e.g. a diary? Have you somehow documented what you have done, and how have you evaluated your work?
9. What kind of supportive and resistant forces have you experienced at school, at the health centre among physiotherapists, in the surroundings and in yourself?
10. How do you look upon physiotherapy in schools from a five-year perspective?

Six of seven interviews were tape-recorded, and one interview was

documented by hand as requested by the informant. The six tape-recorded

interviews, earlier transcribed verbatim, were read through several times

together with the hand-written interview to obtain a sense of the whole. A first

possible theme was written down. The initial impression was an immediate

sense of coherence and whole, related to the informants' way of thinking in

connections, such as theory *and* practice, individual *and* group, physical

activity *and* stress.

The assembled text was sorted into three Content Areas (CAs), related to groups of similarities regarding the interview questions. Question 1 and the first part of Question 2 were separated from the Content Areas as background questions related to the demographics described above. The three chosen CAs were labelled: 1)The physiotherapists interact with their environment (the rest of question 2 except the last part, the whole of 3-5 and the first part of 8); 2) The physiotherapists get close to their own and others' reactions (question 6, middle part of 8 and the whole of 9);. 3) The physiotherapists reflect upon the process (question 7, last part of 8 and the whole of 10). This process of arranging the questions into CAs was discussed with two other researchers.

The next step was to formulate meaning units, condensed meaning units and codes on the manifest level related to "What" – "What is this understanding of and approach to work about"? The codes formulated from the meaning units were compared based on similarities and differences and sorted into subcategories and categories. In this phase, the second author [EBL] was a co-researcher who focussed on specific parts of formulating meaning units and came to a similar conclusion, expressed in different words. A part of the coding process was reflected on at a seminar, and parts of the analysis process were presented and critiqued within the researching group. Examples of the process from meaning unit to category are shown in Table 2.

Table 2. Three examples of the process from meaning units to categories – the manifest level "What".

Meaning unit	Condensed meaning unit	Code	Subcategory	Category
/…/and then they had a lot of interest in stress and relaxation…a need they saw themselves, but when we discussed it there, we still decided to talk about movement and physical activity and body/…/plus stress and relaxation, that they go together (m.u. 104 CA1)	A lot of interest in stress and relaxation related to a need, but movement, physical activity, body/…/plus a little stress and relaxation, that they go together, that was the parts decided	Interest in management of stress turned into physical activity *and* stress	Integration-oriented understanding	Way of coping
The children themselves find it/../fun to move if they can move as they like to/.../and then you have to adapt a little (m.u. 53 CA2)	The children themselves find it/../fun to move if they can move as they like to/../and then you have to adapt a little	It is important to develop health of movement in cooperation with the children	Shared responsibility	Meeting the culture of school
I believe that our base should be in primary care. We can be a responsible clique, but everyone is to feel that this is something important we are doing and that we will see results further on (m.u. 12 CA3)	Believes the base is in primary care/…/a clique can be responsible, but everyone is to feel that this is important and that we will see the result further on	Sees the base in primary care and provides a plan	Belonging	Organizing questions

The next step was to focus on the underlying meaning, the latent content related to "How", through forming themes, one for each Content Area. The step from category level to theme level was taken by changing the question to "How do they understand and approach their work"? After pondering the themes, returning to earlier stages in the process and reading the assembled texts many times, a main theme was discovered.

Results

The main theme that was found, *Perceiving* and *supporting coherence*, refers to a way of viewing and responding to the whole in a given environment. Here the sub themes *Improvising in dialogue*; *Balancing structures of change*; and

Reflecting on the professional process illustrate different aspects of this whole.

The analysis process from subcategories at manifest levels to the main theme at

the latent level is briefly illustrated as an overview in Table 3:

Table 3. Subcategory, category, sub theme and main theme levels, related to the outcome of the question: "How do the physiotherapists understand and approach health promotion work in compulsory school?".

Main theme	*Perceiving* and *supporting coherence*						
Sub-theme	*Improvising in dialogue (CA1)*		*Balancing structures of change (CA2)*			*Reflecting on the professional process (CA3)*	
Category	Basis of agreement	Way of coping	Meeting the culture of school	Feedback in primary care	Surrounding focussing	Organizing questions	Professional developments
Sub-category	Starting processes	Feedback oriented	Responses from school	Different ways of understanding	National debate	Belonging	Presumptive partners
	Local commit-ments		Own responses	Support colleagues	Gap between levels	The financing structure	Visions and future support
		Use of school environment	Shared responsi-bility	Varying responses		Adaptation circumstances	Structuring process
		Integration-oriented understanding			Widen circles		

In the sub theme *Improvising in dialogue,* the informants are oriented to the

Basis of agreement and Way of coping, whereby Basis of agreement includes

Starting processes and Local commitments. In Way of coping, the informants

are Feedback oriented, exhibit a Use of school environment and have an

Integration-oriented understanding. This is illustrated in Table 4:

Table 4. Improvising in dialogue – sub theme on latent level "How".

Improvising in dialogue(CA1)	
Basis of agreement	Way of coping
Starting processes: /…/I phoned the headmaster /…/I met the headmaster and then the team of teachers/.../and then it was very simple, because they have time for themes on Tuesday morning/…/now when we are talking about this/.. /so we can redistribute the hours/…/to every day instead, and if you are free from timetable obligations, you have the whole school day for yourself/…/so they decided to submit movement everyday they did not have physical education (m.u. 63-66 CA1)	Feedback oriented: No contact at all with the school nurse/…/I have asked for that/…/but I have not been at the door myself (m.u. 28 CA1) I have had school nurses as a sounding board and come into health care at school/…/have been to a couple of meetings/…/nurses have phoned and asked questions/…/about stretching/…/training advice and such things/…/(m.u. 85-88 CA1) Then I met the physical education teacher/../I have talked to/../ a tall, slim, very active man, with fixed opinions (m.u.144 CA1) Especially girls thought it was unpleasant to get sweaty, did not want to participate in physical education/.../ we reflected in the teacher group and decided I would join/.../ starting with a theory lesson about body basics/../ skeleton/.../muscles and heart and lungs/.../and then I joined the physical education lesson/.../and they pulsed each other/../and we talked about this coherence (m.u.115-119 CA1)
Local commitments: The teachers were/… /interested in/…/this part of relaxation, concentration /…/maybe massage/…/to reduce the noise and activity level in the classroom (m.u. 49 CA1).	Use of school environment: Gymnastic hall, football hall, the woods, the theatre, the grass, the classroom. We used what we saw in the environment (m.u. 32 CA1)
	Integration-oriented understanding: /…/want to integrate ergonomics coherently/… /and if they have a headache/.. /I ask "Have you been eating?/…/Have you been sleeping?/…/Are you stressed out?"/…/ (m.u. 51-52 CA1) /… movement and time for reflection and peacefulness is needed/…/ this/… /the physiotherapist can do a lot/…/ because you work with body and soul/… /that there is something else that makes you tense yourself/…/ (m.u. 43-44CA1)

In the sub theme *Balancing structures of change,* the informants are oriented to Meeting the culture of school, Feedback in primary care and Surrounding focussing. Meeting the culture of school includes Responses from school, Own responses and Shared responsibilities. Feedback in primary care includes Different ways of understanding and Supportive colleagues and Surrounding focussing includes National debate, Gap between levels and Widen circles.

This is further illustrated in Table 5:

Table 5. Balancing structures of change – sub theme on latent level "How".

Balancing structures of change(CA2)		
Meeting the culture of school	Feedback in primary care	Surrounding focussing
Responses from school: When I got there the second time to one of the classes/…/ they had continued to talk about what was causing the stress and then they had put up yellow notes/…/ "what causes stress" on a door/. ./and then blue notes "how it feels in the body when you are stressed out"/…/and then there were red notes/… /"what reduces stress"/…/ (m.u. 67 CA2)	Different ways of understanding: That they maybe think that they would like to do that themselves, but do not have the strength to get into it/…/ that it steals time from ordinary physiotherapy/…/then I think you aren't looking sufficiently/…/here and now/…/we can win a lot/…/because we will have these 15-year-old children in any case in the end (m.u. 11-12CA2) /…/should you commit yourself to prevention/…/ some people do not think/…/that it is our obligation /…/others think it is totally all right to do so (m.u.122 CA2)	National debate: The debate in society has helped us/… /there is a lot of excess/… / that we don't move/… /that we are stressed out and all that/… /people catch up/… /it is easy to build on/… /a few more facts/… /concrete what you can do/…/ (m.u. 130CA2).
Own responses: I have difficulties dividing/…/When I am into something I want to stick to that/…/it costs a lot mentally to change over/…/ (m.u. 149-151CA2).	Support colleagues: How to do it and which material/… /that came from the networking group/… / I think the networking meetings have been necessary to look back on what you have been doing and to listen to others/… /we don't all have the same concepts/…/ (m.u. 131b-134CA2)	Gap between levels: There are a lot of fine words/…/ there is nothing/ … /about the pupils needing to move more, that they will/… /have the possibility to relax/… /concentrate/… /which really is/… /fundamental in being able to incorporate schoolwork (m.u. 38CA2)
Shared responsibility: I worked a lot with the teachers/… /they joined and did massage/… /they joined and listened/…/they joined in the relaxation almost all the time (m.u. 50 CA2)		Widen circles: /…/I don't think it is that natural to relate physiotherapy to stress/… /more, maybe, to how the children sit in their chairs (m.u. 81CA2)

In the sub theme *Reflecting on the professional process,* the informants are oriented to Organizing questions and Professional developments, whereby Organizing questions include Belonging, The financing structure and Adaptation circumstances. Professional developments include Presumptive partners, Visions and future support and Structuring process. This is described in Table 6:

Table 6. Reflecting on the professional process – sub theme on latent level "How".

Reflecting on the professional process (CA3)	
Organizing questions	Professional developments
Belonging: Then I have had some individuals earlier/… /before I came to school/… /and now/… /it is very exciting to see them in the groups/… /you understand/… /why they have been feeling bad and you understand why the group acts as it does/… /that is why I say it can be good to keep a foot in ordinary primary care (m.u. 21CA3) The physiotherapist will be one of the gang and can get established easier as an employee of the school, they are two different worlds (m.u. 65 CA3)	Presumptive partners: I see possibilities of cooperation with physical education teachers around motorically clumsy children (m.u. 97a CA3) I see the physiotherapist and the school nurse in a specific and long-term cooperation concerning headaches and the management of stress (m.u. 126 CA3) Pupils and teachers and parents/… /all groups are important in some way (m.u. 142 CA3)
The financing structure: Money has to arrive from the county, so that the Department of Public Health can continue contributing/…/and that is so to speak at the heart of what is going to happen with it all (m.u. 133 CA3) There is a will to reach several schools and do more of that, but a lack of courage in the county to commit themselves to physiotherapy in times of cutbacks (m.u. 54CA3)	Visions and future support: The physiotherapist has a task at school in different ways to enable a natural approach to resting and moving, it has to be formulated in the school plan (m.u.45 CA3) The networking meetings are necessary for reflecting (m.u. 134 CA3)
Adaptation circumstances The world of school is uneven/… /periodically there can be a lot of work and during vacation nothing/… /it is important not to have to present every minute/… …./you sow seeds and follow them up (m.u 79-84CA3)	Structuring process /… /a template/… /then you can work together with that template/… /and then you can compensate for each other/…/ (m.u. 117CA3)

Discussion

In understanding and approaching work as *Perceiving* and *supporting coherence*, the physiotherapists turned both to group levels, mainly in the classroom situation, and to organizational and societal levels, in joining a new working context across organizational borders. In accord with the formal agreement about physical activity and stress management in the programme, they worked in the interface between the two organizational fields of health care and compulsory school in an understanding and approach involving *Perceiving* and *supporting coherence*, from perspectives related to *Improvising in dialogue, Balancing structures of change* and *Reflecting on the professional process*.

The physiotherapists' understanding of and approach to their work in compulsory school involved the sub theme *Improvising in dialogue*, through negotiating and adjusting the Basis of agreement to the needs of the specific school. Here, one of the informants perceived the actual structure of the timetable and suggested a change that allowed movement every day. This was discussed related to the eco-holistic model of health promotion at school (Denman, Moon, Parsons and Stears, 2002), whereby the physiotherapists participating in the programme were described as an external relation influencing the structure, development and scope of health promotion in school settings.

Furthermore, in their Way of coping they were Feedback oriented, as in the example of the girls who did not want to get sweaty. Another example is found in the contact with the physical education teacher with "fixed opinions", which was discussed as a possible illustration of lack of professional closeness between the physiotherapist and the physical education teacher in their approaches to movement of today. This is to be considered in relation to the professional history in Sweden (Ottosson 2005), where before 1934 one and the same professional person was doubly educated in physical education and physiotherapy, related to a way of thinking of movement as a whole. Furthermore, there was a Use of school environment, indoors and outdoors; informants had an Integration-oriented understanding, whereby one informant supported integration and learning in working with ergonomics coherently. The physiotherapists' Way of coping was discussed in relation to Broberg (1993), who pointed out the fact that though movement constitutes the foremost health-

promoting means of physiotherapy, it is not clarified which way movement can contribute to promoting health.

The new working context appeared to offer challenges to the physiotherapists, illustrated in the sub theme Balancing structures of change. In Meeting the culture of school, they were involved in a shared responsibility along with teachers who, according to one informant, "joined in the relaxation almost all the time". This was discussed related to Nilsson (2003), who stresses the need to involve all children in the promotion of health, by challenging schools to "change their ethos and classroom practice by encouraging participation from alienated pupils". Furthermore, one informant described her own difficulties in "changeover", from approaches in the working context of primary care to those in compulsory school. In Feedback in primary care, they sometimes had to handle being questioned by colleagues, who felt that it stole time from ordinary physiotherapy. In Surrounding focussing there was a flow related to the National debate on movement, but also Gaps between levels and a need to Widen circles in public preconceived notions about what physiotherapists do and do not do.

The way the informants handled this balancing process was discussed in relation to habitual patterns, which are described in the literature as embedded (Berger and Luckmann 1966; Bourdieu 2005; Bourdieu and Wacquant 2005; Dall´Alba and Sandberg 2006;). According to Berger and Luckmann (1966), "social order exists *only* as a product of human activity"; these authors describe habitualized actions that become embedded routines. In Bourdieu and

Wacquant´s (2005) thinking, habitual patterns are conceptualized in habitus. They describe habitus as a structuring mechanism that operates from within, which allows agents to cope with unforeseen and ever-changing situations. According to them, habitus is a deep structure that is historically constituted and institutionally grounded. Furthermore, it is creative and inventive within the limits of its structures, which are embodied.

Regarding work in the new context of possibilities and struggles, the informants had to find ways to reorganize their professional habitus of socialized embodied patterns of being and behaving in primary care. Habitus is described in a study of an intensive care unit at a hospital (Lindberg, 2003), where the unconscious actions of habitus are energy saving for the individual.

In the sub theme *Reflecting on the professional process*, the informants were related to Organizing questions, of Belonging, whether the most optimal position of working at compulsory school was to belong to primary care or compulsory school. Further, they reflected on problems with The Financing structure, relating to who would pay for the health promotion work in the future. Another organizing question to consider was Adaptation circumstances, concerning different working rhythms at school compared with primary care. The informants were strategic in their way of thinking of Professional developments, related to Presumptive partners to cope with, to the need for Visions and future support like the example of the networking group in the changing process, related to the statement that "the physiotherapist has a task in school in different ways to make a natural approach possible to resting and

moving", and to the Structuring process of conceptualizing their experiences in a template. The role reflection plays in work is described by Lindberg (2003) as "Reflection about what is happening in our life and in the organization preceding actions are the conscious driving forces and a way of dealing with a process of organizational change and problems. Thus people's understanding about themselves, their role in the organization and their work tasks can be interpreted as a base for actions in an implementation process". According to Sandberg and Targama (2007), "Personal and emotionally loaded experiences and effective dialogues seem to be crucial factors in changing understanding".

This study raises new questions about self efficacy in the field of physiotherapy. In what way does a consciousness of historically embedded competence of health-promoting movements influence professional self efficacy? Are there specific transferable organizing skills within the profession that we should be aware of? And how do physiotherapists vary in their understandings and approaches within the new working context?

Limitations

To increase trustworthiness in this study, the research process has been discussed according to credibility, transferability, dependability and confirmability (Lincoln and Guba 1985). Credibility is described as how the analysis process addresses the focus of the research (Graneheim and Lundman, 2004). One way to deal with this in the present study was to illustrate the analysis process in Tables 2 and 3. Dependability is described as the degree to

which data change over time; confirmability is to verify by quotations, here illustrated in Table 2-6, and transferability as the extent to which the findings can be transformed to other settings or groups. Discussions with other researchers took place during the analysis process described above. Throughout the analysis process, the same theme was expressed in different words: it concerned connections, relations and coherence. The analysis process involved continuous movement between the empirical and theoretical levels, which is a way to preserve the integrity of the context in the process of removing sentences while minimizing the risk of altering meaning (Burnard, 1991). In the question of transferability or external validity, the author can offer suggestions that in this case might be of interest to physiotherapists already working in schools, or within other kinds of working contexts involving an interface between organizations; however, according to Graneheim and Lundman (2004), it is ultimately the reader who decides whether the results are transferable to another context.

From a pragmatic perspective, there was a bias related to the first author [MB]. She was the initiator of the programme as head of the physiotherapists, and she acted as interviewer in the evaluation, which was an advantage in getting close to the researched environment but also a disadvantage in getting too close. The second researcher, [EBL], who was a nurse, offered valuable perspectives during the analysis process for handling this bias, and during the process critical support was received from seminars in a cross-professional research group within Health Services Research.

Conclusion

In this study, seven experienced physiotherapists placed their competence in a new working context, through participating in a programme of health promotion work in compulsory school. Through this, they have been given environmental possibilities and challenges that have influenced their habitual professional working patterns, which were described as historically situated from the origins of the construction of the profession. The present study is limited to the work of seven physiotherapists. More studies are needed in the field of understanding and approaches, within the tacit potential of competence of physiotherapists working with health promotion in compulsory school.

Acknowledgement

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Variations in how physiotherapists understand their work on organisational and societal levels

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ABSTRACT: **Background and purpose.** *Many physiotherapists have moved from treating persons on individual and group levels to working in different service positions on organisational and societal levels within health care organisations. The present study has investigated how physiotherapists working on those levels understand their job. The aim of the study was to describe variations in physiotherapists´ understanding of their work on organisational and societal levels within health care organisations. The research question was: How do physiotherapists understand their work on organisational and societal levels?* **Method:** *A phenomenographic approach was chosen. Physiotherapists working in different positions on organisational and societal levels were interviewed.* **Results:** *Among our twenty-one informants we found three logically interrelated categories: Exploring and performing an assignment, Interactive learning and balancing support and Moving within a continually changing structure. These three categories of descriptions formed an outcome space of ways of understanding work on organisational and societal levels within health care organisations.* **Conclusions.** *The findings in this study can be used as tools in professional discussions on how ways of understanding work have an impact on how work is performed and how change is achieved.*

INTRODUCTION

The traditional clinical base of physiotherapy is grounded in different

professional experiences on individual and group levels. Some physiotherapists

gradually develop their professional career by entering surrounding working

contexts on organisational and societal levels. This means to take part in issues

oriented to management, education, research, health promotion and

investigation. The point of departure in work on these levels is to focus on and

develop environmental conditions regarding individual and groups.

Bergman(1989) calls this type of vocational strategy "Innovator", where the

physiotherapist has a desire to work within the whole spectrum from treating

patients to management and research, in order to promote both patient work

and professional authority(1989, p. 86). Another researcher, Waks (2003),

describes difficulties in partly working on organisational levels related to

supervising and qualitative developmental work, namely, that the work had to

be performed at the expense of treatment (2003, pp.122-123).

Physiotherapists more interested in continuing their professional work in

positions at organisational and societal levels, may leave clinically-oriented

work on individual and group levels more permanently. The statistics received

by the Swedish national trade union of physiotherapists (LSR) from a

questionnaire regarding salaries and titles during the period 1999 to 2008, show

an increasing number of physiotherapists working on organisational and

societal levels. Of a total of 5723 members answering the questionnaire in

2008, there were more than 800 with titles referring to management, education

and research sectors and to investigational positions. This was compared with the same questionnaire from 1999, where 350 out of 5023 had titles referring to these levels.

We were interested in how physiotherapists working on organisational and societal levels understand their work and how their ways of understanding might differ. We found no similar studies of physiotherapists working on these levels. There was a study of registered nurses´ understanding of their informal role in student learning in Brammer (2006). Eight variations of understanding were discerned, from student-centred to no contact at all with the students, which had consequences for the learning process. Sandberg and Targama (2007) claim, that "human behaviour is not controlled by structures, systems and prescriptions as such. Instead, it is how people understand those structures, systems and prescriptions that determines their behaviour" (2007, p. 175).

There are studies showing that individuals understand a phenomenon in qualitatively different ways, which means that different aspects are brought into the focus of awareness and different meanings are created, all of which affects the way people work (Marton, 1981; Svensson and Theman, 1983; Sandberg, 1994; Dall´Alba, 1996; Henriksen, 2002; Lindberg, 2003; Larsson, Holmström, Rosenqvist, 2003). In Lindberg (2003), ´understanding´ is described as a prerequisite for acting. She refers to our life world, in which we judge, act and develop feelings. Lindberg relates this to competence at work and states that it is within the worker's life world she can on the whole understand something as being her work, which is illustrated in Figure 1:

Figure 1. An illustration describing qualitatively different perspectives
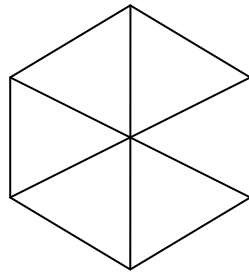
Lindberg here asks whether the figure is an umbrella or a three dimensional cube and states that what we see in the figure is inseparable both from our selves and from the figure (2003, pp. 24-25). To understand the figure in the two different ways described above is to understand these ways as qualitatively different. The aim of the present study is to describe variations in physiotherapists' understanding of their work on organisational and societal levels within health care organisations. The research question was: how do physiotherapists understand their work on organisational and societal levels?

METHOD

Methodological considerations

The interest in variations in how physiotherapists understand their work made the phenomenographic approach a suitable one. Phenomenography as an approach resembles the method of phenomenology through being oriented to life world experiences, but there are differences between the two. In phenomenology as a method the focus is on the core of the phenomenon, which is a first order perspective – how something really is. The weight of phenomenography is on differences in understanding the phenomenon, which

entails a second order perspective – how phenomena are conceived of (Marton 1981, p. 178). According to Marton (1986), people hold finite numbers of qualitatively different understandings of all kinds of phenomena. These understandings concern non-dualistic perspectives. Marton (Dall´Alba, 1996) describes how knowledge is established as an internal relationship between the individual and the world, and knowledge is established when the relationships between the two change (1996, pp. 174-177). There are several studies of phenomengraphy in health care sciences (Henriksen 2002, Holmström I, Halford C, Rosenqvist U 2002, Lindberg, 2003). In the present study phenomenography is used to find out more about the variations in physiotherapists' understanding of their work on organisational and societal levels. There are a limited number of such variations (Stålsby-Lundborg, Wahlström, Dall´Alba, 1999) and twenty informants will usually provide the full spectrum of variation.

Setting, participants and data collection

Interviews were made with physiotherapists working on organisational and societal levels within health care organisations. The selection was strategic in order to encompass examples within the range of positions in health care organisation - managerial, educational, research, health promotional and investigative. Furthermore, the selection aimed to provide a balance between the sexes in relation to the approximate gender distribution within the total group of physiotherapists in Sweden. We also wished to distinguish between the southern, middle and northern parts of the country. The selection started with two pilot studies and continued as a snowball selection related to the

range of positions above. In Polit and Beck (2008), the snowball selection is shown to have an advantage during the process as the researcher can more readily specify the desired characteristics related to his or her strategic selection (2008, pp. 354-355). In this study an example of questions to the informant was "Do you know a female physiotherapist working on organisational and societal levels within the context of health promotion in the north of Sweden"?

All the interviews were conducted between May and December 2007 by the first author [MB], who is a physiotherapist now working on an organisational and societal level, and trained in qualitative methods. The interviews lasted between 45 minutes and 1 hour and 40 minutes, and were taped and transcribed verbatim. The focus in the interviews was on the informants' experiences of working on present-day organisational and societal levels. The basic and probing questions that were posed are illustrated in Table 1:

Table 1 Basic and Probing questions

Basic questions	Probing questions
Can you describe a situation that has occurred and that you see as important, meaningful and valuable to you in the process of professional development in your work? Can you describe the "core" of your work?	Can you elaborate on what it is that makes this situation important? Is there anything else you want to describe about the situation? What impact did it have on you? What was your role in the situation? Is there a similar situation you want to describe?

Ethical considerations

A letter about the study and an informed consent document was sent to the informants. Participation was voluntary, and informants were free to withdraw

from the study at any time. Confidentiality was guaranteed in the informed

consent document related to the interview material. Confidentiality was

extended to the interview situation, when the informants were denied

information about who had recommended them. According to Swedish law

(2003:460), approval from an ethics committee is needed for research that

implies physical or psychological influence on the participants; this means that

approval was not needed for the present study. There was neither an ethical

screening nor a peer review, but the ethical issue was discussed in the research

group.

Data analysis

Phenomenographic analysis was performed. The phenomenon being studied

was physiotherapist´s understanding of their work on organisational and

societal levels. The aim of the data analysis was therefore to find categories

that would describe their different ways of understanding their work and to

relate these ways to each other. The data analysis was inspired by Dahlgren,

Fallsberg, (1991): 1) Familiarization – to read through the protocols carefully

to get acquainted with them. 2) Condensation – the most significant statements

made by the subject are selected. 3) Comparison - the selected parts are

compared in order to find sources of variation. 4) Grouping – answers which

appear to be similar are put together. 5) Articulating – a preliminary attempt is

made to describe the essence of the similarity within each group of answers. 6)

Labelling – constructing a suitable linguistic expression. 7) Contrasting – the

obtained categories are compared with regard to similarities and differences.

In the first step, *Familiarization*, the interviews were carefully read through to get a sense of the whole. In the second step, *Condensation*, the first author [MB] read five transcripts to find significant statements made by the subjects in response to the research question. This was discussed with the second author [UR]. Then the first author continued the condensation step with the rest of the transcripts. In the next steps, *Comparison*, *Grouping* and *Articulating*, the first author placed the descriptions into three groups according to similarities and differences in the entire body of the material, which was discussed with the second author [UR]. The process involved a constant back-and-forth reading of the material as a way to revise the analysis before the analysis was "assessed as satisfactory" (Dahlgren, Fallsberg 1991, p. 152). The individual expressions of the informants were grouped into categories of descriptions corresponding to *What* the informants talked about related to their work and *How* they talked about it. In the *Labelling* and *Contrasting* steps, the various categories were denoted by constructing a suitable linguistic expression, with regard to similarities and differences.

RESULTS

Among our twenty-one informants we discerned three ways of understanding work on organisational and societal levels: *Exploring and performing an assignment; Interactive learning and balancing support*; and *Moving within a continually changing structure*. In the first category, the preference is for a theoretical and analytical approach when solving a given task. Here six of the

informants had a reviewing and analytical way of understanding work related to the given task, which included being open and reflective about their own routines.

The second category contains descriptions oriented towards a relational approach. Here five of the informants focussed on building relationships related to professional responsibility through reflecting on educational and developmental situations as a way to gain professional growth. This process involves being sensitive to the other person in finding the right respectful relational level and, when needed, confronting participants/customers/ professionals as a way to support them in coming to a more comprehensive way of understanding.

The third category contains an environmentally-oriented approach within a given context. This pertains to ten of the informants, who expressed a preparedness for continual environmental changes and supporting persons in an organisation through both giving trust and being available when needed. This support included contacting people at different levels of responsibility as a way to achieve a more comprehensive outcome.

The quotations below were chosen because they exemplify each of the above categories. Each quotation has exclusions pertaining to filling in words or sections where the informants discussed matters that did not relate to the question. The six quotations chosen, two in each category below, represent one

informant each. *What* they were focusing on and *How* they focussed on it,

illustrate aspects of the non dualistic perspective:

Exploring and performing an assignment:

Example 1
What: To survey what the counties here do, if they measure "care load" or "needs of personal welfare" in elder care; which instruments they use.
How: It appears when I am asking the personnel about this, that each of them is concerned about their own things, which shows a great need in this organisation I am working in, to facilitate through coordination. We can suggest a good response to this, namely to have a seminar where you can discuss with each other, help with rationalizations, what to do with these instruments. You cannot just change one concept into another, which shows that you have really not thought it through entirely. Different concepts ought to be investigated more clearly to get to know what we are talking about.

Example 2
What: We have a deficit. We have to attend to this, look at it, how to handle it, find a way out.
How: What are the alternatives from the broad outlines; we've tried to penetrate the problem and to find from where our deficit arises. It seems to be salaries and drugs costs. Those are the big items we have succeeded in marking off. Have we had sufficient amounts of money, are we doing too much and the wrong things regarding our assignment?

Interactive learning and balancing support:

Example 1
What: At the first learning seminar you exchange experiences. These participants were a little outside/they had misunderstood the whole project.
How: In my approach to get them on the same level, I wanted them to fall, but my issue was to lift them. They did not have the staff with them. When that became clear, it was very painful. To get them to turn; to get people to grow, from that ´view-turn´ they had to do. To be an instrument; to be in that process; exciting; to successively diminish my role; They own this issue by themselves.

Example 2
What: That you pay respect and at the same time supply some concrete facts
How: To be very keen, try to find out, what this person wants, imagine, what is it they really ask for, because this is not always that clear. This is the greatest challenge in my work. Many people feel hurt and frightened. Then it is important to ´turn´ it right. What we have to rely on in this case is evidenced-based knowledge.

Moving within a continually changing structure:

Example 1
What: Developed templates for self-reviews; that people themselves would be able to check whether what they did was good.

How: Self-review was much better than if I told them this is how it should be, because then they could do it by themselves and then we could follow it up together. I saw that it works when you do quality work in this way. I checked with persons who had knowledge about this and found that you can do it in more than one way.
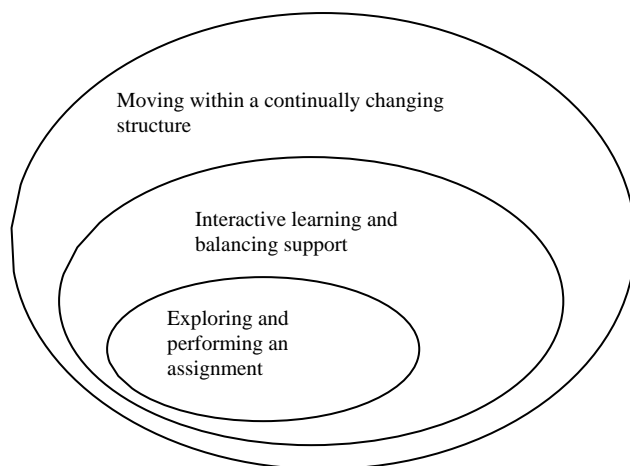
Example 2
What: Clinical research, where many co-workers had to cooperate with data collection and tests. The patients should be followed up during a long period.
How: When you have launched this sort of clinical research you have to stick to it until you have had the required amount of patients and that means that you influence the others' work a lot. If you then have not secured that they are with you, that we are doing this together, participation in the whole, that you confirm them in doing a very important part of this research…There were periods when had the head of the department not stood up for the decision made about what to carry out and to finish it, then there would have been a problem.

These ways of understanding were interrelated in an outcome space of experiencing work, related to an increasing complexity from the first to the third category of description, illustrated in Figure 2:

Figure 2. Outcome space of results

Moving within a continually changing structure

Interactive learning and balancing support

Exploring and performing an assignment

DISCUSSION

The aim of this study was to describe variations in physiotherapists´ understanding of their work on organisational and society levels within health care organisations. What do the three found variations mean? According to

Marton(1981), it is to be understood on a collective level. He claims that the totality of categories of description denotes a kind of collective intellect, an evolutionary tool in continual development (1981; p.177). Sandberg and Targama (2007) argue that results from phenomenographic studies indicate that people can keep the context of an earlier understanding as part of a new one [Marton and Booth, 1997]. The earlier view is then related to and made sense of within the frame of the new understanding (2007, p. 119). In the present study, the found variations in understanding work were discussed on a collective level as *a question of finding a solution, consequences of a ´view turn´,* and as *creativity of action.*

A question of finding a solution

This first category of understanding work corresponded to the analysis of a defined part related to a greater whole. The problem to be solved in the first example was to make a mapping of the way workers in elderly care measure their work in different parts of a region. Different ways of measuring were found and a solution was described as "to facilitate through coordination, to have a seminar where you can discuss with each other, to get help with rationalizations and what to do with these instruments". The problem to be solved in the second example was how to find reasons for a deficit. When a reason was found the informant continued to reflect upon the reasons in terms of a greater whole to come to a more satisfying solution. In both examples the informants reflected theoretically upon their assignment through asking

themselves questions as a way to go on with the process of finding an optimal solution to a given assignment.

Consequences of a ´view turn´

The second category is related to consequences of a ´view turn´ in understanding, by which the first informant supported a number of individuals in order to gain a ´view turn´ in their understanding of the given task. In the example of the second informant the 'view turn' perspective was more of a hint: "Many people feel hurt and frightened. Then it is important to turn it right. What we have to rely on in this case is evidenced-based knowledge ". The concept of ´view turn´ is described in Ahlberg (2004) as "descriptions of a changed way of understanding" (2004, p. 5). In Sandberg and Targama (2007), "the most fundamental form of learning is the one that occurs when people change their understanding of something" (2007, p. 114). Dall´Alba and Sandberg (2006) criticize stage models of development like Benner's novice-expert model (1984). They claim that this model directs attention away from the skill that is being developed "– namely, *understanding of, and in, practice*", which is embodied (2006, pp. 388-389). Uljens asks the question "What is learning a change of?"(1992) and what is changing through the process of learning. According to him human learning cannot be meaningfully discussed without perceiving competence and human awareness and how cultural patterns are ´kept alive´ by an individual´s engagement (1992, p.29).

Creativity of action

The two examples of the third category of description were related to supporting persons in their very acts of solving a task-oriented problem. In the first example this was the development of templates for self-review of quality work. In the second example it was about participation in data collection and tests in a clinical research project. To gain support when daring to enter a more complex and creative level, the informant had to be grounded in a wider coherence. In the first example this was described as the established knowledge-based structure of quality with those in positions of responsibility concerning the structures. In the second example it was about being grounded in a decision already made and to be supported in this by the head of the department. Joas (2005) claims that creativity of action is a dimension of rationality related to tacit assumptions behind the rationality of action (2005, p. 147) and that "corporeality shows itself to be the constitutive precondition for creativity not only in perception but also in action itself" (2005, p. 163). The part that corporeality plays in understanding is argued in Dall´Alba and Sandberg (2006), whereby "the knowledge and skills that professionals use in performing their work depend on their embodied understanding of the practice in question" (2006, p. 390).

Limitations of the study

How physiotherapists understand their work on organisational and societal levels is to be seen against the pre-understanding of the first author [MB]. To

gain trustworthiness in this study, the research process has been discussed

according to credibility, transferability, dependability and confirmability

(Lincoln, Guba, 1985). Regarding credibility, the researcher, as a

physiotherapist working on organisational and societal levels, was building

trust in the interview situation, giving the informants a supportive space for

describing their working situations. This included follow-up and probing

questions as a way to get closer to their way of understanding experiences of

work.

The transferability criterion is oriented toward a discussion about the

professional role and effects related to the comprehensiveness of understanding

in the professional discourse. Regarding dependability, the 'biased and

perspective subjectivity' of the author [MB] has been taken into consideration

in the sampling process through using the snow ball technique, and in the

interpretation of the findings, through adopting a phenomenological attitude

including "bracketing". Uljens (Dall´Alba, 1996) describes bracketing as a way

to be open-minded and to shift between natural attitudes and reflections

regarding awareness of the research questions (1996, pp. 121-127). Further,

interpretative awareness (Sandberg 1994, pp. 65-69), including documented

reflections, was used throughout the process. When the conceptions had been

articulated as categories of description, they were used as "intellectual tools"

(Ottosson 1987, pp. 68-69) in discussions with the second author [UR] and in

the research group. No member of this group has checked on and disseminated

material to the informants - this technique is not used in phenomenography.

According to Marton (1986), the original determination of categories of

description is a form of discovery, and discoveries do not have to be replicable (Marton, 1986, p. 35). Confirmability has been addressed regarding descriptions of the logical process, structuring of categories and discussions related to quotations.

CONCLUSIONS

The findings describe three variations in physiotherapists' understanding of work on organisational and societal levels. These variations were discussed on the collective level in relation to a question of finding a solution, consequences of a ´view turn´ and as creativity of action. The findings can be used as tools in professional discussions of work on organisational and societal levels, as a way to become aware of how variations in ways of understanding work have an impact on how work is performed and how change is achieved on the basis of a new way of perceiving work.

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