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-PROMOTING RETURN TO WORK-

**LAY EXPERIENCES AFTER SICKNESS ABSENCE WITH
MUSCULOSKELETAL DIAGNOSES**

Gunnel Östlund



FACULTY OF HEALTH SCIENCES
LINKÖPINGS UNIVERSITET

Division of Social Medicine and Public Health, Department of Health and Society,

Linköpings universitet, SE-581 85 Linköping, Sweden

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Gunnel Östlund, 2002

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In dedication to my two lovely daughters, Lina and Emma

MEN'S MEETING

If in a lonely wood
You were in an anguished mood
A passing wanderer
Could ease your solitude

Tell, where your way does start,
Then in peace part,
According to primeval usage,
Such was wandering's art.

To have a word or two
Makes it easy to go.
All men's meeting
Ought to be so.

Hjalmar Gullberg (1).

ABSTRACT

Introduction: Musculoskeletal disorders constitute the greatest cause of sickness absence from work. Despite research and efforts at rehabilitation, sickness absence due to these disorders has not decreased, but has instead increased, particularly in women. Clients' perceptions of care and rehabilitation, i.e. knowledge generated from a lay perspective, is a neglected area of research. This thesis deals with lay experiences of rehabilitation following sickness absence due to back, neck or shoulder problems, termed musculoskeletal disorders (MSD). **Aim:** The overall aim was to examine hindering and promoting processes in rehabilitation after sickness absence due to MSD from a lay perspective. Specific aims were to study how lay persons experience rehabilitation agents and rehabilitation activities (paper I), how they describe themselves and their experience in relation to work (paper II), the significance of the private arena regarding return to work (paper III), and how clients who have experienced sickness absence due to MSD perceive contact with rehabilitation agents (paper IV). **Method:** The study population in the four papers is part of a cohort of persons living in the same municipality and who in 1985 were aged 25-34 years and were sick-listed due to back, neck or shoulder diagnoses for 28 days or more, n=213. During 1995, 148 persons in the cohort responded to a questionnaire, and in 1997-1998, 20 of these persons were interviewed concerning their experiences with rehabilitation. In papers I, II and III the qualitative method of Grounded Theory was used with a focus on creating an empirically-based theory concerning the area under study. Data collection was strategic and analysis of the tape-recorded interviews was done on a continual basis. How previously sick-listed persons experienced contact with professional rehabilitation agents in the health care sector and social insurance office was investigated in paper IV. Factor analysis and multiple regression analysis were used to analyse the data in this study. **Results:** The interview study shed light on lay persons' experiences with medical, social and work-related measures in rehabilitation, their perceptions of rehabilitation actors and family members in relation to rehabilitation, and their self-presentations. The descriptions of lay persons concerned three arenas, the health care arena, the occupational arena, and the private

arena. Dilemmas and difficulties in these arenas were described, such as handling the duty to work, experiencing domestic strain, and the experience of lacking socioemotional support from significant persons during the rehabilitation process. In **paper I** some ideal types of rehabilitation agents emerged from the interviewees' descriptions concerning the health care arena, and we called these the routine bureaucrat, the empathic administrator, the distant technician, and the professional mentor. The latter agent was requested and was described as a person who could provide socioemotional support, who had professional competence, and who could function as a unifying link during the rehabilitation process. The results from **paper II** showed that in their self-presentations, the interviewees expressed having a duty to work and that there were differences in how they handled this sense of duty. The self-presentations contained descriptions of work as a part of personal identity and could be summarised in the following ideal types: the work manic, the workhorse, the workaholic and the relaxed worker. The latter used a strategy that can be considered to promote rehabilitation in that the individual himself/herself had control over his/her work and worked in accordance with his/her own needs rather than those of others. **Paper III** focused on the private arena. Different patterns were found in the experiences of men and women. Women related that their responsibility for the home and domestic work seldom left any time for themselves, including any time for rehabilitation. Men more often reported having time for themselves that could be used for leisure activities and rehabilitation. Some of the women said that they lacked socioemotional support from their partner and that they had a great deal of responsibility for housework, which seemed to be a hindrance in returning to work after sickness absence. Furthermore, these women, like most of the men, had little education, which could make finding other work alternatives more difficult. Based on the interviews, a hypothesis was developed regarding domestic strain that is related to the distribution of domestic work, the distribution of responsibility for the home, and the quality of the marital relationship. **Paper IV** dealt with clients' perceptions of contact with rehabilitation agents in health care and the social insurance office. Three latent dimensions were found in the respondents' ratings of these contacts: supportive treatment, distant treatment, and empowering treatment. Sex, disability pension status,

mental health and diagnostic group were significantly related to how these dimensions were rated. Women perceived the treatment from both types of rehabilitation agents as more supportive than men. Contact with the social insurance offices were rated higher by persons with disability pensions than by those who had returned to work. Men rated their contact with rehabilitation agents at social insurance offices high on the dimension of distant treatment. Respondents with mental health problems rated the contact as distant for both types of rehabilitation agents, but contact with health care was also scored low on the supportive dimension. Finally, respondents with neck/shoulder diagnoses rated contact with rehabilitation agents in health care as more empowering than was done by persons with back diagnoses. **Conclusions:** From a lay perspective rehabilitation following sickness absence due to MSD occurred in three arenas, the health care arena, the occupational arena and the private arena, where the quality of relationships both with rehabilitation agents, persons at work and in one's private life was described as important regarding the rehabilitation process. This thesis also showed that both sex and health were important factors regarding how lay persons' perceived contacts with rehabilitation agents during the rehabilitation process following sickness absence due to MSD.

Keywords: Musculoskeletal disorders, back pain, neck and shoulder pain, sickness absence, sick leave, qualitative interview, lay knowledge, patient satisfaction, rehabilitation, gender.

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ORIGINAL PAPERS

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

PAPER I

Östlund G, Cedersund E, Alexanderson K & Hensing G (2001). "It was really nice to have someone": Lay people with musculoskeletal disorders requested supportive relationships in rehabilitation. *Scandinavian Journal of Public Health* 4: 285-291.

PAPER II

Östlund G, Cedersund E, Alexanderson K & Hensing G (2002). Developing a typology of the 'duty to work' as experienced by lay persons with musculoskeletal disorders. *International Journal of Social Welfare* 11: 150-158.

PAPER III

Östlund G, Cedersund E, Alexanderson K, & Hensing G.
Domestic strain – A hindrance in rehabilitation? Submitted, 2002.

PAPER IV

Östlund G, Borg K, Wide P, Hensing G & Alexanderson K.
Clients' perceptions of contact with professionals within Health Care and Social Insurance Offices. Accepted in *Scandinavian Journal of Public Health*, 2002.

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ABBREVIATIONS AND OPERATIONAL DEFINITIONS

MSD is an abbreviation for musculoskeletal disorders.

Lay persons refers to men and women who have experienced a specific phenomenon, in this case sickness absence with MSD.

Rehabilitation refers to medical, social and vocational measures included over time in a process where the goal is return to work. Efforts by both rehabilitation agents and lay persons can be included in the rehabilitation process.

Rehabilitation agents refer in this thesis to those who are involved through their professions in rehabilitation and/or health care. They are professionals with theoretical and practical competence concerning rehabilitation such as doctors, physiotherapists and social insurance officers.

The concept of *gender* is used in this thesis in accordance with the definition presented in the Public Health Science dictionary which is “a designation of sex emphasising the social aspects of sex, that is how sex is interpreted in different cultures, how femininity and masculinity are perceived in different contexts.” (p. 116-117) (2).

GT refers to the method of Grounded Theory.

Ideal type is a stereotype or generalised compilation where we have defined typical characteristics in order to clarify the common essence of statements from the interviews.

INTRODUCTION

Musculoskeletal disorders (MSD) of the back, neck and shoulders constitute one of the biggest public health problems of the welfare state and the most common reason for sickness absence, and temporary and permanent disability pensions in the working population (3-5). Since the mid 1950s there has been a continuous increase in sickness absence and in temporary and permanent disability pensions in these diagnostic groups, particularly among women (6-9). Sickness absence due to MSD and other diagnoses has increased in recent years. In 2001, 14% of the working population were temporarily absent from work due to poor health (10). This is equivalent to 800 000 permanent employees, where half consisted of persons who were absent with sick pay or sickness benefits and half with disability benefits. Thus 400 000 were long-term sick-listed. Municipal employees constitute a category that generally has a very high level of sickness absence, and in 2001 they were responsible for 60% of long-term sickness absence (over one year). Municipal employees comprise large groups of women engaged in providing health and social care. Between 1997 and 2001, women's general sickness absence more than doubled (10). Furthermore, sickness absence is higher for persons with low socioeconomic status, both generally and with respect to MSD (7). Marmot et al. (11) found that general sickness absence was six times greater for men with low socioeconomic status than for men with higher socioeconomic status. Women with low socioeconomic status had two to five times more sickness absence than those of high socioeconomic status. Marmot et al. contend further that sickness absence can be seen as an integrated measure of physical, mental and social function in the working population. In parallel with medical and other treatment, social and political measures are required in order to cope with MSD in the population (12).

The direct and indirect costs to society for back and neck pain reached almost SEK 30 billion in 1995 (5), and since then these costs have markedly increased (13). During 2001, mental health problems and psychiatric diagnoses were increasingly often the reason for disability pensions in Sweden, constituting 25 percent of those that were

newly granted, but MSD, with a corresponding figure of 40 percent, remain the most common cause (9). In its information summary, the Council on Technology Assessment in Health Care (5) reported that 80% of the population are afflicted at some time in their lives with lower back pain and that 50% suffer at some time from neck pain. Reigo (14) found a prevalence of 23% for MSD in a Swedish population study, and of afflicted individuals, more than half reported having been sick-listed for their problem. Descriptions of ill health and pain result in higher prevalence figures than studies of sickness absence, which are often based on doctors' certificates (6, 15). Nor does reported ill health have to be related to presence at work.

This thesis is based on sickness absence due to MSD, and the introduction deals with current research in this field. Previous research in the area is primarily quantitative and contains data mainly concerning relationships at the group level. On the other hand, the material in papers I-III in this thesis is focused primarily on the individual level while paper IV focuses on the group level. It is of particularly great interest, however, to interpret how the results interact amongst the individual level, the group level and the structural level (16).

Risk groups for high levels of sickness absence due to MSD

Low-income individuals, the elderly, women, manual labourers and immigrants have higher levels of sickness absence both generally and due to MSD (3, 4, 6, 17, 18). In Whitehall's study of English employees it was found that persons in lower positions with low incomes and weak economic status had a higher level of sickness absence due to MSD (7). General sickness absence and that due to MSD also increase with age (17, 19, 20). Being both a woman and an immigrant constitutes a double burden, which can involve an increased risk for developing MSD (21). In addition, sickness absence due to MSD is higher among certain employees. In a Norwegian study Brage et al. (22) found that male construction workers had the highest level of sickness absence due to MSD, while women's sickness absence was greatest in the

manufacturing industry. Leijon et al. (8) found that women in extremely male-dominated occupations had the very highest sickness absence due to MSD.

Risk factors for high levels of sickness absence due to MSD

A general explanation for the high levels of sickness absence for MSD is a detrimental work environment where psychosocial and physical factors interact in a negative way (6, 7, 21, 23). Brage (22) found that a high tempo and a high level of physical strain were risk factors for sickness absence due to MSD in the most vulnerable occupational groups. In a prospective study of MSD Reigo (14) found that previous sickness absence, stress at work and a low level of work satisfaction predicted further periods of absence. The strongest predictor for return to work was, however, the clinical finding of a lack of tenderness in the neck muscles, while earlier periods of MSD also predicted new illness (14). In a Swedish longitudinal study it was found that sickness absence due to MSD predicted disability pensions, particularly in women (24). In the Whitehall study mentioned earlier it was found that men with a low level of control over their work situation had a higher risk for both long-term and short-term sickness absence (7). The study showed that men and women differed with respect to the effect of having a low level of control over their work. Men in higher positions had a 3.42 times higher risk of sickness absence due to MSD while men in lower positions had a lower risk (0.78) of being absent if they felt they had a low level of control over their work. On the other hand, women in higher positions had a lower risk (0.80) for sickness absence due to MSD, but a higher risk (1.35) if they were in lower positions if they experienced having a low level of control (7). There are also reports indicating that the prognosis differs between persons sick-listed for back diagnoses and those sick-listed for neck/shoulder diagnoses, where the latter group constitutes a high risk group for development of long-term problems (25). Thus the background concerning sickness absence due to MSD is multi-factorial, and single factors cannot explain the high level of sickness absence. Further analyses are needed to explain findings such as higher levels of sickness absence for women.

Gender differences in MSD

Many studies show that women have higher levels of sickness absence due to MSD than men (15). The significance of gender in relation to MSD is a research question of immediate interest, but the results are not clear-cut (26). Some researchers maintain that gender differences in MSD are associated with other than gender-related factors. By controlling for income and socioeconomic status, Brage (27) and Feeney (28) showed that the differences that arise between women and men are greatly reduced. Other researchers emphasise the different circumstances of men and women and contend that factors such as income and socioeconomic status are determined by gender. Men and women work in a segregated workforce and in many cases under different conditions regarding paid work (15, 29). The horizontal segregation of the workforce results in women being found in different types of work than men, and vertical segregation results in men having responsible positions while the majority of women are in subordinate positions. Other possible explanations for women's higher level of sickness absence can be that their physical constitution and lower level of muscular strength contribute to increased strain at jobs where machines and the work environment are often designed to suit the male body (29). In addition, women's work situations often provide less opportunity for physical activity than those of men, even within the same occupation (30). Women work primarily within the areas of health care and social care or in teaching. In health care there is a great deal of physical strain but few opportunities to compensate for poor working posture. Women also have poorer circumstances at work, they have more physically demanding work than men, and a poorer work environment (13). In a recently conducted study in the region of Öresund, between Sweden and Denmark, it was found that Swedish women reported a much higher level of experienced stress than their sisters on the other side of the channel (31). Further, it was found that 69% of the Swedish women and 58% of the Swedish men reported that they lacked support and help from their employers, in contrast to the Danes where less than 30% reported lacking support. This indicates that there are also cultural differences in nearby regions that can be of importance regarding men's and women's health. Explanations for the different occupational

conditions for men and women can also derive from private life, where stress in occupational life in combination with a high level of domestic duties results in an increased risk for a high level of sickness absence (32, 33). A high level of unpaid work or often being at home with sick children has been found to increase the general sickness absence of women (34). The majority of women in the world still have primary responsibility for the home and for domestic work (35, 36), even in Sweden. Knowledge about gender differences in MSD is still insufficient. The alarming increase in sickness absence among women, where this diagnostic group is responsible for the largest proportion, constitutes an area for further research.

Gender differences in rehabilitation

Research regarding gender is limited both within medical research in general and within research on rehabilitation (37), but those studies that have been done indicate a difference in the resources offered to women and to men (29, 38). The outcome in many studies of rehabilitation programmes has been found to be more positive for men than for women (20, 39-41). Women more often get work training, while men more frequently participate in more expensive vocational training courses. In this way women who are long-term sick-listed return to work more rapidly than men and their rehabilitation is often less expensive than that of men. Edlund (20) contends that despite the fact that women take more responsibility for their rehabilitation, they nevertheless have a poorer starting point than men. Edlund (20) shows that employers expend fewer resources on long-term sick-listed women and more seldom make changes in the work place for women despite the fact that women have been shown to have more rehabilitation meetings with their employers than men. When the goal of rehabilitation is only return to paid work, gender differences regarding paid work can cause problems. For example, women with little education who have done manual work run the risk of remaining in an unhealthy work environment (37, 42). Ahlgren et al. (41) argue that gender affects the outcome of rehabilitation on many different levels such as in encounters with professionals and also because of the uneven distribution of

domestic work. The significance of domestic work with respect to health and return to work has not been sufficiently studied, as current research has largely focused on occupational life (29). A study of women with diffuse muscle pain showed that women's orientation toward their family increased in periods of long-term sickness absence, and that their marriage contract, i.e. the often hidden agreements concerning domestic work, love and power within the marriage, was of significance regarding the rehabilitation process (43). In a study of women's life stories, Carlstedt and Forssén (44) reached the same conclusions, and showed that negotiations about power and responsibility in private life and work life affected women's health. Gender has also been shown to be important in contacts with rehabilitation agents. Bäckström (37) found that when a man made demands during the rehabilitation process this was expected behaviour, but when a woman made demands she was instead considered difficult. Research about the importance of gender in rehabilitation is still being developed, but thus far we lack the knowledge to be able to understand and explain the often complicated associations amongst gender, social context, occupation, health care and family in the rehabilitation process.

Rehabilitation in MSD

By tradition, the importance of work for the individual's well being is strongly emphasised in Sweden, and a general goal in the work-related rehabilitation of long-term sick-listed persons has been and is return to work (45). Ekberg (46) found that early and active rehabilitation does not in itself result in decreased sickness absence in MSD, but rather that measures and changes at the workplace are required in order to change the individual's situation, such as by developing flexibility in the work and giving the individual the possibility to influence his/her work situation. Rehabilitation programmes with combinations of cognitive training and motion training have been shown to have positive effects regarding return to work in MSD (47) and to be cost-effective (48), at least in the short term (49). Physical training has also been shown to be suitable both as primary and secondary prevention, and for decreasing pain in MSD

(50, 51). However, in an international comparison of rehabilitation measures for MSD, researchers found that only orthopaedics constituted an effective measure for return to work (52). A new type of rehabilitation effort that may improve the situation at the workplace for individuals in the risk zone is problem-based rehabilitation (PBR). In PBR, rehabilitation takes place in groups that meet at the workplace on a continual basis. The manager is included in the group, but the participants themselves determine the strategies and goals for rehabilitation (53). Current rehabilitation programmes have not been shown to be particularly effective in the long run (46, 54, 55). In addition, long-term sick-listed persons who have not started any rehabilitation measures have thus far had a better prognosis regarding return to work than those who have taken part in rehabilitation. This can be understood against the background of the fact that most people who are sick-listed spontaneously return to work and thus can be considered healthier than those taking part in rehabilitation measures (38). Wesser (56) contends that being at work does not have to be a measure of successful rehabilitation. One third of the persons in his study on long-term sick leave thought that rehabilitation had helped, despite the fact that they had not returned to work. He also thinks that there is a gap between the view of professionals and that of lay persons concerning rehabilitation (56). In a study of compliance in an individualised rehabilitation programme, it was found that professionals and patients sometimes disagreed about the goals of rehabilitation and the reasons for discontinuing or completing the rehabilitation (57).

Motivation

From the perspective of rehabilitation agents it is often maintained that the main problem in rehabilitation is the client's lack of motivation, and that that is what determines whether or not a long-term sick-listed person returns to work (58, 59). Grahn (48) has described motivation as an ability to set one's own goals, and she considers this ability to be necessary in order to succeed with a rehabilitation programme for MSD, although other factors such as availability of professionals,

emotional support, personal strategies and social support at work are also important ingredients regarding outcome. Gard (60) found in a review that clear goals, value-clarifications, social support, participation in treatment, locus of control, communication, and co-operation were motivating factors within rehabilitation. Other studies have also shown that being able to set individual goals is a good predictor for return to work in MSD (61). Similar conclusions have been reached by researchers within occupational therapy, who have developed an instrument for a client-centred goal formulation structure in order to increase the patient's influence in rehabilitation (62). There is increased interest today in research concerning the individual's motivation to work, where work life forms the basis for the research. A collective term used to measure the employee's mental attachment to his/her work, company and union is 'work commitment', which can be seen as a measure of how personally involved the employee is at his/her job (63). The hypothesis for this research is based on the fact that there is a chain of reasons between work motivation and absence behaviour. A problem with the term motivation is, however, that it is often seen as an individual characteristic free from the structural influence of class, education and gender. Personality-based approaches regarding motivation that do not take the effect of social factors into consideration might lead to moralising in the clinical encounter (64).

Contact

Most of medical research is based on the perspective of professionals (65, 66). Despite the fact that health care legislation emphasises the importance of a good approach as well as quality of care, research focusing on the approach of professionals from a client perspective is largely lacking, particularly with respect to the approach of professional categories other than doctors. The Council on Technology Assessment in Health Care conducted a survey of research on the patient-doctor relationship where the most comprehensive international research is found (67). Patients wanted the doctor to be interested, involved, knowledgeable, and to discuss treatment alternatives.

Studies have also shown that when the doctor directs attention to psychosocial relationships, chances increase that the patient's health condition will improve (67). Eisenberg (68) is of the opinion that the doctor-patient relationship is just as much social as it is medical, and that it will inevitably affect the patient and be of importance regarding recovery. In a survey of randomised controlled studies it was found that the doctor's encouragement and support of the patient had a positive effect on the outcome of treatment (69). In connection with MSD, the patient-doctor relationship has also been pointed out as decisive regarding the results of medical treatment and rehabilitation (70). The national investigation 'Different care under the same conditions' (71) that dealt with the importance of gender with respect to care and treatment, showed that knowledge was extremely limited concerning the approach used with patients and that in particular, studies from a gender perspective were lacking. The Council on Technology Assessment in Health Care (67) also argued for the need for further research. It is their opinion that there is a dearth of studies that can be generalised to Swedish conditions, such as studies concerning the importance of the professional's sex with regard to the benefits of the care. In her thesis, however, Bäckström (37) shed light on work-related rehabilitation of long-term sick-listed persons from the perspective of gender. She found that social insurance officers believed that they treated clients in a gender-neutral way, which resulted in men and women being treated differently. She states that women mainly wanted someone who listened, while men sought information and wanted to direct their own rehabilitation, although the need for understanding and to be shown respect was expressed by both men and women. Seltzer et al. (72) think that conversational studies dealing with authentic encounters emphasising the client's voice are lacking. Knowledge is needed, based on a public health and social medicine perspective, about the individual as well as populations and groups of people with respect to the approach used toward and the care of sick-listed persons, which is one of many areas where the approach used by professionals has not been adequately studied.

Lay person knowledge

The experience of individuals is a source of knowledge that can enrich medical research (73). Different groups of professionals or experts are usually the ones who judge the success of rehabilitation measures. In systematic studies such as those using questionnaires, questions are usually based on the interest and knowledge base of the professional or the expert. The problem concerning the fact that professionals would rather work with rules and structures than look at the individual was described as early as the 1950s (74). By instead allowing the individual to speak and relate with his/her own words, the perspective is changed, which enables new angles on what are perceived as unsuccessful, worthless and successful efforts, changes or measures. The researcher's task then becomes to systematise the experiences through analysis without changing the point of departure for the study. It is only through a conscious approach during the different steps of the research process that it is possible to maintain the perspective of the individual. These collected experiences of individual persons provide a new knowledge base that can be called lay person knowledge (75). One of the uses of such knowledge can be to bridge the gap between research and clinical experience (73, 76, 77). The lay person perspective is the point of departure for this thesis where the individual is seen as an expert on his/her experience of a specific phenomenon, which in this case is MSD.

AIM

The overall aim of the thesis was to investigate hindering and promoting processes in rehabilitation from a lay person perspective following sickness absence due to MSD.

The specific issues in the different parts of the thesis were:

- to study the experiences of lay persons with MSD regarding rehabilitation agents and rehabilitation activities (paper I)
- to study how lay persons with MSD describe themselves and their experience in relationship to working (paper II)
- to study what significance the private arena can have regarding return to work following MSD (paper III)
- to study the perceptions of clients with MSD concerning contact with health care staff and insurance officers (paper IV).

METHOD

This thesis is part of 'the 11-year follow-up of young persons on sick leave' project at the Division of Social Medicine and Public Health Science at Linköping University in which consequences of sick-listing for back, neck and shoulder diagnoses have been studied (78). The project was developed from earlier research (17, 18), and the data collection methods and study samples are illustrated in figure 1.

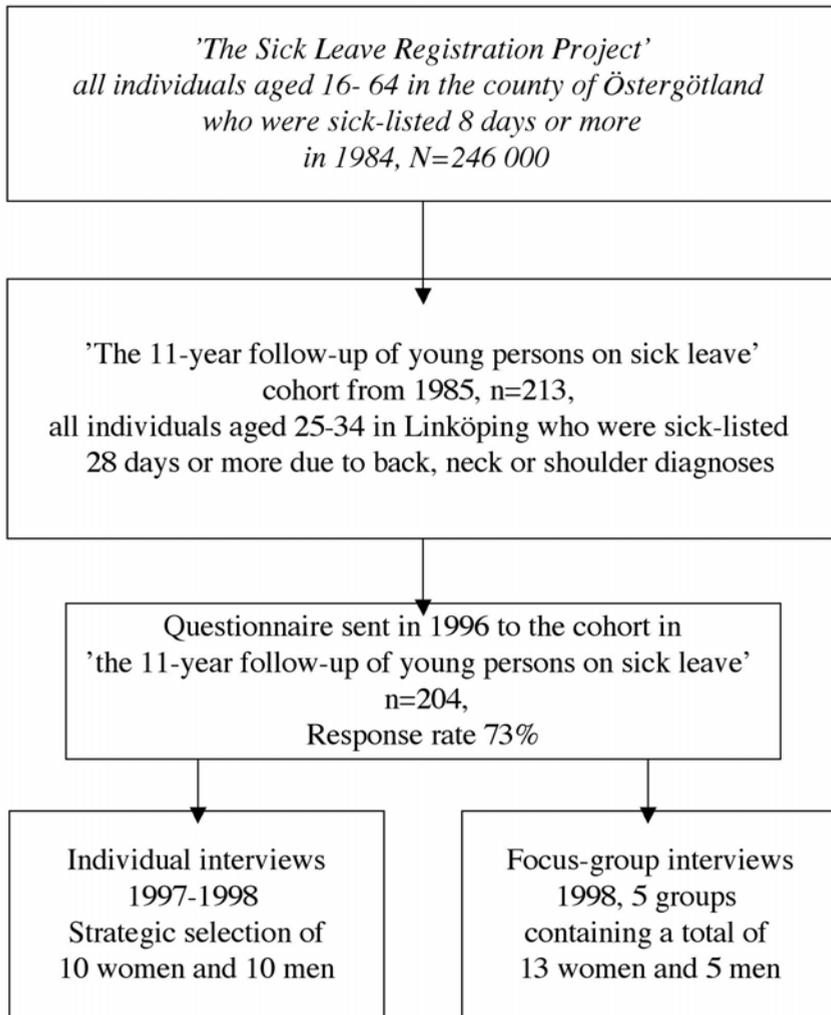


Figure 1. Data collection methods and study samples in 'the 11-year follow-up of young persons on sick leave' studies.

The aim of the overall project is to identify hindering and promoting factors for return to work using different methods for data collection and analysis. In one phase of the project data on sickness absence, disability pension status, family and work situation, and experiences with rehabilitation were collected using questionnaires (25, 79) and registers (24). In another phase, individual (80, 81) and focus group interviews were carried out (82, 83). The cohort studied in the project consisted of all residents of the municipality of Linköping who in 1985 were in the age group 25-34 years and were sick-listed for 28 days or more due to back, neck or shoulder diagnoses, n=213 (diagnosis codes 7170, 7131, 725, 7288, 7171, 7179, 7289, 7282 and 7285) (84). This group was shown to be a high-risk group, with 22% receiving disability pensions within 12 years after inclusion in the cohort (24). The papers I-IV included in this thesis are based on data from individual interviews, questionnaire responses about contact with professionals, and register information concerning sickness absence.

The interview study, papers I, II, III

During the planning phase of the individual interview study the design and method were discussed in detail and assessed in relation to the aim of the study. During this time other researchers were also invited to seminars to increase the research group's knowledge about qualitative research. We jointly concluded that individual interviews were a possible way to generate knowledge concerning how lay persons perceived rehabilitation after sickness absence due to MSD. In the spring of 1997 a pilot study was conducted (85). A man and a woman who were long-term sick-listed due to MSD were interviewed. With the help of the pilot study, the procedure and themes for the interviews in the main studies were planned. The pilot study indicated that as a female interviewer, it was more natural to pose clarifying follow-up questions to the male interviewee and thereby obtain richer and more comprehensive information. When the interviewee and the interviewer are of the same sex, the risk exists that the interviewer believes that he/she understands and is in agreement with the interviewee and therefore does not seek to acquire a more detailed answer. This experience increased awareness

about the risk for bias in the interview situation and resulted in increased curiosity about how gender influences encounters both in health care and in research.

Grounded Theory

The research approach chosen for the interview study was Grounded Theory (GT). It is a systematic, well-developed and tested method that is well known within health care research (86, 87). The method is highly suitable for studying new phenomena or old phenomena with another approach. GT was developed from symbolic interactionism, which sets the person in his/her social context. One of the goals of the method is to explain social processes with the help of empirical knowledge. Empirical concept development and the creation of theories are other central elements in GT. According to Glaser and Strauss (86), theory provides a composite explanation of how a problem or a process functions and is made coherent. In GT one differentiates between two types of theories, substantive and formal. A substantive theory provides explanations within a limited area, while a formal theory extends over a larger field and is based on many studies from different areas that can be synthesised into a collective formal theory. The goal of this thesis has not been to develop a formal theory, but instead to formulate empirical models of social and psychological processes and, if possible, to combine them into a substantive theory dealing with hindering and promoting processes in rehabilitation in MSD.

Strategic selection

In line with the intentions of GT, the interview material was collected step by step and the data were analysed continually. This procedure was time-consuming, and to decrease the time needed for data collection, smaller groups of four to five persons were studied. Via preliminary analyses of the content of these interviews a new group of interview persons was then selected. To reduce the time for data collection and get a manageable amount of data for analysis, data collection was concluded when there was pragmatic saturation, meaning when the size of the material was extensive and

when sufficient variation had been attained. This meant that 20 persons were interviewed during the period 1997-1998, ten men and ten women. Unemployed persons were excluded, as unemployment involves an additional aspect entailing both methodological and analytical difficulties in a study where the focus was return to work after sickness absence. However, those with disability pensions and persons who had at some time had sickness benefits were included. To simplify the selection process, interviewees were chosen from three groups in the previously mentioned cohort in the 'the 11-year follow-up of young persons on sick leave' that were based on the individuals' average general sickness absence during the period 1989-1991. The three sample groups were 'low sickness absence', which was defined as fewer than eight days on average of sickness absence per year, moderate sickness absence, which was defined as sickness absence of between eight and 60 days on average per year, and finally 'high sickness absence' comprising those persons with more than 60 days of sickness absence. In addition, sex was taken into consideration in order to study the experiences of both men and women. Table 1 shows the sickness absence groups from which the interviewees were selected.

Table 1. Selection groups in the interview study based on average sickness absence during a one-year period between 1989 and 1991.

SELECTION GROUPS ACCORDING TO SICKNESS ABSENCE					
LOW		MODERATE		HIGH	
Women	Men	Women	Men	Women	Men
2	3	5	3	3	4

The first persons interviewed were selected from women in the two extreme groups of sickness absence experience in order to obtain an overview of women with different degrees of problems. One person on the list had a shielded telephone number and it was never possible to contact her for an interview. The other five women were contacted and agreed to be interviewed. These interviews provided a varied picture of women's experiences with rehabilitation, but sufficient information was still lacking

from persons who remained in the work force despite their difficulties. In the second stage persons were therefore chosen from the moderate group. Six names were randomly selected from this group. Five persons agreed and were interviewed, while no current address could be found for the sixth person, a woman. The group comprised three men and two women. After analysing these interviews, information was needed from more men. In the third stage men were therefore chosen from the extreme groups, i.e. persons with high levels of sickness absence and men with few sick-listed days who worked full time. Nine men were randomly selected and current addresses were lacking for four of them. Five men were contacted, three of whom agreed to be interviewed. Despite repeated attempts, one man could not be reached by telephone. One man declined to be interviewed because of a difficult family situation but according to agreement was contacted again and interviewed six months later. After the thirteenth interview it was judged that further information was needed regarding persons with low levels of sickness absence and persons from the moderate group. As a fourth step additional interviews were done in these groups; three men and three women, and the man who had agreed to be interviewed on a later occasion, were interviewed. An additional woman was asked about being interviewed at this time but she declined due to acute illness.

Dropout in the interview study

The dropout in the interview study thus comprised one woman who actively declined to be interviewed, four men and one woman for whom we were unable to find addresses, one woman who had a shielded telephone number, and one man who could not be reached by telephone (a total of eight persons). Persons for whom we were unable to find addresses could constitute marginal groups with social and medical problems who generally do not take part in research studies. The dropout thus probably consisted of persons with lower educational and socioeconomic status than those who were interviewed. If these persons had participated, this would probably have resulted in further variation in the interview group, which would have been of value. In a qualitative study, however, the dropout is not as decisive regarding the

results as in a quantitative study, where the aim is to be able to generalise the results with the help of a representative sample. Our point of departure was to get a sample of interview persons that varied, particularly with regard to gender and rehabilitation experience. Our samples based on sickness absence were of help in attaining this. Decisions about whether sufficient variation had been attained were, however, made on the basis of the preliminary analyses of the interview material.

The interviewees

Fifteen of the interviewees had started working directly after nine-year compulsory school. At the time of the interview, twelve years after the period of sick-listing that led to inclusion in the study, seventeen of the interviewees were gainfully employed and three had disability pensions. Those interviewed had mainly blue-collar occupations, but white-collar occupations were also represented. Table 2 shows information concerning the interviewees regarding occupational level and level of employment at the time of the interview.

Table 2. Data on educational level and occupational status according to sex obtained from interviews (1997-98) with lay persons with back, neck or shoulder diagnoses.

INFORMATION ON THE INTERVIEWEES			
LEVEL	LOW	MODERATE	HIGH
<i>Educational level</i>	<i>Compulsory school</i>	<i>Upper secondary school</i>	<i>Academic education</i>
Women	9	1	0
Men	6	2	2
<i>Occupational level</i>	<i>Disability pension</i>	<i>< 75% work time</i>	<i>> 75% work time</i>
Women	3	0	7
Men	0	2	8

The majority of persons in the interview group had low levels of education but were gainfully employed. The education levels of the women were lower than those of the men, and three of them had total disability pensions. The majority of interviewees lived with a partner and had children, but one woman and one man were single without children. All of them had experienced rehabilitation measures since their sickness absence in 1985 (See Appendix 1). At the time of the interview (1997-1998) some of the participants were totally recovered while others had become worse.

Performance of the interviews

The interviewees were initially contacted by letter and informed about the study and that participation was voluntary. All interviews were conducted by the author of this thesis. Several days after the first letter I telephoned the interviewees to give further information and to book a time and place for the interview. Each person could choose where the interview would take place, either at the person's home or in a more neutral location at the Faculty of Health Sciences in Linköping. At the start of the interview I obtained permission from the interviewee to tape-record the interview, a procedure that had been described in the introductory letter. The interview was planned so as to provide the opportunity for the person to talk freely about his/her situation and rehabilitation. My task as interviewer was to listen actively and create a good climate, and the interviewee's role was to tell his/her story (88). An interview is a joint production (89) where both parties interact as persons even though they have different roles. A checklist was developed over time with interview themes and information points, and it was used for support at the end of the interview (90). Written information including the address and telephone number of the Dept. of Health and Society at the Faculty of Health Sciences in Linköping was given to the person at the conclusion of the interview. The interviewees were urged to contact me if they felt uncomfortable after the interview or if they had any additional information. Following every interview I made written notes including my reflections.

Nine persons chose to be interviewed in their homes, seven women and two men. Eleven persons, eight men and three women, were interviewed at the Faculty of Health Sciences. The length of the interviews varied from 50 minutes to three hours. The length of the interviews generally decreased as we went along. This is probably because my ability to concentrate on the content of the interview improved during the course of data collection, so that the dialogue concerned mainly the themes found on the checklist. All recordings except for one took place without mishap. In one of the interviews half of the sound content disappeared due to a technical error. I therefore wrote out the missing parts of this interview from memory. The pilot interviews and the first interview in the main study were transcribed by the interviewer, but the remaining 19 interviews were transcribed by a secretary so that the interviewer would have the chance to concentrate on the analyses and collection of new data. The person who did the transcribing was instructed to do so word for word without any censorship concerning the interviewee's choice of words. Following transcription of each interview I listened to the tape and corrected any possible errors and filled in sections where the secretary had had difficulty hearing what was said.

Analysis of the interviews

The transcribed interviews were read through to obtain an overall picture of their content. Prior to continued analysis they were transferred to a text file and analysed using the NUD*IST programme (Non-numerical Unstructured Data, Index, Searching and Theorizing) (91), which is software used for analysis of qualitative data. In the next reading the content was designated with open codes and in a third step with preliminary categories. These preliminary codes and categories were compared between interviews to elucidate characteristics and dimensions in the data. Through selective coding, in-depth analyses of the content of the three arenas in rehabilitation were done later. This was now done using paper copies of the interviews, as it was my opinion that they provided a better overview of the data as a whole. In later phases of the analysis, theoretical coding was used to formulate models of the psychosocial processes that were common for the group. In practice, however, different types of

coding are continually carried out, which can mean that theoretical concepts can appear as early as during the open coding. In addition, data analysis comprised a continual interaction between the researcher's own formulations via memos about development of categories and concepts, and statements from the interviewees in the existing interview text. In the concluding phase of analysis this connection was recapitulated and in this way the statements of men and women concerning the private arena were compared. Analyses of the data, interpretation of the results, and the empirical models were also continually taken up and discussed with co-authors in the research group, in which my supervisors were also included. In the beginning of this research process the raw material was also read by my supervisors and we had meetings in the research group on a continuous basis where the categorisation and interpretation of data were discussed. After that, my analyses became more independent, and during the latter part of the work on this thesis the empirical models were discussed primarily with my advisors and at different research seminars.

Validity

Validity in a qualitative study is closely associated with the choice of design and method and with the procedure used by the researcher to collect data. A closely related question then becomes whether the researcher is prepared to reflect on the different steps of the research project. Malterud (92) writes that reflexivity, validity and relevance can be viewed as criteria of quality for qualitative methods. For example, an important issue regarding validity involves whether the researcher has studied what is considered to be the aim. Kvale (93) maintains that qualitative interviews are a type of data collection well suited for documenting people's experiences and thoughts concerning a specific area. I contend that the interviewees were given the opportunity to communicate their experiences concerning rehabilitation with minimum influence from the views of rehabilitation agents concerning medical treatment or work-related rehabilitation, and that in that way the lay person's perspective was examined. Interviews are naturally reconstructions of reality where both the interviewer and the interviewee work together (89), which means that the researcher's preunderstanding

affects the content of the interview. A strong point of the interviews is, however, my solid psychotherapeutic experience in listening to the individual and following his/her story.

The researcher's preunderstanding

The researcher's perspective influences which results emerge from studies and how these are presented. This is associated in turn with the researcher's preunderstanding of the phenomenon that will be studied and the researcher's own values. No researcher is totally objective or neutral, irrespective of the choice of method or perspective (94). My earlier work experience and education were in the areas of social pedagogy, social work, and psychology. I was active in the psychosocial treatment of drug addicts where group psychotherapy was used as part of the treatment in a therapeutic community (95). In that work I was particularly interested in the situation experienced by women. My point of departure is that all people have the ability to actively affect and change their situation. A process of change can often start with the individual making new decisions, and by making conscious choices taking responsibility for his/her situation. However, people have different biological, social and economic prerequisites, where personal history and social inheritance can constitute obstacles to individual development (96). According to my starting point in social psychology, people strive to belong and to be like others, and to be able to support themselves and be financially independent. I believe that all individuals have both resources and weaknesses and that the resources can sometimes be hidden, even from the person himself/herself. Moreover, I have had MSD myself, but have only sought help from a chiropractor and have never been sick-listed for this problem.

The questionnaire study, paper IV

The study base was all residents, approximately 120 000 persons, of the municipality of Linköping in Sweden. The study cohort comprised all persons in the age group 25-34 years who had been sick-listed for 28 days or more due to MSD during 1985 (n=213). Information about these persons was acquired from the database in the Sick Leave Registration Project (17, 18). Information was obtained on sickness absence, disability pension status, mortality and immigration up until 1 September 1996 for all those included in the study.

Inclusion diagnoses

Those persons included in the cohort had one of the following as the first diagnosis on their sickness certificate (84): low back diagnoses: displacement of intervertebral disc (725), lumbago (7170) and lumbar pain syndrome or sciatica (7288); and neck/shoulder diagnoses: cervicalgia (7280), cervicobrachalgia (7282) peri-arthritis humero-scapularis (7171), tendovaginitis (731) or myalgia (7179). Diagnoses primarily related to pregnancy or musculoskeletal inflammatory diseases were excluded.

Dropout

During 1996 a questionnaire was sent to those persons who still had a Swedish mailing address (n=204). Six persons had emigrated, two had died, and one person could not be found in the official register. Two reminders were sent. Three weeks after the second reminder those who had not answered were phoned for a telephone interview. A total of 136 persons answered in writing and 13 persons by telephone. Eighteen actively refused to take part and 37 did not answer at all. One returned questionnaire was excluded due to insufficient answers (n=148). This resulted in a 73% response rate for the whole questionnaire.

Content of the questionnaire

The questionnaire (97) was designed for 'the 11-year follow-up of young persons on sick leave' project and had been preceded by three smaller pilot studies. The questionnaire contained demographic questions, questions on strategies for managing pain, effects of ill health on daily life, questions about changes in health and life situation over time, so-called life lines, and general health, mental health and questions about contacts with rehabilitation agents. The questionnaire took about an hour to complete. The questions dealt with in this study concerned perceptions of contact with professionals (A), mental health (B) and health in general (C).

- A. The questions on contact with professionals were developed using the results from a qualitative study on long-term sick-listed persons (37) and consisted of 16 statements for each of which the respondent was asked if it applied to him/her to a great extent, somewhat, to a slight extent or not at all (98). The four alternatives were ranked from 1 to 4, with 1 indicating the greatest agreement. These questions concerned contact with social insurance officers, health care professionals and employment office clerks, but for the latter agency there was an insufficient number of answers for a factor analysis (n=28).
- B. For the questions about mental health the respondents answered yes or no to whether they had often experienced fatigue, sleep problems, headache/migraine, fear/anxiety/uneasiness, stomach pain/diarrhoea/ constipation/nausea, feeling low/depression, or irritation.
- C. For the questions concerning general health the respondents assessed their health using six alternatives: excellent, very good, good, fair, poor or very poor, and the responses were ranked from 1 to 6, with 1 indicating excellent.

The study population

Paper IV comprises an in-depth analysis of two questions from the questionnaire concerning perceptions of contact with rehabilitation agents. Due to a lack of time, five of the respondents interviewed by phone did not get these two questions (n=143).

1. A total of 90 persons answered the question on contact with health care professionals, and the groups that underwent further analysis were as follows: 58/32 women/men, disability pension/no disability pension 27/63, back diagnoses/neck-shoulder diagnoses 61/29.
2. A total of 73 persons answered the question on contact with social insurance officers, and the groups that underwent further analysis were as follows: women/men 45/28, disability pension/no disability pension 24/49, back diagnoses/neck-shoulder diagnoses 46/27.
3. Eighty-nine respondents were included in the in-depth analyses of the question concerning health care professionals in combination with the question on general health, and in combination with the question on mental health there were 82 respondents.
4. Seventy-two answers were included in the analyses of the question concerning contact with social insurance officers in combination with the question on general health, and in combination with the question on mental health there were 68 answers.

Validity

The questions on contact with professionals have not previously been used in any study, but since they were developed using the opinions of lay persons concerning rehabilitation via results from a qualitative study (37), we believe that in this respect the instrument has good 'face validity'. In other words it is in good accord with how lay persons describe their experiences with rehabilitation. The descriptions by lay persons thereby constitute the basis for perceptions of contact with professionals. The

questions were also discussed and answered by researchers and those involved in clinical practice in the field of rehabilitation. The relevance of the questions was later confirmed by results from paper I (80). The 16 alternatives in the perceptions of contact questions comprised a mixture of positive and negative statements (98), which may have made it more difficult to fill in the questionnaire, but on the other hand it hindered the respondents from ticking off their answers in a routine way. When validity-tested instruments were available, they were included in the questionnaire designed for the project, but otherwise the researchers developed new instruments (97). The questions concerning mental health were the questions used in the Study of Living Conditions (the ULF study) (99), with the addition of two questions concerning nausea and stomach problems.

Dropout analysis

Analysis of the external dropout showed no statistically significant differences between respondents who had answered the questionnaire in writing and those who had done so by telephone in relation to sex, diagnosis at the time of inclusion, or whether or not they had at one time received a temporary or a permanent disability pension. Analysis of the internal dropout showed, however, that a greater proportion of those with disability pensions, as compared to those without, had answered the questions on contacts. Respondents with neck/shoulder diagnoses at inclusion had answered the question on contact with social insurance officers to a greater extent than those with back diagnoses. This indicates that of those who answered the contact questions, there is an over-representation of respondents in the questionnaire study with recurrent problems who have had repeated contact with health care and the social insurance office. Thus the results can be assumed to be based on ratings by persons who have had good insight into rehabilitation. Pearson's chi-square test and Fisher's exact test were used to test for differences between groups in the dropout analyses. Differences where $p < 0.05$ were considered statistically significant, and all data were processed using SPSS, version 9.0.

Factor analysis

Factor analysis was initially performed in order to synthesise and structure the results and obtain an overview. The aim was to determine whether the respondents' ratings in the two contact questions contained latent patterns and if these so-called factors could be used to reduce the variation in the answers. A Principal Component Varimax rotation showed that three of the factors had an eigenvalue greater than 1. The three factors remained for contact with rehabilitation agents both in health care and the social insurance office. Agreement in the ratings of the contact factors from the factor analysis were tested with Cronbach's Alpha. Two of the contact factors had high values greater than 0.84. The third factor had lower values (0.48 and 0.43) but explained more than 70% of the variance in the answers (98). Using the mean value of the respondents' ratings of the three factors, an index was created for each factor, type of profession and for each respondent in order to get a clearer picture of the results of the respondents' ratings. However, a more detailed picture of how groups of respondents rated the different factors was lacking, and we therefore chose to further analyse the material.

Multiple regression analysis

Multiple linear regression analysis was done in a following step to see if additional variables could contribute knowledge about how risk groups of respondents rated the three contact factors. The method contains a control for the influence of the different variables. Five variables were used: sex, disability pension (whether the person had at any time received disability benefits), diagnostic group at inclusion into the study (back diagnoses or neck/shoulder diagnoses), general health and mental health. These variables were selected taking into account earlier research as well as existing data from the questionnaire and registers (98). To simplify interpretation of results from the multiple regression analyses, a mean value index was used for the ratings on each factor instead of indexes from the factor analyses. However, these two types of indexes were strongly correlated, $p < 0.001$ for all six correlations. As there were no

extreme values in the data due to the formulation of the question, an approximately normal distribution was assumed.

Ethical considerations

Three ethical principles that generally regulate medical research have guided this research: the principle of autonomy, the principle of care and the principle of justice (100). The interview study (no. 97-138) and the questionnaire study (no. 95-286) included in this thesis were approved by the Research Ethics Committee at the Faculty of Health Sciences in Linköping. Informed consent was obtained for the studies comprising the thesis. An introductory letter containing written information about the study was sent to the participants, and verbal information about personal contacts was part of the study design. The interviewees gave verbal consent for audio-recording of the interview and for their knowledge and experience to be used for research. With respect to the questionnaires and telephone interviews, the respondents were informed that the information would be used for research and they chose themselves either to send in the questionnaire or to continue the telephone conversation. In processing the material, care was taken to safeguard personal integrity. In the qualitative interview study there was no state of dependence between the parties to the interview. In quotations from individual respondents, interview numbers and fictitious names were used instead of authentic names, and details were deleted from the interviews so that individual respondents cannot be recognised. The interview tapes are kept in a fireproof, locked filing cabinet at the Division of Social Medicine and Public Health. Transcriptions of the tapes and questionnaire responses are kept in locked files and in secured computer files. At the interviews respondents were told they could contact the researcher if they experienced any uneasiness after the interview or if they needed to talk with someone. However, it was stressed that the interviewer had the role of researcher only and therefore not available for therapeutic contacts. If needed arrangements would have been made with a specialised clinic, but no study participant requested such support. Those who answered the questionnaire received information

about how they could reach the research group to get information or if they had other questions. Great effort was expended at the interviews to create a good climate and to use a non-paternalistic approach (101). The research group were also concerned about making the questionnaire easy to understand by using a distinct, but non-paternalistic language. Research of this kind can benefit the participants when the results are implemented within the areas in question.

During the time I have been working on this thesis I have actively participated in discussions with researchers by presenting my research at a number of conferences and publishing my results in articles both in Swedish (102) and in English. My aim was to make sure that the results reach others, both those inside and outside the research community. In addition, I have continually presented my results both to students at the Faculty of Health Sciences and to employees at the social insurance office. I am part of a national and a Nordic network for sickness absence researchers which has regular meetings. I am also a member of the Q-network, which is a network for qualitative research in medicine and a member of section 8, Listening to the Welfare State, of the Nordic Summer University (NSU), which is a network for students, practitioners and researchers.

RESULTS

The interview study showed that lay persons had made their experiences of rehabilitation after sick-leave with MSD on three arenas, the health care arena, in which we also include rehabilitation agents at social insurance offices, the occupational arena, and the private arena. The interviewers further described that relationships to significant persons within the different arenas were decisive with respect to the rehabilitation process. Within the individual, and in relationships with significant persons in the three rehabilitation arenas, different difficulties and dilemmas arose from the interviewees' descriptions. These were insufficient socioemotional support from rehabilitation agents and partners, individual difficulties in handling the 'duty to work', and the significance of 'domestic strain' with respect to return to work. Further, significant differences in gender, disability status, diagnosis and mental health were also found in lay persons' ratings of contact in the health care arena. A summary follows of the results of papers I-III, which are based on interviews, and thereafter a summary of the results of paper IV, which is based on questionnaire data.

Paper I

In paper I the analysis focused on the interview material concerning the health care arena, i.e. the interviewee's experiences of rehabilitation agents and their rehabilitation measures. The interviewees were happy to talk about the trustful relationships they had had with rehabilitation agents such as physiotherapists who cheered them on in a lively way and were supportive in successes and in adversity, or doctors who were informal and personal. However, many accounts dealt with rehabilitation agents who distrusted the interviewee's own reports. For example, these descriptions concerned a physiotherapist or a doctor who did not believe that the patient was exerting himself/herself or trying enough, or a social insurance officer who did not believe that the client felt unwell and therefore needed to be home from work. In their contacts

with health care, the interviewees described both non-supportive and supportive qualities in their relationships with rehabilitation agents. The socioemotional qualities of the rehabilitation agents were included in a model comprising different ideal types. In the qualitative analysis of interview data we found four ideal types based on the interviewees' descriptions, and these were the professional mentor, the empathic administrator, the distant technician and the routine bureaucrat (figure 2).

		Socioemotional quality of rehabilitation agent	
		Supportive	Non-supportive
Type of rehabilitation measures	Individualised	Professional mentor	Distant technician
	Standardised	Empathic administrator	Routine bureaucrat

Figure 2. A socioemotional model of rehabilitation - the lay perspective (80), p. 290.

The ideal types varied according to two dimensions: the use of individualised measures or the use of routinized, so-called standardised measures, and the ability to offer supportive or non-supportive treatment styles. What the interviewees wanted was socioemotional support in a relationship with a professional with whom they could have recurrent contact during the rehabilitation process (80). In the health care arena this was a rehabilitation agent who was prepared to draw up an individualised rehabilitation programme. The socioemotional support was described as containing trust in the individual and social presence, i.e. being accessible. Examples of socioemotional qualities requested by the lay persons were being treated as a subject (not as an object), being listened to and being asked for their opinions (80). Socioemotional support from the rehabilitation agents during the rehabilitation process

was complemented by support from family in the private arena and from co-workers in the occupational arena.

Paper II

The analysis in paper II focused on the occupational arena. Many of those interviewed had the same type of occupational history involving an early start in an occupation that did not require theoretical education. All the interviewees said that they wanted to be active, that they liked working and were working either in the home or with paid work (81). When the interviewees described themselves, their working was a recurrent theme that seemed to be a central part of their personal identity. A ‘duty to work’ was often conveyed through idiomatic expressions or sayings. A woman reported that she “worked like crazy”. Some persons called themselves “workaholics”, others said that they liked having “several irons in the fire”. Working and keeping busy was described both as a duty and as a need. The way in which the interviewees handled this duty to work appeared to be significant regarding their rehabilitation. We found that the interviewees could be divided into four ideal types depending on how said they handled the duty to work. These ideal types have been called the relaxed worker, the workaholic, the workhorse and the work manic. See Figure 3.

		Self-agency	
		Confident	Uncertain
Driving force	Own needs	Relaxed workers	Workaholics
	Others needs	Workhorses	Work manics

Figure 3. A typology of different ideal types in relation to the ‘duty to work’ found in lay persons’ self-presentations (81), p. 153.

The relaxed worker was a person who had some control over his/her working and took his/her own needs into account. This work identity was characteristic of persons who had found a way to handle their MSD and had returned to part-time or full-time work. The work manic instead appeared to lack control and gave the impression of working to avoid worry and to satisfy the needs of others rather than his/her own. The workaholic worked for his/her own sake but appeared to be uncertain about his/her ability to have control over his/her working and reported needing support from his/her partner in order for daily life to function. The workhorse seemed secure in his/her self-agency but mainly worked hard for the sake of others. The ideal types found in the material are naturally simplifications of the interviewees' descriptions. Being able to control and influence one's working seemed to promote the rehabilitation process while hindering strategies comprised working due to a feeling of duty, working to avoid worry, and where the individual's focus was on the needs of others.

Paper III

Paper III comprises analyses of accounts from the private arena. These often dealt with domestic work, children and the marital relationship. Women talked more about domestic work than men and more often took the initiative in talking about this subject. Men liked to talk about the children and about their spouse, and often needed to be asked about the practical side of work at home. When the interviewees described how domestic work was distributed they also conveyed information about the quality of the marital relationship. Some women reported having experienced domestic violence. An overall picture described by both women and men was that the women bore most of the responsibility for domestic work, meaning the planning and distribution of work. However, some interviewees said that there was equity in their marital relationship and that they divided work in the home between them, and a divorced man said that he had full responsibility for the children every other week. The women felt that due to their responsibility for the family, they did not have enough time. Time of their own was seen as being in short supply, and in many cases they had difficulty giving priority to rehabilitation activities. Men had a different

understanding: they seldom questioned if they had time for rehabilitation, although they sometimes questioned if their financial situation was sufficient to be able to give priority to their health. Three dimensions of domestic strain were found in the interviewees' descriptions: distribution of responsibility, distribution of work and the quality of the marital relationship. Based on these dimensions a hypothesis was formulated concerning domestic strain. See figure 4.

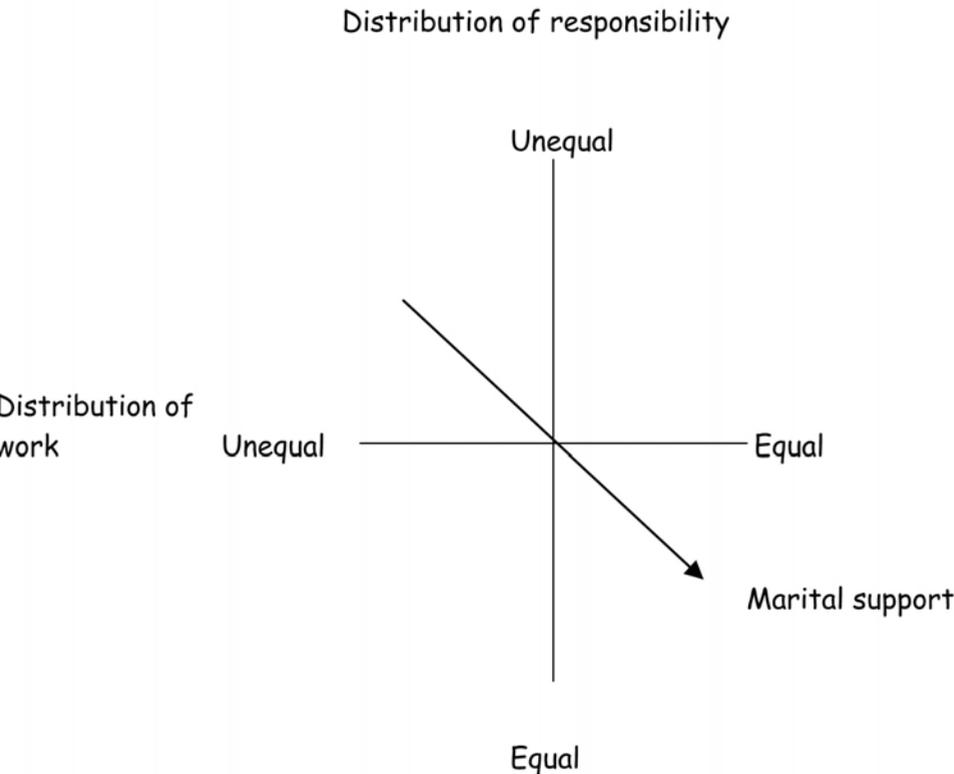


Figure 4. Domestic strain hypothesis.

Our hypothesis is that domestic strain was a hindering factor in rehabilitation and this hindering factor affected primarily women through an uneven distribution of domestic work, which in turn contributed to the fact that women had less time for themselves for relaxation, personal development and rehabilitation. The uneven distribution was compensated for in some pairs by good socioemotional quality in the relationship, which seemed to function as a buffer against domestic strain. Additional studies that also have a quantitative approach are needed in order to study these relationships further.

Paper IV

Paper IV is based on a questionnaire in which perceptions of contact with rehabilitation agents were studied. Three dimensions of contact with professionals were found in clients' ratings of contacts with rehabilitation agents from health care and the social insurance office. The three dimensions were almost identical for both categories of professionals and we termed them supportive treatment, distant treatment and empowering treatment. Supportive treatment contained high ratings for statements about the client being given support for his/her own needs, encouragement, good cooperation, being listened to, being cared about, being taken seriously and respected. Distant treatment contained more negative aspects of contact such as having met resistance, not being cared about, the rehabilitation agent acting superior, having had to wait a long time, and a frequent change of contact person. The dimension of empowering treatment contained two parts, having received support for suggestions and having been allowed to take responsibility. The mean values for the respondents' ratings on the three dimensions of contact gave rise to more questions. For example, concerning whether there were groups of respondents who rated contacts in a similar way, and if that was the case, whether the ratings of different risk groups could contribute more knowledge about perceptions of contact. These questions lead to additional analyses of the association between the respondents' ratings of the contact and sex, general health, mental health, disability pension status, and diagnostic group (neck/shoulder problems or lower back problems) at the time of inclusion.

Significant relationships were now found between the respondents' ratings of contact and sex, mental health, disability pension status, and neck/shoulder diagnosis at inclusion, but not for general health. The women in the study, as compared with the men, judged the contact with rehabilitation agents from health care and from the social insurance office as more supportive as compared with the men. Men, as compared with women, rated contact with the social insurance office as more distant, and this was also the case for respondents with mental health problems. Contact with social insurance officers was rated by respondents with disability pensions as more supportive and more empowering than by respondents who had returned to work. Respondents with mental health problems rated contact with both groups of rehabilitation agents as distant, and contact with health care professionals as less supportive. In addition, ratings of contact differed depending on the inclusion diagnosis (1985), where respondents with neck/shoulder diagnoses rated contact with health care as more empowering than persons with back diagnoses.

In summary, there were significant sex differences in the rating of the supportive and the distant dimensions of contact regarding contacts with both types of rehabilitation agents. Women rated health care professionals and social insurance officers as more supportive than men did, i.e. women more often thought they were respected, were taken seriously, and that there was place for their needs. For the whole group of respondents, the mean ratings of the supportive dimension of contact were somewhat higher for health care professionals than for social insurance officers. Health care professionals were also appreciated more by persons with neck/shoulder diagnoses, who felt they had been fortified more in their own way of managing their problems than respondents with back diagnoses at the time of inclusion.

Social insurance officers were particularly appreciated by respondents with disability pensions, who rated these contacts as more supportive and more empowering than persons who had returned to work. On the other hand, respondents with mental health problems were dissatisfied with their contact, and they gave high ratings to distant treatment for contacts both with health care professionals and social insurance officers.

These respondents also rated the supportive dimension in contacts with health care professionals as significantly lower than persons without mental health problems.

DISCUSSION

This thesis deals with lay persons' experiences of rehabilitation and their perceptions of contact with rehabilitation agents after sickness absence due to MSD. The results of paper I showed that from the lay person perspective the rehabilitation process occurs in three arenas, the health care arena, the occupational arena and the private arena (80). How important it is for rehabilitation agents to identify and intervene in the individual's work identity was stressed in paper II (81). In paper III a hypothesis was proposed concerning the content and significance of domestic strain with respect to the outcome of rehabilitation (103). In paper IV differences were found in how clients perceived contacts with rehabilitation agents with respect to sex, disability pension status and mental health (98). In the following section the results of the thesis will be discussed and related to previous research. Theoretical contributions and methodological questions are also discussed and proposals for continued research are made. Finally, a comprehensive hypothetical model is presented containing the three promoting processes that emerged from the lay persons' statements. It is proposed that this model could be used by rehabilitation agents in contacts with clients in rehabilitation after sickness absence due to MSD.

Rehabilitation as an interactive process

When people meet, a good climate is jointly created by the involved parties both in institutional and informal encounters, although the professional agent is primarily responsible for encouraging good communication in the institutional encounter. The interviewees described how important it was to be listened to, to be treated as a unique person, to be treated as a person (a subject rather than an object), to be believed, and to be asked for their opinions (80), and similar aspects of treatment by rehabilitation agents have emerged from earlier studies (37). When asked what hindered or promoted rehabilitation, the interviewees talked about the importance of contact with

rehabilitation agents rather than discussing types of programmes or measures. From an interactionist perspective (104) rehabilitation can be seen as an interactive process, a transaction developing from a meeting between actors, which is in good agreement with lay persons' descriptions of a positive rehabilitation process. Rehabilitation can thus be described as an interactive process of relationships and encounters where motivation is deliberated rather than being an individual, personal characteristic. Sex, the length of sickness absence, diagnosis, mental health (98), socioeconomic conditions and education (71) create specific prerequisites for communication and for the form the contact takes and how it is perceived by the participants. Clinical encounters between lay persons and rehabilitation agents are also examples of institutional dialogue where there are different norms for the different actors and where the professional often dominates the conversation (105-108). The professional agent can thus be seen as primarily responsible for how the contact proceeds, although the rehabilitation agent is naturally subordinate to the regulations of the organisation (109).

The duty to work was a central factor in lay persons' descriptions of rehabilitation (81). From the perspective of the lay person, motivation to work was not usually lacking. It was instead the case that understanding and trust on the part of other significant persons in the rehabilitation process were lacking. Examination of how the individual handles this duty to work might be a good start to a rehabilitation process. The focus would then be on trying to understand the individual's situation and investigating his/her attitude toward his/her work identity both in the private arena and the occupational arena. By listening to the individual and believing his/her description, the first obstacle to a good climate in the rehabilitation process, i.e. mistrust, is avoided. As it is primarily the professional who has the power to judge who is motivated to work and to what extent, there is a risk that the concept of work motivation will contain a built-in mistrust toward the sick-listed individual. In addition, this might also lead to moralising in the encounter with the client (64). This critical attitude or mistrust of the person can be the result of the rehabilitation agent's desire and ambition to scrupulously fulfil the duties inherent in his/her role as a public

authority. Social insurance officers are to carry out the intentions of political decisions at the grass roots level, which can often involve significant difficulties and demarcation problems (109). When the rehabilitation agent's ambition and desire to attain his/her own goals and those of the organisation are hindered by what is perceived as a lack of will or interest in the sick-listed person, the thesis of low work motivation can serve as a shield against disappointment concerning the obstacles that arise in the process or that the case is managed more slowly than planned. A different way of handling this would be to work together with the sick-listed person and, using the findings from paper II as the starting point, examine the individual's work identity, and use the typologies to discuss the characteristics in the ideal types that have been described.

The duty to work

Descriptions of work identity emerged from the interviewees' self-presentations, where the duty to work was conveyed by sayings and idiomatic expressions. Goffman (1959) and Kohler Riessman (1990) described self-presentations as a way of asserting one's identity (110, 111). Reports of the type Scott (1968) describes as "accounts", consisting of explanations and justifications of behaviour, can be included in self-presentations (112). Most of the interviewees were blue-collar workers with a background of manual work. Well-educated persons often introduce themselves using their titles or occupation. Among those interviewed in this study it seemed that instead, the capacity to work was of significance in asserting an identity. Being able to work hard and assist in shared work tasks instead of being a burden to others was of central importance and seemed to constitute a part of their identity as a worker and member of the working class. The idiomatic phrases can also be an expression of the dilemma experienced by the interviewees, a way of handling contradictory demands and conflicts. Morrheim has shown how doctors use idiomatic phrases in their work as a way of handling moral dilemmas (113). In the area that was studied, idiomatic phrases make cultural norms explicit. For the interviewees in our study, the frequent references

to idiomatic expressions, which reflected the individual's will to work and happiness at being able to work hard, may reflect a conflict between the individual will and reality, where work capacity is decreased due to illness and it is difficult to keep up in the workforce. We found no references in the interviews to sayings or idiomatic expressions containing anything about the importance of rest and relaxation or the importance of enjoying life. It is possible that the interviewees' choice of expressions reflects an adaptation to our research project in which their experiences are presented. The Faculty of Health Science, which is the research environment for the project, is associated with health care, and the project's overall aim was to study factors that hinder/promote return to work. Thus the interviewees may have wanted to emphasise their work capacity and their will to work. Without drawing conclusions that are too far-reaching, it would be interesting to think about a rehabilitation dialogue that not only includes work capacity but also the capacity to rest and enjoy life. The increase in mental health problems and burnout depression in recent years, and thereby the associated long-term sickness absence, has certainly focused attention on the need for recovery (3, 9, 71). Much remains to be done to further develop and assess the combined efforts of active, training-directed measures during rehabilitation as well as training in cognitive techniques for relaxation (5). A gender perspective is of special interest, baring in mind the results of paper III where women described a lack of time for themselves (103).

The professional mentor

In qualitative research the researcher sometimes presents the scientific results in the form of ideal types. Ideal types can be considered as stereotypes and simplifications of reality that can present pictures of our mutual experiences in which we can recognise ourselves. In paper I and II the participants' strategies were categorised in relation to the duty to work, and their descriptions of rehabilitation agents' way of working were categorised into different ideal types (80, 81). Ideal types of employers, social insurance officers and doctors were also described in a current thesis concerning sick-

listing and rehabilitation (20). An ideal type as described there was “the doctor as the familiar stranger”, a concept inspired by Giddens (114), who thinks that “Encounters with strangers or acquaintances are a balancing act with trust, tact and power.” (1990, p. 83). This description is in accord with the characteristics the interviewees wanted in the professional mentor in paper I (80). The professional mentor can be understood as a person who balances his/her knowledge with tact and manages his/her power as a professional in a non-paternalistic way by giving the client socioemotional support. According to the lay persons who were interviewed, a rehabilitation-promoting contact should contain the socioemotional qualities of being treated as a unique person, being treated as a person (i.e. a subject rather than an object), being treated with trust, being listened to, and being asked for opinions. Another way of expressing this elusive “good encounter” is by means of Hjalmar Gullberg’s words in the poem (“Människors Möte”) about an encounter (1). He describes the encounter of strangers on a deserted path....”To have a word or two makes it easy to go, All men’s meeting ought to be so.” Time for conversation and encounters with communication are important in all rehabilitation arenas, especially in the health care arena. A patient-centred consultation in which the patient’s emotions are taken into consideration, in contrast to an illness-centred, paternalistic consultation, does not need to take a longer time (67). On the other hand, it can naturally be necessary for rehabilitation agents to have time set aside for special training or supervision in order to maintain good communication when their professional work consists of a large number of meetings, such as is the case of doctors in health care and social insurance officers.

The relaxed worker

There is extensive research showing that occupational conditions are of great importance in rehabilitation after sickness absence due to MSD (6, 7, 21, 23). The results of paper II showed that the duty to work is present in all three rehabilitation arenas (81), but the possibility for the individual to manage this duty while doing paid work is naturally associated with other factors demonstrated to be of importance

regarding return to work after sickness absence due to MSD, such as socioeconomic conditions (7), type of occupation (22), and gender (8, 15). Perhaps the individual's control over his/her work is a further cog that is needed in order to understand the difficulties involved both in returning to work after sickness absence and the complexity of MSD. Having control over one's working is not the same as having control over paid work in the sense described by Karasek's "Job Strain" model (115). It also involves how the individual handles the structural demands in our society concerning the duty to work both during paid and unpaid time. There may be an increased risk for sickness absence in certain approaches toward working, such as in working more because of the needs of others than based on one's own needs. The relaxed worker in our study was able to handle the duty to work based on his/her own needs and circumstances; he/she developed flexibility so that it was possible to return to work even when that involved part-time work (81). Participation in occupational life by the women in the interview study was less than for men at the time of the interview. This was not our intention, but we think it provided a realistic picture of rehabilitation in Sweden. Women's subordination and the distribution of power in society results in different circumstances for women and for men both in occupational life and in private life (116). In earlier research this was presented as a partial explanation for women's high level of sickness absence (15, 32) and women's poorer chances for rehabilitation and return to work (20, 29, 37-41). The lay persons in the interview study also said that the possibility of influencing one's practical situation was poorer for women than for men. In addition, both men and women described the situation in the private arena as important regarding the rehabilitation process in sickness absence with MSD (103).

Domestic strain

A situation in private life described as constituting a hindrance in rehabilitation was domestic strain. An individual who consistently gives priority to the needs of others over those of her/his own runs the risk of falling into this trap, more because of others' needs than to satisfy his/her own life requirements. Earlier research has shown that

when others decide or when others' needs are given priority over one's own, this can result in negative consequences for women's health (44, 117, 118). The Swedish equityideal, where spouses divide the work in the home, is seldom attained (36). Earlier studies have suggested that men's power and women's subordination in our society affect rehabilitation (41, 117, 118). It is my contention that a good prerequisite for a rehabilitation process, both on an institutional level and an individual level, would be gender equity both in the occupational arena and the private arena. Further, it is probable that the degree of collaboration would increase if women and men had equal value and power. A lack of socioemotional support in the private arena can be a reason why the rehabilitation process does not move forward. Paper III showed that time for oneself was one of the factors that distinguished women from men. For example, childcare can conflict with physiotherapy or work training. Housework was something women seldom refrained from doing irrespective of the degree of MSD they had, while in many cases men with MSD had a spouse who could do the work (103). For many women domestic strain was a reality regardless of education or socioeconomic background. However, many women sick-listed with MSD have low educational levels and little chance to influence their situation either in private life or in the occupational arena. To the extent that positive changes in equal rights have occurred within the family in Sweden, this has applied to groups with higher educational levels (13, 36). Private life is a forgotten arena in rehabilitation and constitutes part of the undertaking for rehabilitation agents who want to work with individuals based on a holistic perspective (10, 45). The situation of women in the private arena needs to be further emphasised as a way to handle women's increasing sick-listing, where women with previous sickness absence for MSD have been shown to be an extreme high risk group regarding disability pensions. Eleven years from inclusion 28% of the women in the cohort studied in present thesis had been granted disability pensions (24).

Addiction or psychological problems that have not yet received attention can naturally constitute obstacles to rehabilitation in private life as well as in the occupational arena. Social isolation, mental health problems or addiction have been shown in earlier

studies to be risk factors that can increase the length of sickness absence and be predictive of a disability pension (38, 119). The few studies that have investigated the relationship between sickness absence and having been subjected to domestic violence and sexual abuse in adulthood indicate that there is a relationship between high levels of sickness absence and abuse (120). Some of the women in our interview study were victims of domestic violence. Lundgren (121) has described the victimisation process and social isolation is part of the male strategy to control the woman. This along with the woman's choice to avoid others in order to hide any wounds or other signs of violence might lead to a negative circle of isolation. Further, Hensing et al. (120) found in a Swedish population-based study that women with mental health problems had a greatly increased level of sickness absence due to MSD as compared with women without such problems. Studies have also shown a relationship between MSD and depression (122). In summary, it seems that sickness absence due to MSD can also involve mental health and social problems within the family.

The health care arena

Many of the lay persons described lacking sufficient support from rehabilitation agents in the health care arena (80). Earlier studies of long-term sick-listed persons have shown that contacts with rehabilitation agents where there is understanding and respect are important for both men and women during the rehabilitation process, but that there are also gender differences regarding the type of contact that is wanted (37). In paper IV we found sex differences in how the respondents rated their contacts with rehabilitation agents; women rated contacts as more supportive than men did. The women's higher ratings in their perceptions of contacts might be explained by their focus on relationships (123) and might also be connected to the way women adapt themselves to others. The content of women's and men's perceptions of contacts with rehabilitation agents ought to be further studied, which is also supported by the distant treatment men experienced from the social insurance officers. The majority of those

who work in the health care arena are women, which results in women usually meeting someone of the same sex. The situation is the opposite for men and can be of significance in their assessments. Similar sex differences in perceptions of contacts that were found in this middle-aged group (37-46 years) were reported in two Swedish studies (20, 71). However, these Swedish studies differ in part from international research. Sitzia (124) found in a review that in most studies patient sex did not affect the patient's satisfaction with care. Regarding the relationship between health and perception of contact, findings from one of the Swedish studies mentioned earlier showed that the higher participants rated their health, the higher they rated the quality of care (71). These results differ from those in paper IV where we did not find significant associations between the respondents' general health and their ratings of encounters. On the other hand, the results showed that respondents with neck/shoulder diagnoses rated contact with health care professionals as more empowering than persons with back diagnoses at the time of inclusion. Persons with neck/shoulder diagnoses have been shown to have worse prognoses than those with back diagnoses (25). The results indicate that the time period is important regarding lay persons' perceptions of contact with rehabilitation agents. Perhaps longer relationships, which arise when the client has more problems, also result in better contact.

Respondents with mental health problems were dissatisfied with contacts both with health care and the social insurance office. Sick-listed persons with mental health problems have previously been shown to be most dissatisfied with contacts with doctors as compared with other diagnostic groups (20). Results from the presented studies show that persons with mental health problems are in many cases dissatisfied with their contacts during rehabilitation. This can be due to a multitude of factors. Mental illness itself can be such that the individual experiences his/her world as negative or has a pessimistic view of the surroundings, which can be associated with the mental problems. Another explanation can be rehabilitation agents' lack of experience in handling this group of clients. In particular, social insurance officers lack adequate supervision and training in working directly with clients (59), and because of their new functions within rehabilitation they require more education and training (45).

Nor are doctors, as a group, adequately trained to handle sociocultural, cognitive and emotional manifestations that occur in the clinical encounter according to the national investigation (71). It can naturally be the case that persons with certain types of mental problems have a reduced work capacity resulting in difficulties during rehabilitation. Social competence, perseverance, self-assertion, etc., have come under increasing demand in the labour market, and in periods of failing mental health this competence can be difficult to maintain, which can in turn result in difficulties in obtaining a suitable job or job situation (18).

The importance of how persons are treated with respect to the outcome of rehabilitation cannot, however, be determined from paper IV, although previous studies emphasise the significance of the good relationship in medical treatment and rehabilitation in general and in MSD (67, 68, 70). Many studies also indicate that surrounding factors such as being treated well improve the outcome of medical treatment and rehabilitation measures (69). The results of paper IV showed that persons with physical problems are more satisfied with their contacts in the health care arena than persons with mental health problems. The results are contradictory as sickness absence and rehabilitation research indicates that women have a more negative outcome than men regarding return to work. According to our questionnaire data, women perceive that they get support from rehabilitation agents after sickness absence due to MSD, but we know from the interviews that both men and women sometimes experienced insults, distrust and insufficient support from professionals. Nevertheless, many lay persons do not give up, and search instead for some type of professional who can be supportive during part of or the entire rehabilitation process. For others, persons from the private arena constitute their only support, which places heavy demands on socially well-functioning family life and a circle of supportive friends.

Theoretical contributions

In many scientific areas the voices of lay persons have not yet come into focus. This thesis is a contribution towards increasing such knowledge development in social medicine and public health science. The lay perspective provides knowledge from the client's or patient's reference point. This type of research turns the hierarchy within medicine upside down by viewing the lay person as an expert. During the course of the study the lay perspective has sometimes been difficult to define due to the fact that the concept has previously been used in many areas such as the health care arena. For example, the persons who make decisions in social insurance committees are called laymen, as distinguished from professional rehabilitation agents such as social insurance officers, insurance doctors and attending doctors. However, the lay perspective is based on the individual's experiences as a private person and as a user. Scientific studies with a lay perspective can contain both quantitative and qualitative approaches and deal with different research levels. Quantitative questionnaires can be used, but an important issue here concerns whose experiences and perspective the questions in the instrument are based on. In paper IV our questions on contact with rehabilitation agents were formulated from statements by lay persons in an earlier study (37), which I contend is a basic requirement in studies conducted from a lay perspective. In such studies it is also important to retain to as great an extent as possible the participants' own words and opinions, which can be difficult since there is a requirement in research to compress and theorise the findings. However, GT is well suited for studies with a lay perspective, as aims similar to those described are found in the method (86). It has been my intention to retain the lay perspective not only during data collection but also during the analysis and writing phases.

In the study of rehabilitation after sickness absence due to MSD, this thesis conveys new knowledge concerning psychosocial factors. The three arenas in rehabilitation were brought out in papers I, II and III, which can increase the understanding of both rehabilitation agents and individuals regarding the complexity of rehabilitation after sickness absence. Two typologies were developed on empirical grounds both in papers

I and II. These can further contribute to increased understanding concerning rehabilitation in both this as well as other diagnostic groups with respect to the roles of the individual and rehabilitation agents in the rehabilitation process after sickness absence. For example, the different ideal types can offer guidance concerning the lay person's needs in relation to rehabilitation agents and provide ideas concerning how the individual can recognise and handle the duty to work.

Further, a hypothesis concerning domestic strain was developed that is based on three dimensions, distribution of work, distribution of responsibility, and quality of the marital relationship, with respect to socioemotional support. The importance of domestic strain for women's rehabilitation and health is closely related to conclusions from earlier studies of similar diagnostic groups (44, 117, 118). Our paper III contributes by emphasising the importance of socioemotional qualities in the marital relationship and by distinguishing between distribution of and responsibility for domestic work. In addition, our conclusions are also substantiated by the statements made by men. The men in our study described a picture that was in good agreement with women's descriptions of possibilities in private life for rehabilitation.

In paper IV the psychosocial aspects of rehabilitation after sickness absence due to MSD in the health care arena were further investigated by studying and providing knowledge about clients' perceptions of how they were treated. Contact in encounters is a neglected area in health care research, particularly regarding studies of contact with social insurance officers (71). In paper IV we found sex differences in perceptions of contacts in the age group that was studied (37-46 years), and clients' perceptions also differed according to diagnosis, length of sickness absence and mental health. These results indicate that health and sex are important regarding contacts in the health care arena and show the need for further studies in this area. In order to fulfil the goal of health care, further studies can facilitate the adaptation of encounters and treatment regarding differences in the life circumstances of individuals (71).

From a lay perspective, rehabilitation after sickness absence due to MSD contained three specific difficulties or dilemmas, which can also be called psychosocial processes, that can make return to work more difficult for the individual. In addition, there are also biological processes in illness, but these have not been the focus of this thesis. One of the dilemmas was associated with the individual's work identity, which became apparent via what I have termed the duty to work. A proposed way of handling this dilemma is the relaxed worker's strategy in which the person's control over his/her working and his/her own needs were driving forces for working. Another difficulty described by lay persons was domestic strain, where the needs of others were given priority over their own needs and where the individual's return to work was not given priority, particularly among sick-listed women with low educational levels. In this case the proposed measures were to minimise domestic strain by increasing socioemotional support from the partner and encouraging a more equal distribution of work and responsibility in the home. The third difficulty described was a lack of socioemotional support from rehabilitation agents in the health care arena. The proposed measure was to provide professional mentors who are prepared to listen and contribute professional knowledge to these sick-listed persons and to be a connecting link in the rehabilitation process. The hypothetical model of promoting processes in rehabilitation after sickness absence due to MSD is illustrated in figure 5.

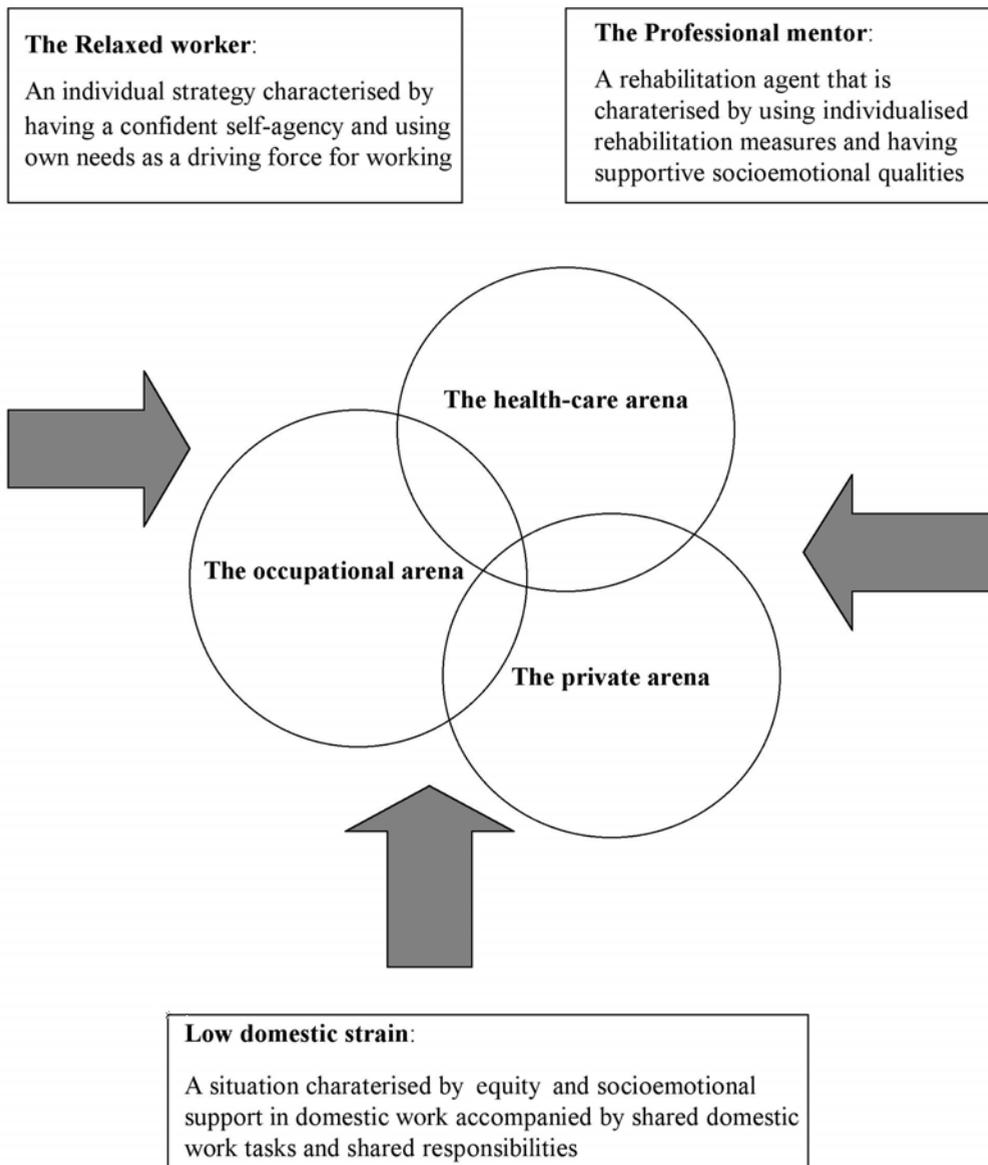


Figure 5. Towards a model of promoting processes in rehabilitation after sickness absence due to musculoskeletal diagnoses based on lay persons' descriptions obtained by interview in 1997-1998

Future research

Within the Nordic welfare system additional research is needed focusing on social activity (16, 72), where rehabilitation is seen as a process involving many parties (125). More studies of dialogue and interaction between lay persons and rehabilitation agents are needed. Interviews conducted in connection with this type of dialogue can provide additional knowledge about which issues are of significance from an interactionist perspective regarding the rehabilitation process. In this thesis the lay perspective concerning contacts in rehabilitation was investigated, which naturally sheds light on only part of the multifaceted process involving rehabilitation. Other aspects include rehabilitation agents' perceptions of encounters with clients, employers' experiences, and if relatives' perceptions of the rehabilitation process shape and influence interactions and relationships in the private arena. It is of particular importance to shed light on the rehabilitation process as a co-operative process that takes place over time. Research can also focus on demonstrating the way in which implicit evaluations become important in contacts between different actors in rehabilitation. An example concerns how rehabilitation actors perceive their own role as communicators and conveyors of the duty to work, and the implicit and explicit demands the professional places on himself/herself and on the client regarding working.

Through additional research, specific gender differences that need to be considered in rehabilitation can be identified, such as how equity and distribution of work in the home contribute to the possibility people have to remain in the workforce and to give priority to their health. The importance of the private arena regarding return to work for both men and women is an important area of research. Paper III can be seen as a first step in such a line of research where testing of our domestic strain hypothesis in different diagnostic groups can be a second step. In a currently ongoing study, the intention is to test the domestic strain hypothesis, operationalised in a quantitative longitudinal study, via quality in the marital relationship and stipulations in the home concerning unpaid work. The duty to work should also be studied in both the private

arena and the occupational arena. How do men and women handle this duty in relation to work at home, the family, leisure time, and paid work? Moreover, our results support the importance of further studies with a gender perspective, especially concerning marginalised groups and their contacts with the health care arena.

An important goal of my research has been and continues to be to develop qualitative research in social medicine and public health science that sheds light on the individual's experiences. This is needed as a complement to research that mainly collects data on the group level. In the comprehensive '11-year follow-up of young persons on sick leave', focus groups have been formed regarding lay experiences of sickness absence with MSD and rehabilitation (82, 83). Further elaboration of already collected data could involve meeting our participants in the interview studies again and discussing and further developing the results with them (126). This involves more action-directed research with the aim of changing the situation of vulnerable and subordinate groups, something in good agreement with a feministic research approach, which is also possible to combine with social medicine and public health science research (127). Developing knowledge and contributing to change involves giving names to experiences and making them explicit (128). If the individual's experiences are not given names, they cannot be communicated between individuals. The experience becomes invisible, which has been described as an effective technique for preserving subordination (129). I maintain that the language of professionals is not adequate for naming lay experiences and that a holistic view of rehabilitation after sickness absence due to MSD requires knowledge from a number of levels of data and different perspectives, where additional knowledge is allowed to enrich the different perspectives. Continued research from a lay perspective is needed to further complement current knowledge concerning sickness absence with MSD.

Methodological considerations

With an empirically based theory the researcher begins with an inductive approach by studying a phenomenon without prior assumptions, instead of starting from a formulated hypothesis. In our study this was attained in that I initially had no professional knowledge concerning rehabilitation from MSD, was not acquainted with current research, and instead planned the interview study using experiences from the pilot study and advice from the research group. The advantage of lacking prior knowledge within the area was having a more unbiased starting point regarding what the interviewees were expected to say. In addition, it was more natural to ask detailed questions about what was unknown to me. A disadvantage was that the interviewees expected the interviewer to be knowledgeable about places and routines in medical treatment and work-related rehabilitation.

An investigative approach such as factor analysis was well suited for studying the clients' perceptions of contacts. Factor analysis is an explorative method that is in many ways similar to a qualitative approach, as it is possible for the researcher to select and name recurrent patterns in the material. The questionnaire, which was designed to collect additional knowledge about perceptions of contact with rehabilitation agents, was tested for the first time in paper IV and gave detailed information about how risk groups of respondents rated the contact. The content of the questions was in good agreement with the results of paper I. Balance may have been lacking in the instrument concerning positive and negative statements, and some additional negative statements could be added regarding perceptions of contact, such as questions about whether the respondents felt insulted or mistrusted in their contact with rehabilitation agents.

Combining methods of analysis is enriching for the researcher and provides a broader knowledge base, which is reflected in the studies comprising this thesis. For example, paper II (81) was inspired by discourse analysis, although the basis for the analysis of the self-presentations in the interview material was GT. It is very important to build

bridges between different types of research approaches, which is work in which researchers in social medicine are often forerunners (130, 131). GT has, however, been the overall method used in this thesis (86) where the requirements for theory formulation have forced the analyses to move toward creation of empirically based models. A positive aspect of the results from the interview study is that the dilemmas and difficulties presented can also be said to apply to many levels of data, despite the fact that the investigation dealt with only one level of data, which is a criticism that can be directed toward GT studies (16). I contend that the self and its experiences, but also the effect of social context and cultural norms, can be discerned via the duty to work and the significance of gender, where women comprise a group that is subordinate in most cultures (116).

Throughout the research process I have repeatedly reflected over how I as a researcher have influenced my results. A different interviewer probably would occasionally have obtained other data and presented a partially different description of lay experiences. A nurse familiar with medical rehabilitation would have been able to follow up other clues and would possibly have focused on how the individual managed his/her pain, for example. On the other hand, I contend that the psychosocial aspects of lay experiences concerning rehabilitation, factors that have been insufficiently developed in previous research, have been studied in this thesis. Sickness absence with MSD is a public health problem of large proportion in occupationally active age groups. The thesis contributes knowledge that can be of relevance for researchers, clinicians in rehabilitation, students and persons afflicted with MSD.

A frequent criticism of interview and questionnaire studies is that participants want to give socially acceptable answers and are less willing to express critical points of view (132). With regard to the interview study we think it was easier for the interviewees to convey criticism to an interviewer not previously involved in health care and rehabilitation. The questions on perceptions of contacts spanned a period of eleven years and had to do with contacts in general with rehabilitation agents in health care and the social insurance office. This probably also made it easier to express criticism

in the questionnaire, rather than if the question had been directed toward a specific rehabilitation agent. Time is somewhat of a problem in both the questionnaire study and interview study. It may have been difficult to remember what happened and how a contact was perceived at the timepoint in question. However, the retrospective answers reflect how lay persons talk about and rate the contacts in the rehabilitation process, irrespective of what actually happened. There is also a causality problem in the studies as all of them are cross-sectional studies, and the cause and effect are naturally more complex than what is presented with this type of data. However, the lay understanding of cause and effect is of extreme importance regarding the clinical reality in the meeting with rehabilitation agents. I believe that the results clearly elucidate the studied group's experiences with rehabilitation and contact with rehabilitation agents after sickness absence due to MSD.

Specific conclusions

Paper I: Rehabilitation after sickness absence due to MSD occurs in three arenas, the health care arena, the occupational arena and the private arena. In the health care arena lay persons emphasise the importance of socioemotional support from rehabilitation agents and stress the need for individualised measures.

Paper II: In the lay persons' self-presentations, the duty to work emerged via idiomatic phrases. This work identity contained cultural values and dilemmas that were described as hindering and promoting in relation to rehabilitation. A typology was developed that illustrates control and driving force in relation to the duty to work. A strategy comprising a sense of control and direction over one's own work and being driven by one's own needs was proposed as promoting return to work after sickness absence due to MSD.

Paper III: A hypothesis concerning domestic strain was developed building on quality in the marital relationship and distribution of work and responsibility in the home,

where the experience of domestic strain seemed to hinder return to work, particularly for sick-listed women. The private arena was described as a significant context for rehabilitation by both men and women, and it needs further study regarding both MSD and other diagnostic groups.

Paper IV: In clients' perceptions of contact with rehabilitation agents, three latent dimensions of treatment were found: supportive, distant and empowering. Clients' ratings of these dimensions were associated with sex, disability pension status, diagnosis and mental health. This indicates that clients are treated differently depending on health and sex, or that gender and health are associated with the individual's expectations regarding contact with rehabilitation agents.

General conclusions

Rehabilitation after sickness absence due to MSD as seen from a lay perspective occurred in three arenas, the health care arena, the occupational arena and the private arena, where quality of the marital relationship as well as relationships with rehabilitation agents and persons at work and in private life were of significance regarding the rehabilitation process. This thesis also showed that both sex and health were important factors regarding how lay persons' perceived contact with rehabilitation agents during the rehabilitation process following sickness absence due to MSD.

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SVENSKT ABSTRAKT

-Att främja återgång i arbete – Lekmäns erfarenheter av rehabilitering efter sjukfrånvaro i rygg-, nack- eller skulderdiagnos

Introduktion: Rörelseorganens sjukdomar är den största bakomliggande orsaken till sjukfrånvaro från arbetet. Trots forskning och rehabiliteringsåtgärder har inte sjukfrånvaron för dessa åkommor minskat utan ökat inte minst bland kvinnor. Ett eftersatt forskningsområde rör klienters egna erfarenheter av vård och rehabilitering, det vill säga kunskap genererad ur ett lekmannaperspektiv. Avhandlingen behandlar lekmäns syn på och erfarenheter av rehabilitering efter sjukfrånvaro för rygg-, nack- eller skulderbesvär (RNS-besvär). **Syfte:** Det övergripande syftet var att från ett lekmannaperspektiv utforska hindrande respektive främjande processer för rehabilitering efter sjukfrånvaro i rygg-, nack- eller skulderdiagnos. Specifika syften var att undersöka vilka erfarenheter lekmän har av rehabiliteringsaktörer och rehabiliteringsaktiviteter (delstudie I), hur de beskriver sig själva och sin erfarenhet i förhållande till arbetande (delstudie II), undersöka vilken betydelse privatlivets arena kan få för återgång i arbete (delstudie III) och att studera hur klienter med erfarenhet av sjukfrånvaro för RNS-besvär uppfattar bemötandet från rehabiliteringsaktörer (delstudie IV). **Metod:** Studiepopulationen i de fyra delstudierna ingår i en kohort av personer boende i samma kommun vilka 1985 var 25-34 år och sjukskrivna i rygg-, nack- eller skulderdiagnos mer än 28 dagar, n=213. Under 1995 besvarade 148 personer ur kohorten en enkät och 1997-98 blev 20 av dessa personer intervjuade angående sina erfarenheter av rehabilitering. I delstudierna I, II och III användes den kvalitativa metoden Grounded Theory, vars fokus är att skapa en empiriskt grundad teori för det studerade området. Datainsamlingen var strategisk och analysen av de bandade intervjuerna skedde kontinuerligt. I delstudie IV studerades hur tidigare sjukskrivna upplevde bemötandet från professionella rehabiliteringsaktörer inom hälso- och sjukvården och försäkringskassan. I denna delstudie användes faktoranalys och multipel regressionsanalys som metoder för att analysera data. **Resultat:** De olika delstudierna belyste lekmäns erfarenheter från medicinska, sociala och arbetslivsinriktade åtgärder inom rehabilitering, deras erfarenheter av relationer till

rehabiliteringsaktörer och familjemedlemmar i förhållande till rehabilitering samt deras självpresentationer. I **delstudie I** framkom att lekmännens beskrivningar rörde tre arenor; nämligen hälso- och sjukvårdsarenan, arbetslivets arena respektive privatlivets arena. Från dessa arenor beskrevs dilemman och svårigheter såsom att hantera plikten att arbeta, att uppleva hemmastress samt erfarenheten av att sakna socioemotionellt stöd från betydelsefulla personer under rehabiliteringsprocessen. Ur de intervjuades beskrivningar från hälso- och sjukvårdsarenan framträdde några idealtyper av rehabiliteringsaktörer, vilka vi benämnt rutinbyråkraten, den empatiska administratören, den distanserade teknikern och den professionella mentorn. Den sistnämnda efterfrågades och beskrevs som en person som kunde ge socioemotionellt stöd, hade sakkunskaper och kunde fungera som en sammanhållande länk under rehabiliteringsprocessen. Resultaten från **delstudie II** visade att de intervjuade i sina självpresentationer uttryckte en plikt att arbeta och att det fanns skillnader i hur de intervjuade hanterade denna plikt. Självpresentationerna innehöll beskrivningar av arbetandet som en del av den personliga identiteten och kunde sammanfattas i idealtyperna den spände arbetaren, arbetshesten, arbetsnarkomanen och den avspände arbetaren. Den sistnämnde använde en strategi, som kan antas vara rehabiliteringsfrämjande, genom att individen själv hade kontroll över sitt arbetande och arbetade för att tillfredsställa egna behov snarare än andras. Privatlivets arena var fokus för **delstudie III**. Där framträdde skilda erfarenheter från de kvinnor och män som intervjuats. Kvinnor beskrev hur ansvaret för hem- och hushållsarbete sällan gav utrymme för egen tid inklusive rehabilitering. Män beskrev oftare att de hade tillgång till egen tid, vilken kunde brukas till personliga fritidsaktiviteter och rehabilitering. Några intervjuade kvinnor beskrev att de saknade socioemotionellt stöd från sin partner och att de hade en hög grad av ansvar för hemarbetet, vilket syntes vara ett hinder för återgång i arbete efter sjukskrivning. Kvinnorna hade i likhet med flertalet av de intervjuade männen dessutom kort utbildning, vilket kunde försvåra möjligheten till alternativa sysselsättningar på arbetsmarknaden. Med utgångspunkt i intervjuerna utvecklades en hypotes kring hemmastress vilken är relaterad till fördelningen av hemarbetet, fördelningen av ansvar för hemarbetet samt kvalitén i relationen med partnern. I **delstudie IV** behandlades klienters upplevelser av bemötande från

rehabiliteringsaktörer inom hälso- och sjukvården samt försäkringskassan. I respondenternas skattningar återfanns tre latenta dimensioner av bemötande, nämligen stödjande, distanserat och jag-stärkande. Kön, förtidspension, psykisk hälsa och diagnosgrupp visade signifikanta samband med hur dessa dimensioner skattades. Kvinnor uppfattade bemötandet från båda typer av rehabiliteringsaktörer som mer stödjande än män. Kontakterna med försäkringskassan skattades högre av personer som hade förtidspension än de som återgått i arbete. Män skattade i stället dimensionen distanserat bemötande högt för kontakterna med rehabiliteringsaktörer inom försäkringskassan. Respondenter med psykiska besvär skattade bemötandet som distanserat för båda typerna av rehabiliteringsaktörer, men även bemötandet från hälso- och sjukvården skattades lågt på den stödjande dimensionen. Slutligen skattade respondenter med nacke/skulderdiagnos bemötandet från rehabiliteringsaktörer inom hälso- och sjukvården som mer jag-stärkande än personer med ryggsdiagnos.

Slutsatser: Rehabilitering efter sjukfrånvaro med RNS-besvär försiggår ur ett lekmanperspektiv på tre arenor; hälso- och sjukvårdens arena, arbetslivets arena och privatlivets arena, där kvalitén i relationerna såväl med rehabiliteringsaktörer som med personer i arbetsliv och privatliv beskrivs vara betydelsefulla för rehabiliteringsprocessen. Denna avhandling visar vidare att både kön och hälsa får betydelse för rehabiliteringsprocessen, vilket återspeglades i de skilda erfarenheter lekmän rapporterade av sina kontakter med rehabiliteringsaktörer.

Appendix 1. Lay persons' experiences of rehabilitation measures after sickness absence in 1985 due to musculoskeletal diagnoses; self-reported data from individual interviews in 1997-1998.

*Interviewees	Physiotherapy	Vocational Rehabilitation	Other Measures
Berit (w7)	yes	yes	
Berta (w1)	yes	yes	
Bert (m9)	yes		
Elin (w4)	yes		
Gerd (w5)	yes	yes	back surgery
Kim (m8)	yes	yes	
Klara (w10)	yes	yes	
Kurt (m4)	yes	yes	chiropractic
Leif (m6)	yes		back surgery
Lotta (w6)	yes		
Max (m7)	yes	yes	
Mia (w9)	yes		massage
Hans (m2)	yes		
Per (m10)			
Bob (m1)	yes		
Rut (w3)	yes	yes	massage
Stina (w8)	yes		
Sune (m3)	yes	yes	
Svea (w2)			naprapathy
Tom (m5)	yes	yes	

*Fictitious names and numbers, w=woman and m=man.