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**CO-OPERATION IN
VOCATIONAL REHABILITATION
- METHODS IN
MULTIPROFESSIONAL CROSS-
SECTOR GROUP MEETINGS
AND EFFECTS ON
EMPLOYMENT**

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ABSTRACT

The overall aim of the thesis was to acquire an increased knowledge of co-operation between different rehabilitation actors in the provision of vocational rehabilitation (VR). One aim was to investigate the differences in effects on employment between clients rehabilitated according to a systematic multi-professional cross-sector co-operation model (SMCVR) and clients subjected to conventional co-operation. A second aim was to investigate the communicative process in the rehabilitation group meetings and female clients' experiences during the VR process.

The studies used material collected from two intervention projects, enabling natural experimental designs. Fifty-one unemployed clients with various work limitations, who underwent intervention with SMCVR I model during a period of 18 months, were individually matched into pairs using records from the Swedish Public Employment Service. Three matched comparison groups, representing the conventional way of co-operation between VR actors, were formed at local, county, and national levels. A distinctive feature of the SMCVR I model was that the client's rehabilitation was planned by multi-professional cross-sector rehabilitation groups consisting of the client, a rehabilitation official from the social insurance office, an occupational therapist from a primary care unit, an employment counsellor from the county employment office and a social worker from the municipal social administration office. The main effect variable was the number of persons in employment. ANOVA for repeated measures for binary responses and a logistic regression model was used. The VR actors involved in the SMCVR II model were a public employer (a municipality), the social insurance office and an occupational health service. The material consisted of 22 systematic multi-professional cross-sector rehabilitation group meetings with clients who underwent intervention (20 women, 2 men). An observer attended each meeting to observe communication; each meeting was tape-recorded and subsequently transcribed. The analysis was based upon these transcriptions, using content analysis.

A larger proportion of clients subjected to this particular form of developed co-operation studied (SMCVR I) became employed during the first 2 years compared with similar clients in neighboring municipalities or among those in a national register; the higher employment rate showed a peak two years after closure of the intervention; the chance of becoming employed after rehabilitation in the 2-year follow-up was roughly twice as high as that in both comparison groups with conventional co-operation. There was a difference between the study group, the national and county comparison groups on 6 measuring occasions over the period from 1 year following closure of the intervention to the 6th year after. The logistic regression model showed that the clients with mental/social work limitations were at a greater risk of being unemployed after VR than clients with somatic work limitations. In the SMCVR II model the topics discussed primarily concerned the client's situation regarding the field of medical and health care, previous and new work, and social insurance and none of the professionals dominated the meetings. The clients had the highest percentage of utterances. Clients were allowed ample scope to address their own requirements, thoughts and feelings. 'Adaptation' was a pervading theme in the discussions during the observations. The 'importance of work' for the clients emerged as a sub-theme; positive and neutral aspects occurred. The conflict between health and work was an ever-present theme of substantial importance for VR. Support from the employer and fellow workers during the client's return to work was important. This support appeared as both a positive and a negative force in the VR.

In conclusion, systematic multi-professional cross-sector co-operation – which can be performed without any changes in law – leads to seeing a greater proportion of clients in employment over a long period of time compared with "co-operation as usual". It is possible to achieve a creative communicative climate in multi-professional cross-sector rehabilitation group meetings, which can favor good results in VR.

Keywords: Co-operation, communicative process, comparison groups, effects, employment, integration, multi-professional rehabilitation, cross-sector, participant observation, sick-leave, unemployment, vocational rehabilitation, qualitative and quantitative.

CONTENTS

ABSTRACT	3
ORIGINAL PUBLICATIONS	5
INTRODUCTION	6
THEORETICAL FRAME	6
<i>Abbreviations</i>	7
<i>Co-operation, collaboration, co-ordination</i>	8
<i>Integration</i>	8
<i>Conventional co-operation</i>	8
<i>Theoretical perspectives on co-operation</i>	9
<i>Multidisciplinary or interdisciplinary teams</i>	11
VOCATIONAL REHABILITATION ACTORS IN SWEDEN	13
<i>The client</i>	13
<i>The employer and occupational health services</i>	13
<i>Health and medical services</i>	14
<i>The Swedish Social Insurance Agency (SSIA)</i>	14
<i>The Swedish Public Employment Service (SPES)</i>	14
<i>The Municipalities</i>	15
THE DEVELOPMENT OF CO-OPERATION IN VOCATIONAL REHABILITATION IN SWEDEN	15
PROBLEM LIMITATION	17
AIMS	18
<i>Specific questions</i>	18
MATERIAL AND METHODS	20
ETHICAL CONSIDERATIONS	20
INTERVENTIONS	20
<i>SMCVR I</i>	20
<i>SMCVR II</i>	21
MATERIAL AND METHODS OF STUDY I AND IV	22
<i>Statistics</i>	23
MATERIAL AND METHODS OF STUDY II AND III	24
RESULTS	25
<i>Study I and IV</i>	25
<i>Study II and III</i>	27
DISCUSSION	30
DISCUSSION OF RESULTS	30
THEORETICAL ASPECTS OF CO-OPERATION BETWEEN ORGANISATIONS IN VR	34
METHODOLOGICAL ASPECTS	36
SUMMARY OF MAJOR RESULTS AND CONCLUSIONS	37
ACKNOWLEDGEMENTS	39
REFERENCES	41

ORIGINAL PUBLICATIONS

This thesis is based on the following studies, which will be referred to in the text by their Roman numerals:

I

Jakobsson B, Bergroth A, Schüldt K & Ekholm J (2005). Do systematic multi-professional rehabilitation group meetings improve efficiency in vocational rehabilitation? *Work*, 24,279-90.

II

Jakobsson B, Schüldt U, Selander J, Bergroth A & Ekholm J (2002). Improved co-operation in vocational rehabilitation with systematic rehabilitation group meetings. *Disability and Rehabilitation*, 14, 734-740.

III

Jakobsson B, Bergroth A, Schüldt K, Ekholm J & Svedlund M (2008a). Multi-professional vocational rehabilitation group meetings with female clients – a qualitative study. *Work*, 30, 413-21.

IV

Jakobsson B, Bergroth A, Ekholm J & Schüldt Ekholm K (2008b). Improved employment rate after multi-professional cross-sector co-operation in vocational rehabilitation. A six-year follow-up with comparison groups. Submitted to *International Journal of Rehabilitation Research*.

INTRODUCTION

This thesis focuses on co-operation in vocational rehabilitation in Sweden between professionals who deal directly with rehabilitees, i.e. their clients.

In Sweden, as in several other European countries (Ds 2003:63), the percentage of people of working age, who are excluded from the labour market, is high. The Swedish population of around nine million people includes a workforce (18-64 years) of approximately five million. In December 2006 554 897 people were receiving disability pensions (401 115 full time) while 194 500 had been sick-listed for more than 29 days (Försäkringskassan 2008a, 2008b). 277 561 people were unemployed, including participants in activities organised by unemployment offices (Arbetsförmedlingen 2008a). Around 80 000 persons aged 20-64 were estimated as being dependent on social assistance for longer periods (Ds 2003:2).

Several public investigations conclude that inefficiency in co-ordinating rehabilitation measures is causing problems in the process of resuming work (SOU 1958:17, 1988:41, 1996:85, 2000:78, 2007:2). The groups mentioned above, i.e. those that depend on more than one rehabilitation actor, are those primarily in need of co-ordinated rehabilitation. Around 70 000 –100 000 are estimated to have more advanced needs for co-ordinated rehabilitation (Socialstyrelsen 2001, Ds 2003:2).

The majority of disability pensioners (60% 2006) and long term sick-listed (63% 2006) people in Sweden were women who worked mainly in the public sector, where their jobs were quite often characterized by low wages with a high physical work load and psychosocial strain at the work place. These characteristics indicate a group that has few possibilities of leaving a hazardous job for a less physically demanding one (Karlqvist et al 2003). The situation for women during rehabilitation can be more complicated than for men, partly because women often take considerably more responsibility for home and family, which can cause difficulties when co-ordinating rehabilitation (Hamberg et al 1997, Medin et al 2003).

THEORETICAL FRAME

The word ‘rehabilitation’ comes from the Latin meaning a “restoration of appropriateness”. Different definitions of vocational rehabilitation (VR) currently exist in Sweden (Trygged 1998, Selander 1999, Marnetoft 2000, Gobelet & Franchignoni 2006, Gobelet et al 2007). In the decree SFS 2000:628, section 11, VR is described as follows: ”occupational rehabilitation means that those in need of specific support are offered investigation, counselling and rehabilitative measures or measures in preparation for work”. Some authors suggest the definition: “... medical, psychological, social and occupational activities aiming to re-establish, among sick or injured people with previous work history, their working capacity and prerequisites for returning to the labour market, i.e to a job or availability for a job” (Selander 1999, Gobelet & Franchignoni 2006). The above definitions focus on the process that prepares a person for reinstallation on the labour market. Other definitions merely point out that the goal of vocational rehabilitation is for the rehabilitee to become employed or “to enable a disabled person to secure and retain employment” (ILO 1998). When focusing on the goal of becoming employed it is not necessary to define different forms of VR, all activities

that help a person to become employed are involved. An advantage of this definition is that the ‘vocational’ part of rehabilitation is not clearly visible in every case. Different parts of rehabilitation (medical, social, and psychological) often run in parallel. If we accept that employment is always the goal, VR spans the other forms of rehabilitation, and could consequently be a way of capturing the whole scenario from medical treatment of the injury/sickness until the person is back at work. When the process is in focus it underlines the need of support of the clients during this complicated process (Melin 2003, Millet 2005).

The process in vocational rehabilitation for both employed and unemployed people is described in Figure 1. The process starts at work, or with an unemployed person who is prepared to take a job before disease or injury intervenes. As a first step the person needs medical care but early in the process, when activity becomes limited rehabilitation should commence; in the first phase more in the form of medical rehabilitation, to be followed in the final phase with more vocational rehabilitation. The figure illustrates the need to plan and coordinate the rehabilitation measures continuously during the rehabilitation process in order to attain effectiveness for the individual.

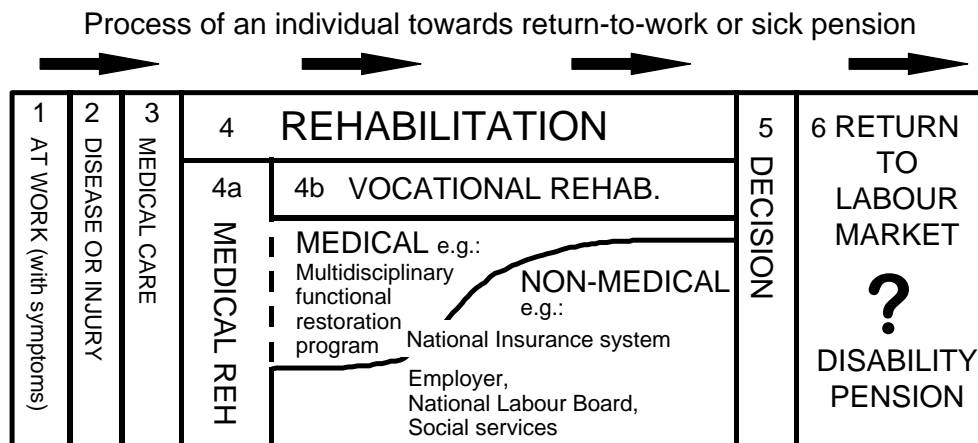


Figure 1. The vocational rehabilitation process from disease or injury leading either to a return to the labour market or receiving a disability pension. Modified by Ekholm et al. (2002) from the original after Berglind et al (1997).

ABBREVIATIONS

AFL: Swedish National Insurance Act.

AML: Swedish Work Environmental Act.

SMCVR I: Systematic Multi-professional Cross-sector Vocational Rehabilitation, study I, IV.

SMCVR II: Systematic Multi-professional Cross-sector Vocational Rehabilitation, study II, III.

SPES: Swedish Public Employment Service (in Swedish "Arbetsförmedlingen").

SSIA: The Swedish Social Insurance Agency (in Swedish "Försäkringskassan").

VR: Vocational Rehabilitation.

CO-OPERATION, COLLABORATION, CO-ORDINATION

The Oxford English Dictionary (2nd Edn., 1994) defines co-operation as “...working together towards the same end, purpose, or effect...”. Co-operation and its near-synonym collaboration presupposes co-ordination, i.e. acting “in combined order for...a particular result” (op.cit.). Co-ordination goes further than co-operation, in that it presupposes common rules and that goals and activities are created together: co-operation allows the parties to keep their original goals and activities (Rogers & Whetten 1982).

For the purposes of the present work, *co-operation* (in Swedish ‘samverkan’) signifies a situation where two or more organisations systematically design their decision-making or work processes so that those working in them work together towards a mutual goal; *collaboration* (in Swedish ‘samarbete’) that people communicate within or between organisations to achieve common goals, and *co-ordination* (in Swedish ‘samordning’) that different systems are (brought into) in concurrence. Co-ordination can relate to financing, political decisions, administrative management, rules and regulations in various benefits systems, functional support, etc. The Swedish equivalents of these words have been discussed and defined in several public Swedish investigations (SOU 1996:85, SOU 2000:78, Socialstyrelsen 2001) with by no means full agreement as to their meanings and connotations.

INTEGRATION

Some authors use the term integration in the sense that it can be applied to a whole class of phenomena, for instance the processes referred to by ‘merger’, ‘co-ordination’, ‘co-operation’ and ‘collaboration’ (Hvinden 1994, Øvretveit et al 1997, Lindquist & Grape 1999, Hultberg 2005, Axelsson & Axelsson 2006, Axelsson & Axelsson 2007, Kärrholm 2007). Axelsson & Axelsson (2006, p 79) state that: “Vertical integration takes place between organisations or organisational units on different levels of a hierarchical structure, while horizontal integration takes place between organisations or units that are on the same hierarchical level or have the same status. The different forms of inter-organisational integration have different emphasis on vertical and horizontal integration.”

CONVENTIONAL CO-OPERATION

Co-operation between actors in VR can be complicated, often involving more than two rehabilitation actors. Cross-sector co-operation and inter-organisational activities in local settings are considered to make VR more efficient. The conventional way of cross-sector co-operation is to arrange meetings as required; conversely co-operation may be institutionalised so that the rehabilitation actors meet regularly, perhaps weekly (SOU 1996:85, SOU 2000:78, Jakobsson et al 2005). In conventional rehabilitation the client personally has considerable responsibility to co-ordinate different measures, “looking after the problem” (SOU 2000:78).

The client may have contacts with several staff members in the same organisation, e.g., in the health services, physicians, occupational therapists etc; which implies even more possible contacts than shown in figure 2.

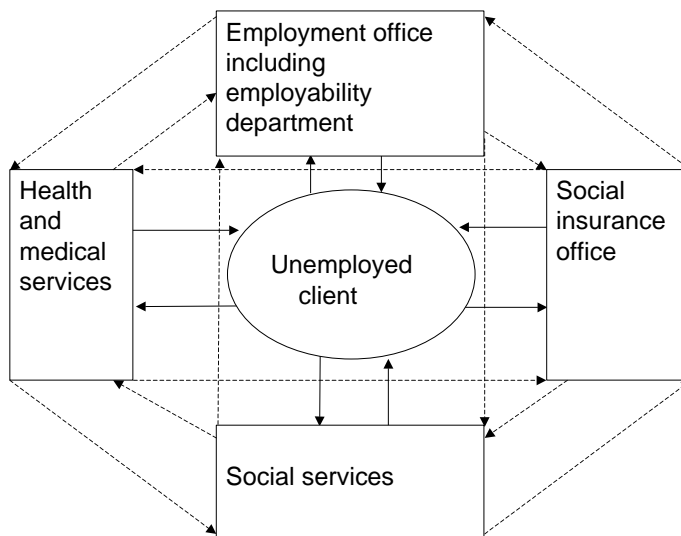


Figure 2. The aim of this figure is to illustrate the complicated pattern of various co-operations applicable in a conventional vocational rehabilitation model, when the client is obliged to arrange her/his own encounters. The peripheral arrows indicate that rehabilitation actors may communicate with each other without involving the client (Jakobsson et al 2008b).

THEORETICAL PERSPECTIVES ON CO-OPERATION

Aims and goals

Westrin (1987) compared conditions in ten countries (Belgium, Canada, Finland, Great Britain, Israel, The Netherlands, Norway, Poland, Sweden and West Germany), when studying co-operation between social and medical organisations for the years 1980-81. The most striking finding was the substantial differences between the ideals manifested in political documents and the reality in the field: co-operation between the rehabilitation actors was less than expected in the documents. According to Westrin, this poor co-operation may be a result of vagueness in the formulation of aims. In the studies several factors that could facilitate co-operation were elicited. The most important was a need for common goals, working methods, co-operation ideology and, to some extent, access to similar staff resources (skills/competence). Other researchers have also stressed the importance of common aims and goals between rehabilitation actors (Hvinden 1994, El Ansari et al 2001, Bronstein 2003, Hultberg et al 2003).

Interdependence between rehabilitation actors

Hvinden (1994) studied relations between social services departments and national insurance offices in Norway and relationships between social security offices and social work area offices in Scotland. Hvinden uses the term 'horizontal integration', integration on the same level, and the studies focused on lower-level rehabilitation actors (those who deal directly with clients). According to Hvinden several authors have suggested that such integration must include three conditions: 1) mutual awareness concerning common problems, 2) compatibility of perception and goals, and 3) interdependence between organisations. Mutual awareness is made possible by direct visibility and face-to-face contact. Compatibility of perceptions and

goals refers to the degree of agreement on factual premises. Interdependency between rehabilitation actors is connected with differences, different specialists possessing different knowledge which makes them complementary and, if the rehabilitation actors are alike they have nothing to gain from the integration (Bronstein 2003).

Leadership

The importance of leadership in cross-sector co-operation in VR is one of the main subjects stressed by several researchers. Stenberg (1999) found that the management is a guarantee for the existence of formalised co-operation in VR. Bronstein (2003) means that a collective leadership is the ideal in this field. Axelsson & Axelsson (2006) mean that “Such an organisation is fragile and volatile, however, which means that it needs a lot of management support in order to survive”. Kärholm et al (2006) and Jakobsson et al (2005) found that a co-operative model can exist without specialized legislation in a Swedish context, if the rehabilitation actors take collective responsibility.

Managing clients

Øvretveit (Øvretveit et al 1997) suggests a division between network teams and integrated inter-professional teams. The former is characterized by separate “entry doors” and “exit doors” for clients, thus responsibility for clients lies with the separate organisation and the function of network meetings is to refer the client to the most appropriate instance. In the integrated inter-professional team model there is a “one-door entry” followed by case allocation. However, the professions decide separately when a case should be concluded, and all the professionals serve as team leaders. Øvretveit also distinguishes between the “collectively responsible team” (CRT) and the “co-ordinated professional team”(CPT). “CRTs - teams in which members are accountable as a group for pooling and using their collective resources in the best way to meet the most specific needs of the population they serve” and “in CPTs, different professions have their own formally-agreed priorities and are financed and managed to provide specific services” (Øvretveit et al 1997, p 14).

Organization

Mandell & Steelman (2003) mean that the new forms of networks, collaborations, partnerships as inter-organizational innovations have multiplied during recent years, which leads to the fact that researchers as well as practitioners use different labels or concepts in describing these co-operative innovations. Further they mean this prohibits reliable communication and understanding of these new models of *co-ordination*.

Table 1 is an attempt to illustrate how different forms of co-operation can be designed in VR. The two models studied in this thesis, had a design which included extensive co-operation, both horizontal and vertical. The “Faros projects” was at a national level between SPES and The Swedish Social Insurance Agency, a project designed for people on long term sick-leave who were unemployed, or employed people who ran the risk of losing their job. This project is now a permanent activity (Försäkringskassan 2007) and is sanctioned at top level in the public organisations in question. At local level the designs differ, depending on how much the organisations are integrated; in the Table 1 “Faros” is therefore placed in two squares.

Table 1. Cross-sector co-operation in vocational rehabilitation. Extensive and limited horizontal and vertical co-operations. Vertical extensive level includes a collective leadership that includes leaders from all participating organisations at horizontal level.

	Extensive vertical co-operation	Limited vertical co-operation
Extensive horizontal Co-operation**	SMCVR I (Beta model) SMCVR II (Stockholm project) “FAROS” project*	Clinic based multi-professional co-operation
Limited horizontal Co-operation	“FAROS” project*	Conventional co-operation

*The “FAROS” project could be placed in two squares depending on design on local level.

** Extensive horizontal level means that professionals, who meet the clients directly have regular meetings (which also include the clients).

Disability management can also be seen as a “co-operative model” in the field of VR and should be seen as a model comparable to the SMCVR I (Beta) and SMCVR II (Stockholm project) models presented in the present thesis. Williams & Westmorland (2002) described the concept as “early intervention and rehabilitation programmes, and that early and safe return to work for injured and disabled workers are essential components of optimal workplace disability management” (p 87), and that one of the essential components is co-operation or collaboration between the rehabilitation actors.

MULTIDISCIPLINARY OR INTERDISCIPLINARY TEAMS

Schofield and Amodeo (1999) distinguish between multidisciplinary and interdisciplinary teams. Multidisciplinary teams have a lower degree of integration. According to these authors, teamwork becomes interdisciplinary when the collaboration, while grounded in one basic discipline, also incorporates aspects of others. Another commonly used distinction between multi- and interdisciplinary teams in health care is that in the multidisciplinary group each group member acts as an expert on his/her discipline and takes responsibility for actions within that domain, while in the interdisciplinary group the disciplinary borders are partly dissolved so that members can take over actions normally executed by the expert member. The term multi-professional team is increasingly used when the “disciplines” are represented by people with different professions.

Effects or outcome for clients

There are currently several existing studies on inter- or multidisciplinary collaboration in the field quality of care. However, several researchers conclude that there is still a lack of evidence based research in this field (Schofield & Amodeo 1999, Schmith 2001, El Ansari et al 2001, Hultberg 2005). Schofield and Amodeo (1999) analyzed 138 articles in health-related fields, which they deemed reflected “interdisciplinary team work”. They found that most of the articles were descriptive or process-focused and identified eleven as “outcome-based” in that they examined the effect on an external goal that was separate from team function. Only one study was considered to have the design elements necessary for assessing whether the interdisciplinary team aspect had any effect on clients. Two other reviews (Smith 2001, El Ansari et al 2001) that studied inter-professional collaboration also found weak evidence for

improved outcomes of care. Smith (2001) stated that “conceptualization of critical elements of the ‘team’ intervention was absent” (p 51), which made it more difficult to compare the outcome effects.

There are numerous studies of the effect on work resumption in the field of multi-professional/multidisciplinary co-operation that occurs in work-oriented medical programmes, many of which are summarised in the form of systematic reviews. The intervention is often denominated multimodal rehabilitation, which means rehabilitation with several different actions usually performed by different professionals from different rehabilitation disciplines. There are five systematic reviews regarding the effects of rehabilitation programmes for clients with long-standing pain on work resumption and/or sick leave: three about chronic back problems (Flohr et al 1992, Guzmán et al 2001, Schonstein et al 2002), one about wide spread pain and back pain (Nielson & Weir 2001), one about protracted pain in general (SBU 2006). In four of the five reviews there is evidence showing positive effects on work resumption, while one is contradictory (Nielson & Weir 2001). One of the studies, which was performed by the Swedish Council on Technology Assessment in Health Care (SBU 2006), contains 46 RCT's with 6 213 patients with long-standing pain conditions and shows strong evidence that multi-modal rehabilitation has a positive effect on work resumption and sick leave compared with less comprehensive measures or conventional treatment. The intervention most often constituted medical and psychological measures, combined with physical activity /training or physiotherapy (Ekholm & Schüldt Ekholm 2008).

Norrefalk et al (2006, 2007, 2008) found that a structured medical work-oriented multiprofessional rehabilitation programme for patients with persistent musculoskeletal-related pain had the effect that 63 % of the patients had returned to work or were in work related activities after one year, and at the 6-year follow up 52% had returned to work, compared with 13% in the matched control group.

Another review study (Henriksson et al 2005), which focused on the work situation for women with fibromyalgia concluded that “The total life situation, other commitments, type of work tasks, the ability to influence the work situation, and the physical and psychosocial work environment are important factors in determining whether a person can remain in a work role” (p 685).

The concept of disability management has been analysed in a review and was found to have a positive effect on return to work compared with “treatment as usual” (Williams & Westmorland 2002). Braaten et al (2007) measured outcome in return to work for patients in a vocational multidisciplinary rehabilitation programme with a comparison group that received “treatment as usual”. The study group showed a tendency of having a higher proportion back at work 4 months after the intervention (p=0.06).

Kärrholm (2007) have studied the SMCVR II model conducted 1997-99 (the Stockholm project, which is presented more thoroughly on page 23) The rehabilitation actors involved were Stockholm municipality, the Social Insurance Office and an occupational health service. The results of the study group showed that over the six-year-period studied there was an overall difference in sick leave of 5.7 days per month and person, in favour of the study group (Kärrholm et al 2008). Ninety five immediate superiors, who answered a questionnaire, described the cross-sector co-operation as being a successful way of reducing problems (Kärrholm et al 2007).

Some studies show indifferent or negative outcomes of multi/interdisciplinary rehabilitation (Hultberg et al 2005, Bonde et al 2005, Magnussen et al 2007).

VOCATIONAL REHABILITATION ACTORS IN SWEDEN

Sweden has a long tradition as a welfare state and the many rehabilitation actors in VR operate within well-defined segments of welfare policy. They have their own histories, experience and rules that have developed out of the structures of their systems and the needs of the particular populations they normally serve (SOU 1996:85, Trygged 1998, Lindqvist 1998, SOU 2000:78 & SOU 2007:2). Consequently there are different vocabularies, cultures and traditions currently in use. Several of the institutions that operate in the field of rehabilitation were established more than a century ago. Those with legal responsibility for rehabilitation are the client, the employer, the County Council, the National Insurance Office, The Labour Market Administration and the municipalities. Other rehabilitation actors that can also be involved in VR are e.g. private providers of vocational rehabilitation and private insurance companies.

THE CLIENT

The client's personal co-operation and motivation for co-operation in the rehabilitation process is of course paramount for achieving a successful outcome. Clients' prospects for receiving rehabilitation are statutory for the VR actors accounted for in this chapter. It is all about the prospects for rehabilitation and maintenance and in order that these "prospects" might be realized clients' personal responsibilities are also included in the legislations. These responsibilities are generally about the client co-operating with the measures stipulated/planned by the various VR actors, the exception here being in the field of health and medical care. If the client refuses to engage in these measures, which are formally voluntary, she/he risks losing her/his means of support, (SFS 1962:381, SFS 2000:628, SFS 2001:453).

THE EMPLOYER AND OCCUPATIONAL HEALTH SERVICES

Since 1991 and according to the Swedish Work Environmental Act (AML) (SFS 1977:1160) and provisions (AFS 2001:01, AFS 1994:1), the employer is responsible for carrying out rehabilitation of an employee at the workplace. The employer is also obliged to keep a continuous internal check on the working environment. The many rehabilitation measures that can be carried out at the workplace include e.g. adjusted work environment, adjusted working hours, and attempts at replacement in order to try new jobs at the same workplace. Many employers lack the knowledge and resources necessary for handling the rehabilitation obligations according to the legislations in AML and AFL (SOU 2000:78). Consequently it is common, but not mandatory, for them to have agreements with occupational health services (OHS) that can help them with this. OHS seek to protect employees against unsatisfactory and dangerous work conditions. They also provide preventive health care. Financially however, these services depend on agreements with the employers (Frick et al 2000, Antonsson et al 2002).

HEALTH AND MEDICAL SERVICES

The relevant legislation is the Health and Medical Services Act (SFS 1982:763). This decrees that people shall be offered health and medical services of good quality on equal terms, which are easily accessible to all. The services provided shall respect the patient's integrity and her/his right to independent decisions. They should also, as far as possible, be organised and performed in consultation with the patient. In this Act, responsibility for rehabilitation is clearly expressed (3 b, 18 b §§). Responsibility for both health care and rehabilitation is divided between the county council and the municipality. The latter is mainly responsible for home care, which includes some rehabilitation measures. However, in many cases close co-operation between the two organisations is necessary. The health and medical care services offer medical rehabilitation, e.g. rehabilitation medicine, physiotherapy, occupational therapy, psychotherapy and social counselling. Rehabilitation programmes can be carried out at hospital level and/or at primary care level. The physician's role in VR has increased in scope and importance (Edlund & Dahlgren 2002).

THE SWEDISH SOCIAL INSURANCE AGENCY (SSIA)

The relevant legislation, the Swedish National Insurance Act (AFL) came into force in 1963 (SFS 1962:381), and has been amended several times since then (Marnetoft 2000). The AFL imparts that the objective of rehabilitation should be to re-establish a person, who has suffered illness, as an individual capable of maintaining himself/herself through paid work (chapter 22, part 1). In 1992 the Social Insurance Offices were charged with an increased responsibility to co-ordinate and supervise the rehabilitation process and since 1990 they have been empowered to purchase rehabilitation services from public and private providers. Rehabilitation officials are assigned to deal with the clients considered to be in need of rehabilitation. The first duty of the SSIA is to co-ordinate different activities and measures during the clients' rehabilitation process. SSIA's measures are firstly investigations (of work capacity and vocational ambitions), work training and education (Marnetoft 2000, Ahlgren et al 2005, Försäkringskassan 2007).

THE SWEDISH PUBLIC EMPLOYMENT SERVICE (SPES)

The Swedish National Labour Board (Arbetsmarknadsstyrelsen) was formed in 1948 to furnish Sweden's labour market policy with a nationwide effect. Its main task is to find suitable jobs for the unemployed (Arbetsförmedlingen 2008b). In 1980 a new organisation of Employability Institutes (in Swedish "AMI"), was established in parallel with the employment offices. The institutes' target groups were people with work limitations and people needing more extended vocational counselling. Multi-professional teams, consisting of counsellors, psychologists, social workers and medical professionals, such as nurses and physiotherapists, often with a physician co-opted, were formed in all the counties with Employability Institutes. At the institutes, work-training stations were created, which were supervised by people with different trade or professional qualifications in office work, carpet-laying etc. Some institutes had special resources for groups with specific problems such as visual and hearing impairments and locomotion disability. These specialist institutes became national consultants (Montan 1987, Trygged 1998). The Employability Institutes have been incorporated into the employment offices as Employment Office Rehabilitation (AF Rehab) departments, since 2000. During recent years most of the medical professionals have been reduced in the multi-professional teams. It is stated that The Swedish Public Employment

Service (SPES) shall co-operate with other organisations (e.g. The National Insurance Office) with the objective of ensuring effective rehabilitation recourses (SFS 2007:1030).

SPES provides various VR programmes, such as work training, job-seeking courses, vocational guidance and education. When individuals with work limitations are employed, the employer in question is commonly eligible for employment administration subsidies as compensation for any loss in work capacity the disabled person may entail (Arbetsförmedlingen 2008b).

One of SPES more potent measures is sheltered employment. This can be either on the open labour market in the form of public sheltered employment (in Swedish “lönebidrag”) or under the management of SAMHALL, a collective name for different local state-owned companies operating in many different sectors, e.g. factories, hotels, restaurants, cleaning and business. SPES exclusively can recommend a person for sheltered employment, and this function is mainly directed towards persons with a more permanent physical and/or mental/social disability. While the long-term goal here is to transfer employees from sheltered employment to regular employment on the open market, this seldom happens due to the severity of the disability (Trygged 1998, Arbetsförmedlingen 2008b).

THE MUNICIPALITIES

Traditionally each local community took care of poor living conditions among its residents (Trygged 1998, Lindquist 1998). The municipality’s present responsibility is stated in the Social Service Act (SFS 2001:453). The word rehabilitation is not used in this legislation, but in chapter 5, section 7 of the current Act, the Social Services’ responsibility towards people with physical or mental disabilities is stated: “The Social Welfare Board shall endeavour to ensure that people who, due to physical, mental or other reasons encounter significant difficulties in their daily lives shall be provided with opportunities to participate in community life and live like other people” (present author’s translation). The “people... who encounter significant difficulties...” among those of working age for whom the municipalities must be responsible include disabled people, youngsters, immigrants, alcohol and drug addicts, people with financial difficulties, the long-term unemployed and those with psychiatric deceases. Municipal vocational rehabilitation measures often take the form of projects in co-operation with employment offices. Many measures can be defined as “pre-work”, in preparation for return to the “open market”. As an employer the municipality also organises supported employment. Many departments and professionals deal with the clients, mainly in efforts organised by social services, and e.g. consisting of welfare officers, nurses and psychologists (Kertz et al 1995, Trygged 1998, SOU 2007:2).

THE DEVELOPMENT OF CO-OPERATION IN VOCATIONAL REHABILITATION IN SWEDEN

The General Social Insurance Act passed in 1955 included all residents over the age of 16 living in Sweden (Marnetoft 2000). New rehabilitation treatment, which was introduced into the health services included e.g. physiotherapy, occupational therapy, counselling (carried out by almoners). A public investigation (SOU 1958:17) in the 1950’ had, however, already identified problems of co-ordination among the professionals involved. The investigators suggested better integration of activities and that those involved should seek more effective co-operation. As mentioned before, the Act on General Insurance (AFL) came into force (SFS

1962:381) in January 1963 and the The Swedish Social Insurance Agency acquired a more active and co-ordinating role in rehabilitation. New local teams were organised consisted of representatives from both social insurance and what was termed “work care” (in Swedish “arbetsvård”) (Montan 1987, Marnetoft 2000).

In the mid-1970s a new form of co-operation in VR was initiated by the National Insurance Board (in Swedish “Riksförsäkringsverket”), “local rehabilitation groups” (LRG), consisting of representatives from the social insurance office, employment office and social security office, and professionals from the health services (physicians, nurses, physiotherapists etc) (Montan 1987, SOU 1988:41). Between 1975 and 1992 LRGs were the dominating form of co-operation between public organizations operating in VR. Bäckström (1997) studied LRGs in the County of Västerbotten during the period 1981-86. Quantitative and qualitative methods were used; protocols and files were studied, and clients and staff were interviewed. Results indicated communication problems between staff and between staff and clients. The information processed between the participants was defective and could be misunderstood, especially when the officer responsible did not participate in a meeting. Officers often felt unable to fulfill client’s expectations. Clients’ expectations of individual treatment collided with rules on treatment. The percentage of cases ending in disability pension was 59% and after two years only 14 % of clients were in work. Men were favoured over women.

In the reform (proposition 1990/91:140), implemented in 1992, it was stated that the employer was primarily responsible for employees’ rehabilitation, while the Social Insurance Office was responsible for that of the unemployed. The Swedish Social Insurance Agency became co-ordinator of rehabilitation and the other instances – employment office, health services and social services – became legally obliged to co-operate.

In the mid-1990s, the number of clients on sick leave or receiving disability pensions started to increase again and the Government found the development of co-operation in rehabilitation highly unsatisfactory. Once again co-operation was pointed out as being one of the main problems (SOU 1996:85, SOU 2000:78). Poor co-operation resulted in the outcome that few people regained adequate working capacity, especially in complicated cases involving several instances. Lindquist & Grape (1999) studied material gathered in this public investigation (SOU 1996:85) and found that the concept “co-operation” often ends up being implemented, defined and understood in many different, sometimes contradictory, ways. Professionals or officials working in people-processing organisations often find themselves in a contradictory position: on one hand, they must act according to formal rules and procedures; on the other hand, they must investigate asses and solve problems in a manner that benefits the client.

In a study of co-operation in the municipality of Nacka (Stenberg 1999) focus was placed on what it means for different public organisational rehabilitation actors to co-operate in an “imaginary organization”. Stenberg defines “imaginary organization “as an organisation that transcends formal boundaries between or within organisations” (Stenberg 1999, p. 328). The case study was based on qualitative (ethnographic) methods. The organisations involved were the Nacka municipality social services, the public health authorities, the local public insurance office and the local employment office. Results showed that rehabilitation actors at different organizational levels based their understanding, decisions, and actions on different organisational logic, which led to different interpretations of co-operation, misunderstanding, conflicts and organisational paradoxes. The author concludes that leadership of the co-

operation is of great importance: leaders can “act as catalysts: overcoming, containing, and absorbing differences and conflicting opinions” (Stenberg 1999, p. 334).

In the late 1990s, social insurance costs rose dramatically and a new public investigation (SOU 2000:78) established that the reform implemented in 1992 had not had the expected effects, since sickness absence and elimination from the community were increasing. Only 13 % of people sick-listed for more than one year received vocational rehabilitation.

A special legislation, SOCSAM (SFS 1994:566) enabled the local public rehabilitation actors to finance common projects jointly. One project that established financial and political co-operation was the Delta project in Gothenburg. Among several sub-projects one was a special form of collaboration between primary health care, social insurance and social services for patients with musculoskeletal disease (Hultberg 2005). Three health care centres formed multidisciplinary groups comprising physicians, nurses, secretaries, occupational therapists, physiotherapists, social workers and social insurance officers. Analysis showed that collaboration had improved in the multidisciplinary groups compared with the controls. The researcher concluded that co-financing can enhance development of better forms of interdisciplinary and inter-organisational collaboration through legitimising the formulation of common long-term goals. However, the results on days on sick leave for patients after intervention showed indifferent result in a comparison with 3 other health care centres (Hultberg et al 2003, 2005). In another study (interview study) that also focused on a subproject, three different main themes of barriers in vocational rehabilitation emerged: uncertainty, prioritizing own organization and lack of communication (Wihlman et al 2008).

A new government bill (Proposition 2003:2) again underlined the advantages of co-operation: individuals and society alike would gain, even though co-operation between the relevant instances did not automatically give value for the client. Instead, it was the quality of the co-operation that was emphasised. To achieve good quality for the clients, the VR actors needed support and time to generate a good climate of co-operation. Co-operation was not judged as a separate goal, its effects for the client were what was important, e.g. good health and self-reliance. The proposal suggested a new possibility for the authorities to co-operate through co-ordinating associations. This new Act, which came in force on 1 January 2004 (SFS 2003:1210) enables all municipalities to start local co-operation, financed equally between the Swedish Social Insurance Agency, The National Public Employment Service, the county councils and the municipalities, and also includes political representation.

PROBLEM LIMITATION

Current literature contains research on co-operation among different actors in vocational rehabilitation. Most of it, however, is descriptive, illustrating different forms of collaboration and co-operation. Processes are also well researched, showing how co-operation develops over time. This indicates what is important to consider when an activity is at the design stage. There are also studies that evaluate the results for clients, staff and management. Regarding effects, most studies follow a pre- and post- design and concentrate on the internal result, thus there are no comparison groups. Several studies of experimental design also exist, however the majority of these are in clinical settings in the form of multidisciplinary teams, with outcomes showing both that the chances for clients to be at work after the rehabilitation is higher compared with “treatment as usual” and that some studies show indifferent results. Despite the relatively extensive research, there are many vocational rehabilitation models

concerning the effects of which we know little, primarily the effects for clients, but also how meetings between the professionals and clients appear during the VR process.

AIMS

The overall aim of the studies described in this thesis was to increase knowledge of co-operation between different rehabilitation actors in the provision of vocational rehabilitation (VR). Two different co-operation projects in Sweden were studied.

The aims of study I and IV were to investigate differences in effects on employment between clients rehabilitated in a multi-professional cross-sector co-operation model and clients with the conventional way of co-operation.

The aim of study II and III was to investigate the communicative process in the rehabilitation group meetings in a developed cooperative model and female clients' experiences during the vocational rehabilitation process.

SPECIFIC QUESTIONS

The following specific questions were addressed:

Study I

Did the developed model for co-operation in vocational rehabilitation, with its regular multi-professional cross-sector group meetings (Beta model), affect employment outcome?

Did the outcome of the study group differ from that of the conventional co-operation used in two nearby municipalities during a 2-years period?

Did the outcome of the study group differ from that of the conventional co-operation for vocational rehabilitation used in a sample taken from a national register?

To what extent have the three groups studied been able to use sheltered or supported employment?

Study II

Regarding the multi-professional group meetings:

Who participated in the discussions?

What was discussed during the meetings?

Did any representative of a particular rehabilitation actor dominate the rehabilitation meetings?

What was the general character of the discussions?

Study III

Were the participants co-operating to achieve a common goal?

Was the female client being heard?

What were some of the female clients' personal experiences with regard to the vocational rehabilitation process?

Study IV

What was the long-term difference in the percentage on employment after the intervention with VR co-operation using systematic multi-professional cross-sector group meetings, compared with matched pairs in a county group and a national group, representing the usual form of co-operation over a period of six years?

How long did the effect of the developed model for VR co-operation on employment last?

Were independent background variables, e.g. age, sex, educational level, type of restricted work capacity, associated with the dependent variable on employment in a mixed group comprising all of the subjects?

Since the local comparison group changed to a model similar to the study group a question on that could be added. How was employment rate affected when the municipality (the local group) changed its model of VR during the study period?

MATERIAL AND METHODS

ETHICAL CONSIDERATIONS

Study I, II and III were approved by the Research Ethics Committee, Karolinska Institutet North, Sweden. Study IV was approved by the Ethics Committee at Mid Sweden University, Sweden.

INTERVENTIONS

The four studies used material collected from two intervention projects with systematic multi-professional cross-sector vocational rehabilitation, the “Beta Model” (SMCVR I, study I and IV) in Kungsbacka municipality and The Stockholm project” (SMCVR II, study II and III).

SMCVR I

The Beta model started as a project in the municipality of Kungsbacka 1996. The overall goal was to improve effectiveness in the provision of VR among those with work limitations and to prevent their future unemployment and additional ill-health. The plan was to achieve this by improving collaboration and communication among rehabilitation service providers, consequently producing a more effective and lasting VR outcome.

The clients involved were unemployed. The majority had functional impairments and activity limitations, and some also other serious problems e.g. substance abuse. A distinctive feature of the model was that the client’s rehabilitation was planned through “multi-professional rehabilitation groups” consisting of the client, a rehabilitation official from the county social insurance office, an occupational therapist from a primary care unit, an employment counsellor from the county employment office and a social worker from the Kungsbacka municipal social administration office. Sometimes the client’s personal support contact was also present (e.g. a significant other or a counsellor from a substance abuse treatment programme).

The client’s rehabilitation process in the Beta model most often started with a recommendation from a member of the multi-professional group to the group as a whole that they had identified someone for whom vocational rehabilitation might be appropriate. The next stage was when the client and a group member agreed that the client should meet the whole group. During this meeting a rehabilitation plan was formed describing the ongoing rehabilitation in concrete terms. Depending on the degree of complexity of the client’s problem, the number of group meetings held for each client varies from one to several. Once the plan was made most clients started work training or a course in vocational guidance. During the rehabilitation process measures such as physiotherapy, social support measures, work training or other action may run in parallel. The last stage in the process was when the client and the group together decided and recommended an appropriate measure that specified rehabilitation organisations would then set about to achieve.

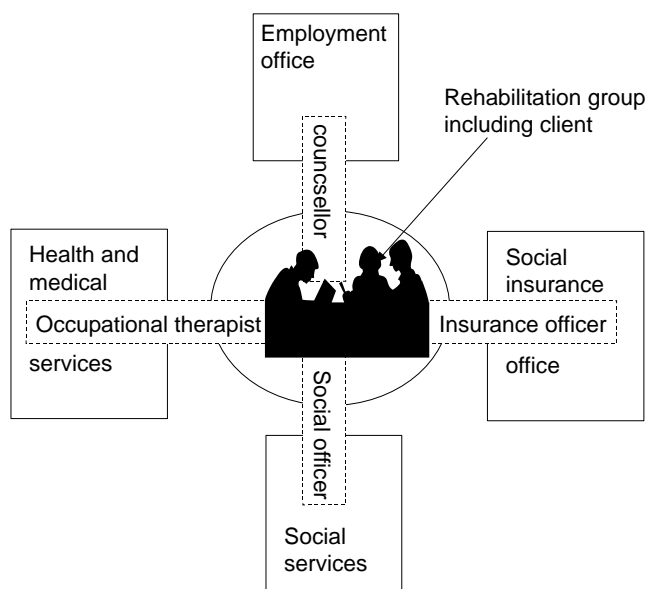


Figure 3. *The SMCVR I model in vocational rehabilitation. The client is central and is in close co-operation with the officials from the different “sectors”, who comprise the representatives in the SMCVR I group. The representatives are still linked in parallel to their “parent” authorities (Jakobsson et al 2005, Jakobsson et al 2008 b).*

The multi-professional team has been working together for several years, since 1996, and holds planned meetings twice a week, in premises detached from the member’s ordinary workplaces. The social worker works full-time with “project clients” while the others spend about half of their working time with these clients and the remainder with other clients in their parent organisations. A special management group, consisting of the local directors of the organisations involved monitors and supports. All involved underline the importance of this group. Around 60-100 people a year get their rehabilitation co-ordinated in the Beta model (Jakobsson et al 2004).

SMCVR II

The Stockholm project was conducted during the years 1997-99. The VR actors involved were Stockholm municipality, the social insurance office and an independent occupational health service. Experience of co-operation previous to the project was poor and there had been conflicts between the municipality local administrations and the employment offices. Many employees were on long-term sick leave a situation that the VR actors found difficult to handle. Stockholm municipality consists of 13 district administrations, totalling roughly 50,000 employees. Each district is responsible for care of the elderly, childcare, schools, parks, etc. The Stockholm project included two organisational entities together employing some 6000 people.

The project sought to improve co-operation in vocational rehabilitation for persons with functional impairments and activity limitations and to prevent future ill health. The project was provided with an appointed steering committee, comprising representatives from the occupational health service, social insurance office and employer. The committee supported the professionals that dealt directly with the clients and they met regularly.

Specific to the project was that the planning of client's rehabilitation, in what were termed rehabilitation groups consisting of the client, his or her supervisor, a representative of the employer, an occupational health physician, a rehabilitation official from the insurance office and the client's support person. The purpose of the rehabilitation group meeting was to discuss the client's rehabilitation in a forum where many of the VR actors participated. The client's path to the rehabilitation group started as a rule with an indication (most often from her/his physician) that vocational rehabilitation could be appropriate. This was then followed by a visit to the occupational health service that included an occupational-health appraisal. The physician, together with the client then decided whether the "case" should go further to the rehabilitation group. The number of group meetings varied from only one to several, depending on the complexity of the problems. A rehabilitation plan was drawn up for each client, showing the ongoing rehabilitation in concrete terms (Figure 4).

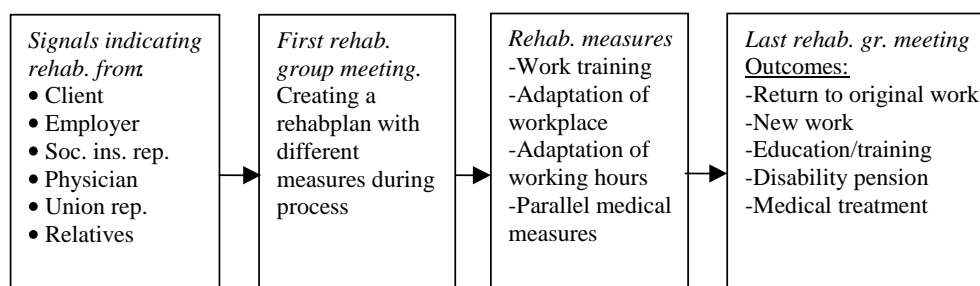


Figure 4. Vocational rehabilitation process in systematic multi-professional, cross-sector, client-centred and solution-oriented co-operation in vocational rehabilitation (Jakobsson et al 2002, Jakobsson et al 2008a).

The most common measure in the rehabilitation process was work training. The last stage was when the client, together with the group decided whether the client could go back to her/his original work, some other work in or outside the local administration, participate in some appropriate training programme, or whether a disability pension was recommended. The "Stockholm project" ended in 1999. Although the participating organisations subsequently tried to continue the methods, reorganisation at the local insurance offices led to the model being abandoned in 2000. About 200 clients had had their vocational rehabilitation planned in the rehabilitation groups (Jakobsson et al 2002, Kärrholm et al 2006).

MATERIAL AND METHODS OF STUDY I AND IV

Study I and IV was based on a material of 51 unemployed clients who underwent intervention with SMCVR I (43% women), during 18 months over the period 1998-1999. Ages ranged mainly between 35 – 44 years, with only a few younger than 25 or older than 55. The majority (56.9 %) had 9 years of compulsory school as their highest educational level. The remaining had upper-secondary school; two were university graduates. A total of 92.2 % had Swedish or other Nordic nationality. Two matched comparison groups were chosen (Table 2): one at local level (LG) and another at national level (NG).

In study IV a third matched comparison group was also recruited because the municipality of LG year 2002 adopted the model of the study group (Beta). The third comparison group was

recruited from the county of Halland (CG), of which Kungsbacka is part of (clients from Kungsbacka were excluded from this group). NG and CG groups represented the conventional method of co-operation in the field of VR from the 3rd follow-up year.

Table 2. Matched background variables in the four groups: study group (SG); county group (CG); national group (NG); local group (LG). n=51+51+51+51. Compulsory school 9 years (=comp. school); upper secondary school and university (upp. sec./univ.). Unemployment (=unempl) (Jakobsson et al 2008b).

Variable	Subgroup	SG	CG	NG	LG
Age (years)	-34	16	14	16	16
	35-44	17	19	16	16
	45-54	15	15	16	16
	55-	3	3	3	3
Sex	Male	29	30	29	29
	Female	22	21	22	22
Type of restricted work capacity	Somatic	27	25	28	26
	Mental/social	15	13	15	16
	Not categorized	9	13	8	9
Education	Comp. school	29	29	30	30
	Upp. sec./univ.	22	22	21	21
Duration of rehabilitation measure (days)	Mean	97	99	116	95
	Median **	68	68	112	68
Days of unempl. during two years before intervention	-182	16	*	14	15
	183-365	11	*	12	11
	366-547	17	*	17	17
	548-	7	*	8	8
* No information available					
** Minimum of 6 days only one in each group					

The groups were individually matched using records from the Swedish Public Employment Service (SPES). The main effect variable was *degree of employment* – full-time, part-time or unemployed (higher education was considered equivalent to employment).

STATISTICS

In study I the data was analysed by an analysis of variance (ANOVA) for repeated measures for binary responses (Procedure GENMOD in SAS ®). The model was set up with the within factors being Group (Study/Local; Study/National) and Time (with 3 or 4 time points). Models with and without the interaction Group*Time were achieved. The estimates from the models were odds ratios and 95% confidence intervals. The odds of “employed” (“working part-time and full-time”) are the probability of both part time and full-time employed over the probability of “not employed” (working 0 %). The odds ratio is defined as the odds of “being employed” for a client in the study group relative to the odds of “being employed” for a client in the local comparison group or the national comparison group respectively. A dichotomy

variable was used with the values 1 (resuming work 50-100%) and 0 (resuming work 0% =not working).

The statistical model ANOVA for repeated measures (SPSS GENMOD) was also used in study IV to illuminate examining whether or not there were any differences in employment between the groups studied annually on six occasions for six years following the VR intervention. The model showed the differences between the studied groups over the entire 6-year period. This method is considered useful for repeated measures with an independent categorical variable, such as are used in the present study (Brace et al 2006). In addition the chi-square test was used.

A logistic regression model (SPSS LOGREGR) was used for studying the possible association between the background variables of the clients and the outcome variable 'on employment'. The four groups studied were merged into one group (SG, CG, NG and LG) (n=204). This merged group was seen as a mixed group with common features. The occasion six years after the intervention was chosen in order to study the possible associations at the latest possible point in time after the intervention.

MATERIAL AND METHODS OF STUDY II AND III

The material in study II consisted of 22 multi-professional cross-sector rehabilitation meetings with clients who underwent intervention with SMCVR II, eleven in each of the two administrations. The client group consisted of 20 women and two men ranging in age from 33 years to 59 years, with most in the interval 45-50. Both quantitative and qualitative methods were used. An observer attended each meeting to observe communication; each meeting was also tape-recorded. Some clients were interviewed in connection with the rehabilitation group meetings; feed-back questions focused on client's immediate reactions to participation in the groups. The taped communication was transcribed, and the analysis is based upon these transcriptions, using content analysis (Downe-Wambolt 1992). This method was inspired by those developed by the social psychologist Robert Bales (Bales and Cohen 1975) and further developed by others (Pfeiffer & Jones 1974, Johansson-Hildèn 1998). The present full text material consisted of 3 859 utterances. These utterances were further categorized into subjects and function.

Study III was based on the same multi-professional cross-sector rehabilitation meetings as in study II, although only the 19 meetings attended by female clients were analysed. An interpretation was made of both the manifest and latent content. The text was first read to obtain a sense of whole. It was then divided into units of analysis, one or several sentences of similar meaning in relation to the subjects studied. These units were then coded to create categories or themes. Creating categories was a way to organize the text, i.e. ten sub-themes were formed from which four themes were subsumed into two categories. The text as a whole was re-read confirming the themes (Downe-Wambolt 1992). The authors discussed how to interpret the text, until an agreement was reached, which strengthened the credibility of the analysis (Patton 2002). To achieve credibility both triangulation and peer debriefing were used (Öman 2003).

RESULTS

STUDY I AND IV

Proportion of clients in employment after co-operation with multi-professional cross-sector VR intervention

The number of the clients that were employed, during the entire six years period studied after the intervention in the four different groups are shown in Figure 5. During the first two years a larger proportion of clients in the study group (SG) was employed (69%) than in the other three matched control groups; the local group, LG (49%), the national group, NG (47%) and the county group, CG (41%).

Three years after intervention the majority of the study group was employed, 30 clients (59%), compared with the two matched control groups, NG with 20 clients (39%) and CG 21 (41%) respectively. The corresponding figures after 6 years were SG 26 clients (51%) vs NG 19 (37%) and CG 20 (39%).

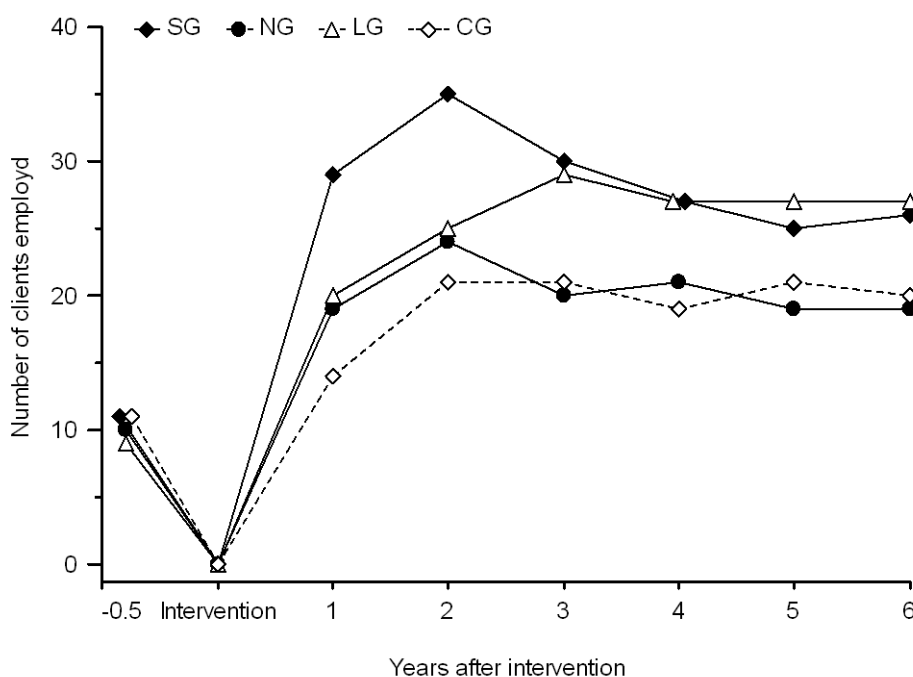


Figure 5. Number of clients employed (vertical axis) in: study group (SG, $n=51$); matched control groups: national group (NG, $n=51$) and county group (CG, $n=51$) yearly (1-6 years) following end of rehabilitative intervention. Local group (LG, $n=51$) is a comparison group found only up to year 2 following intervention because after this time it was adapted to the same model as the study group. Symbols above figure -0.5 to the left on the horizontal axis indicate number of employed people 6 months before the start of the intervention period. “Intervention” represents start and end of SG’s intervention and corresponding period for comparison groups.

As shown in figure 5 the most substantial differences were between SG and the two comparison groups NG and CG. A post hoc test confirmed this result where a significant difference was found for the study group compared with the county group ($p=0.045$) and a tendency ($p=0.084$) to difference between the study group and the national comparison group.

During the first 2-year period a difference was noted between the study group and the local comparison group in employment, following the intervention. After the second year the local group's municipalities changed their administration of unemployed people with limited work capacity. The new administrative model was very similar to SMCVR I. Consequently the local group could not be used as a control group representing conventional co-operation from year three. As can be seen in figure 5 the curve of the LG is similar to the curve of SG for the years 3 to 6. From this point the local comparison group was excluded as a comparison group. When the other three groups and occasions were included in a model, the statistical analysis showed that the groups were significantly ($p=0.033$) different.

When only the SG and NG groups were compared in an ANOVA model for repeated measures (all occasions after the intervention included), a significant difference ($p=0.034$) in employment was found between the SG and NG. When only the SG and CG groups were compared in an ANOVA model for repeated measures (all occasions after the intervention included), a significant difference ($p=0.020$) in employment was found between SG and CG.

In a comparison with the situation 6 months before the intervention, the within-group result for persons rehabilitated according to SMCVR I showed significant changes in outcome regarding employment 6, 12 and 24 months after the rehabilitation. The odds ratio was 7.1 that a person was employed 24 months after the intervention in comparison with the situation 6 months before.

The majority of employment in all the groups was associated with subsidy or sheltered employment (table 3).

Table 3. Percentage of supported and sheltered employment and employment without support or shelter, of employed clients in the study group (SG, $n=35$), local comparison group (LG, $n=25$), and national comparison group (NG, $n=25$) two years after intervention.

	SG	LG	NG
Supported employment	57	64	42
Sheltered employment	14	20	20
Not supported or sheltered	29	16	38
Total	100	100	100

How long did the effect last?

Table 4 shows the outcome of the chi-square test on the independent occasion (1-6 years after intervention), SG versus CG and SG versus NG. Differences were found (95% CI) between SG and CG on the measured occasions 1 and 2 year following intervention and there was a tendency ($p=0.075$) for difference in the 3rd year. Differences were found (95% CI) between the SG and NG on the measured occasions 1, 2 and 3 years following intervention.

Table 4. Pearson Chi-Square test applied on all occasions (1-6 years following intervention), comparing outcome in employment, SG versus CG, and SG versus NG (n=51+51+51).

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
SG v s CG	.003 *	.005 *	.075	.111	.426	.233
SG vs NG	.047 *	.027 *	.048 *	.234	.230	.163

* Correlation is significant at $p \leq .05$

Independent variables associated with the dependent variable employment.

Regarding background variables no associations could be determined for age, gender, citizenship, education, or employment. Types work limitations were clustered in two different categories in the analysis, (i) somatic and (ii) mental/social work limitation. This model showed that a client with a somatic work limitation had twice (1.950) the chance (odds ratio) of gaining employment after VR compared with a client with a mentally/socially restricted work capacity ($p=0.047$).

STUDY II AND III

The text analysis showed that the clients made the majority of utterances in the groups (34 %). None of the “professionals” (employer representatives 21%, rehabilitation counsellors 19% and physicians 15%) dominated regarding the number of utterances. The supervisor did not participate in every meeting and had a share of 10% of the total numbers of utterances. The percentage of distribution of utterances was similar for both administrations.

Table 5. Coverage of different subject areas expressed as percentages of all 3,859 utterances. Two different administrations: X and Y (Jakobsson et al 2002).

Topic	X n=1824 %	Y n=2035 %	X+Y n=3859 %
Medical	16	15	16
Health	8	12	10
Social	12	5	8
Previous work	16	7	11
Practice/new work	10	28	20
Social insurance	15	15	15
Education/training	12	6	8
Miscellaneous	13	13	13
Total	102	101	101

As presented in table 5, the topics mainly discussed concerned the client’s situation regarding the medical and health area, previous and new work, and social insurance. A further analysis

also showed that the rehabilitation group participants made most of their utterances in subject areas related to their own occupations.

The analysis of functions showed that the majority of utterances involved giving and eliciting information (most often as answers to questions). As for the number of utterances, the analysis of function indicated that none of the "professionals" dominated the meetings, though the physician and employer representative played more prominent roles as initiators and co-ordinators. It was chiefly the client who expressed her/his own views and feelings. The variable 'seek recognition/support' differed greatly between the meetings. Certain clients sought support a great deal, while others were very clear about their situations and needs.

Regarding the character of the meetings, the general impression was that discussions took place in a fairly calm, unstressed form. Participants were allowed ample scope to present their personal requirements, thoughts and feelings. However, in some meetings there also arose an image of some clients who appeared to be more passive than active in their participation; those who while often speaking, mostly did so to answer other people's questions. The concluding phase of the meeting was often a long-drawn-out process, sometimes taking half the time of the entire discussion. A series of more or less formal decisions were usually taken during the discussions. Consequently it was necessary to 'make the rounds' several times so ensure that all those present had grasped what agreements had been made.

Study III was a deeper analysis of the observations from rehabilitation group meetings, focused on the woman's situation during the rehabilitation process. Two categories were presented in the result. The first describes **interaction and process in the rehabilitation meetings** and the second **the client's rehabilitation circumstances**. The themes generated by the analysis were then presented under these two categories (Table 6).

Table 6. Categories, themes and sub-themes (Jakobsson et al 2008a).

Categories	Themes	Sub-themes
-Interaction and process in the rehabilitation meetings	-Adaptation in the rehabilitation group	-The client's adaptation to the group -The professionals' adaptation to the client
-The client's rehabilitation circumstances	-Client's health status	-States of ill-health -Feeling of not being completely rehabilitated
	-The workplace's significance for rehabilitation	-Importance of work -Management's attitude to rehabilitation -Work-mate's action
	-The client's decision-point	-Making an attempt at doing something -In control of their health -Fear that the novelty will wear off

The first theme in the first category *Adaptation in the rehabilitation group*, was divided into two sub-themes: 1) 'the client's adaptation to the group' and 2) 'the professionals' adaptation to the client'. The sub-theme 'the client's adaptation to the group', was predominant in some meetings. The client's expressed wishes were not always identified by the group. The sub-theme 'the professionals' adaptation to the client' was revealed indirectly in several fairly short sequences in the discussions. It emerged in discussions on details, new decisions not in line with earlier agreements but where the professionals quickly adapted to the new circumstances.

The second category clients' **rehabilitation circumstances** focused on the client's utterances, primarily those in which she describes her own situation. *Clients Health status* was the most extensive theme during the discussions, and included both ill health and good health. Mainly, the clients described many different 'states of ill-health', both physical and mental. The 'feeling of not being completely rehabilitated' emerged in all types of meetings, including those that wound up the vocational rehabilitation. For some people, medical rehabilitation ran parallel with vocational and included everything from direct treatment to feeling that one's health was not going to improve.

Concerning the theme '*the workplace's significance for rehabilitation*' the clients discussed the 'importance of work' from many perspectives. Positive statements: That it brought them contentment, provided them with the company of others – and financial support. For some clients, however, work was not the most important thing - getting better or feeling well was more important. 'Management's attitude to rehabilitation' was found both in connection with former work and a new job. This could, for example, be the availability or lack of support from the management. Other aspects emerging from these meetings concerned 'work-mate's actions', both as a positive factor in rehabilitation but workmates could also be part of the problem for the individual.

The conflict between health and work meant that the client had come to a *decision-point* and it was time to choose the next step. These meetings dealt with 'making an attempt at doing something', or remaining in an unchanging state of rehabilitation. The individual may have been under pressure for a long time, both in her work and private life, which would subsequently lead to an almost complete absence of well-being for a long period of time before the actual illness. These clients stated that at last, after a long period of time, they felt relaxed and 'in control of their health'. At the same time as the client was trying a new job and beginning to come to terms with her work, a different kind of fear could creep in, 'fear that the novelty will wear off'.

DISCUSSION

DISCUSSION OF RESULTS

Effects on employment

A significant difference was shown between the study group, the national comparison group and the county comparison group on 6 measuring occasions over the period from 1 year following the end of intervention to the 6th year after. This shows that rehabilitative co-operation with systematic multi-professional cross-sector group meetings - SMCVR I - results in a higher percentage in employment compared with “the usual form of co-operation”, not just for a couple of years but over a period of at least 6 years.

During the period from 2 years following intervention to 6 years after, the outcome percentage in employment in the study group decreased from 69% to about 51%, i.e. a reduction of roughly 18% of the entire group. That makes 4.5% per year. The national comparison group, on the other hand, decreased from 49% to about 37%, which makes 3% per year, but the whole time with a much lower percentage in employment. The county group (CG) decreased from 41% to about 39%. The fact that 51% (SG) of the rehabilitees were still employed 6 years following the intervention is an unexpected and positive finding, since an often expressed view is that the permanence of effects of VR for long-term sick-listed people is short, i.e. in the order of a couple of years or so. The results of the present study do not support such a view. The present results, showing a relatively high percentage of rehabilitees retained in the work force after 6 years is in accordance with the findings of e.g. Kärholm et al (2008).

The local comparison group - consisting of participants from two neighbouring municipalities – went over to the co-operation model resembling the study group from the 2nd year, including the fact that officials from the study-group municipality acted as advisers. Consequently the local “comparison” group could no longer be used as a comparison group representing ‘the usual form of co-operation’. From year 3 to year 6 the percentage in employment in the local group increased to the same level as in the study group, i.e. above the level of the national comparison and county groups now representing “the usual form of co-operation”. This unplanned change of the natural-experimental design further supports the conclusion that the SMCVR I model has a positive effect on the percentage in employment compared with ‘the conventional form of co-operation’.

In SG the peak proportion of clients in employment 2 years after intervention decreased after that. A possible explanation could be connected to the system in Sweden where subsidies often are paid to the employer when a disabled person is employed. For instance 42-64% of the employed clients in the three different comparison groups on the occasion 2 years after intervention were backed by subsidies connected to their employment (Jakobsson et al 2005). Those clients are theoretically employed like any other employee, subsequently enjoying the same rights and opportunities. Subsidies are however time-limited and e.g. wage subsidies are considered at least once a year, with a maximum limit of 4 years, with an underlining philosophy that it should decrease every year (Arbetsförmedlingen 2008b). It's reasonable to believe that those people have a weak position on the labour market and will be in need of permanent support to maintain their employments. As described under Introduction, the

clients in the SMCVR I model (Beta) were re-remitted to their original organisation after the rehabilitation plan was completed. This could be a weak phase in the Beta model, because if or when the clients later need more support they are referred to new officials for their needs. The SG had the highest proportion of employed clients two years after the intervention and it's reasonable to believe that more clients with severe problems became employed in SG than in the comparison groups. This might lead to a higher risk of clients from the SG becoming sick listed and again losing contact with the labour market.

A question addressed was "how independent background variables were associated with the dependent variable on employment in a mixed group with all subjects". The four groups studied were merged into one group including all clients, which would imply that the result should be interpreted with some caution. The logistic regression model showed that the clients with mental/social work limitations are at a higher risk of becoming unemployed after VR than clients with somatic work limitations. Some other studies also indicate that people with mental limitations have less chance of becoming employed (Selander et al 2002, Hansen et al 2006, Bolin 2007). SG clients with mental/social type of work limitation have less chance of being employed 6 years after intervention than clients with somatic work limitations. This result could be an indicator that the SMCVR I model would probably benefit from an improved strategy, which would better meet the needs of the mental/social clients in the VR process. In the LG, which had changed their model, the chance of employment for clients with mental/social work limitations was equal for those with somatic work limitations. This may well be related to the fact that their model included a specialized team developed and trained to work for clients with mental work limitations.

The results from study I and IV showed better employment outcomes in SMCVR I than in the "conventional way" of co-ordinating vocational rehabilitation but it remains to define what factors in those models influence the outcome most. However, this is difficult to judge. The model is a concept with many different components, any of which could affect the outcome, e.g. the collaboration "climate", the way clients were treated in the group, the manager's way of supporting the staff and the case-loads. Another factor is the various forms of support and financial benefit connected to employment. A comparison showed that all of the groups had a high proportion of participants with supported and sheltered employment. The study group had slightly lower financial benefits compared with the local comparison group, but a little more than the national comparison group.

Not all "SMCVR I" clients progressed as far as participating in national insurance office or employment office rehabilitation programmes. For comparison via a register study to be possible, only individuals who – because they co-operated – had received registered rehabilitation action were chosen. Roughly 75% of the study group had participated in some form of rehabilitation activity. Not all were included in the study since it had been decided to study the results from the years 1998-99. The reasons varied as to why some did not follow a rehabilitation programme after contact with the multi-professional group. For example, after a few meetings it may well have been determined that the person was likely to qualify for a disability pension, or that some form of medical treatment was needed. Another possible explanation was the limited number or assortment of training positions and programmes, so that no practical rehabilitation opportunities were available. Other studies also show that relatively few individuals receive any rehabilitation at all from public sources (Selander et al 1998, SOU 2000:78). A nation-wide study (Melkersson 1999) based on registered unemployed people with disabilities showed that a good half participated in a labour-market-

related programme (1992-96). This may indicate that the screening for clients to participate in the SMCVR I model was less, or at least not more, rigorous in Kungsbacka municipality than it was for VR services nationally.

Communicative pattern of SMCVR group meetings

The aim of study II was to investigate the communicative process in the rehabilitation groups operating in accordance with the SMCVR II model. The study was intended primarily as a descriptive one, and may hopefully contribute to our knowledge of how close collaboration among the VR actors may be organised. As to the physician's role, several studies (Westrin 1987, Danermark & Kullberg 1999) have indicated tendency for domination by the physician in situations where several rehabilitation actors are involved. The present study showed that the professionals had a fairly equal influence on the discussions in the rehabilitation groups. Interviews with the professionals and managers in both SMCVR models also indicated compatibility of perception and goals between the persons involved (Jakobsson et al 2000, Kärrholm 2007). This condition is judged by several researchers as being a positive factor and useful for building successful co-operation or integration (Westrin 1987, Hvinden 1994, Danermark & Kullberg 1999, Bronstein 2003, Gard & Larsson 2004, Bryson et al 2006).

The client's role in the discussion is of central importance. From the results, a situation may be discerned in which the client speaks often but rarely as anything else than a provider of information. However, this image should be modulated according to the scope the client was allowed to express her/his feelings, which was also quite often the case. The professionals are also the ones who largely keep the group to the subject. All provide support and encouragement, with the client on the receiving end. Note that the clients had been absent from work for long periods, had had considerable problems in returning to work and were in an exposed position. This may be one explanation of why it was hard for them to take the initiative and act more assertively in the rehabilitation groups. However, note also that a majority of clients in both the SMCVR models reported in interviews that they had more say in their own rehabilitation, and that they felt they were being treated with respect (Jakobsson et al 1998, Jakobsson et al 2000, Kärrholm 2007). This corresponds to other findings regarding co-operation between different actors in VR (Linder et al 1999, Socialstyrelsen 2000, Gard & Larsson 2004).

Study II and III was based on results from observations in two different rehabilitation groups, and the communicative pattern was rather similar in both. This is interesting since multidisciplinary projects are criticised for being over-dependent on individual enthusiasts, which render them difficult to reconstruct (Lindquist & Grape 1999). That the groups functioned in a similar manner reinforces the method in which they worked.

The results in study III indicated that the professionals strived in the same direction. One fundamental finding was that the theme 'adaptation' was present in the meetings. One form of adaptation was between the client and the professionals in the rehabilitation group. The clients' 'adaptation' could mean positive acceptance i.e. to be adaptable and flexible to the situation and the professional group, that the participants strive in the same direction. On the other hand, we also found a more 'negative' perspective when a person feels disregarded, and left it to the professionals to decide how things should be (Holmgren & Ivanoff 2004).

The adaptation theme was also present in two other studies. In the first study women's experience of long-term sick listing was in focus (Ockander & Timpka 2003). This study showed that the first period after falling ill was termed critical in its nature, but after a longer time off work the women had adapted to the new situation. Following recovery, a new process of change started for these women, an adaptation to the work situation with reference to the new life situation. The second study, which focused on partners of women who had suffered myocardial infarction, showed that the relatives adapted to the acute situation and its consequences (Svedlund et al 1999).

Regarding the question "if the female clients are being heard", two different behaviours were found, e.g. the meeting where the client had a strongly expressed will of her own and meetings in which the client quickly adapted to the professionals' (and sometimes the supervisors') will. One interesting theoretical framework can be useful here, to help understand those differences, namely the theory "locus of control" (Lefcourt 1982, Millet & Sandberg 2002). People with an internal locus of control have greater self-confidence and the ability to make independent decisions. People with an external locus of control have poorer self-confidence and find it more difficult to make independent decisions. There may be a link between this theory and the character of the various rehabilitation meetings.

Regarding the question "What are some of the female clients' personal experiences with regard to the vocational rehabilitation process?", the analysis showed the importance of the employer's and workmates' support during the time of the client's return to work. The support appeared as both a positive and a negative force in the vocational rehabilitation. A previous study (Nordqvist et al 2003) show that people with experience of long-term sick leave stress the employer's role in the vocational rehabilitation; but the employer can also have a deterrent influence on the process. In addition, the interviewees (focus groups) pointed out the importance of structured programmes for a return to work after long sickness absence. This could be affected by e.g. maintaining contact with the client during her/his sick leave and informing workmates regarding possible changes in job tasks when the client returns to work.

Söderberg et al (2004) found that it was important for clients to receive a confirmed diagnosis at the beginning of the rehabilitation process, in order to regain their health and be able to return to work. In Study III it was found that conflict between work and health did exist in most of the clients' own accounts. This conflict was always managed on the basis of the various decisions the clients had to make. These could concern tangible situations such as continuing treatment in parallel with a work capability assessment, to more wide-reaching thoughts on the possible consequences of a return to one's former job. Negative experiences appeared mainly to be connected with remembering what the job was like at the beginning of the sick-leave period, associations 'at the back of one's mind'. Such associations need processing and rehabilitation groups afford a certain amount of time for this. This support may however be insufficient, perhaps illustrated by the clients more comprehensive statements in this theme.

THEORETICAL ASPECTS OF CO-OPERATION BETWEEN ORGANISATIONS IN VR

The organisations involved in vocational rehabilitation were established as hierarchically centralised units. The units grew until the 1970s at which time criticism grew, pointing out that clients were not treated particularly humanely, that the units were too specialised and had difficulties in handling clients' overall problems and managing the total problem (Marklund 1995, Trygged 1998). Since the 1980s a more holistic trend when dealing with clients in public organisations, has emerged and the units have been decentralised and are now smaller (e.g. SOU 1996:85, SOU 2000:78). In addition, the economic cutbacks since the 1990s have prompted efforts to create better co-operation between organisations (SOU 1996:85, Lindqvist 1998).

The public investigations discussed above (see Introduction) suggest that cross-sector co-operation and inter-organisational activities in local settings are assumed to be what makes vocational rehabilitation work more efficiently. The many co-operation models between different rehabilitation actors from different authorities in VR may, generically, be named cross-sector co-operation. The SMCVR models presented in the present thesis are two extreme models with intensive collaboration between the professionals. They have proved to be superior to conventional co-operation in vocational rehabilitation regarding employment outcome (Jakobsson et al 2005) and reduced sickness absence (Kärrholm et al 2006, 2008) after an effected rehabilitation. It is difficult to make a specific judgement of the importance of different parts of the models causing the effect as always with 'package interventions'.

Organizational theories

The VR models studied in the present thesis may be termed "imaginary organisations" (Stenberg 1999), in that they are not integrated as an ordinary part of the organisations. Considering the models as organisations in themselves in terms of organisation theory, one can apply different analytical perspectives, e.g. as rational or natural systems (Scott 2003). In the rational perspective the models are an instrument designed to attain certain goals, and subsequently possible to import and adapt to other circumstances. In the natural-system view the most important aspect is the behaviour of the participants, not how the model was planned and organised. Here it is the professional's own experience, ambitions and knowledge together with motivation and the capability to co-operate that form their behaviour in the new organisation. If we accept the "natural system" perspective on the two models analysed in the present thesis, it becomes more complicated to adapt SMCVR models to other circumstances; experience can be shared but cannot easily be imported without adaptation. The fact that the neighbour municipality could build up a similar model without difficulties indicates that the SMCVR model can be applied to other circumstances. Interviews with officers and managers involved underline the importance of both the "rational" aspects, e.g. regular group meetings and well-defined roles in the home organisation and in the project, and the "natural" aspects such as the motivation to co-operate and openness to new approaches (Jakobsson et al 1998, 2000). The professionals in the groups also emphasize their strong connection to their parent authorities (Jakobsson et al 1998, 2000), good knowledge of the other VR actors and co-operative "know-how", and the settings of common goals. An example of this was the occupational therapist in the SMCVR I model, who was familiar with the local health and medical care organisations and was therefore able to influence the planning in those units to fit different clients' rehabilitation needs. Consequently, a reasonable interpretation of the

success factors includes both “rational” and “natural” aspects. This leads to the observation that if the model is implemented in other communities, both aspects must be considered.

The supportive roles of the professionals in the two models studied can be compared with a “case management” aspect. Case managers have a supportive role in helping clients through their rehabilitation (Roessler & Rubin 1998). Different varieties of case managing have developed during the years particularly in the US and Australia. Swedish attempts with case management showed promising results on employment (Marnetoft & Selander 2000, Selander & Marnetoft 2005). Perhaps the SMCVR I model could be combined with a case manager (Vahlne Westerhäll et al 2006, Ekholm & Bergroth 2006).

Clients’ experiences

Interviews showed that about 20 – 25 % of the clients in both projects experienced negative experience, e.g. the staff did not listen enough, the clients felt disrespectfully treated and the proposed activities did not suit their rehabilitation needs. It is relevant here to stress that such models need further development to make them suitable for all clients. Management of vocational rehabilitation needs to include alternative forms for clients who feel uncomfortable with the rehabilitation group model.

The “Black box”

In conclusion a mixture of different aspects from different disciplines could be considered as important in the model “systematic multi-professional cross-sector vocational rehabilitation (SMCVR)”. In other words, what is to be found in “the black box”.

1) On individual level, due to observations and interviews with clients in both the SMCVR models the word “empowerment” is one crucial component, the clients mean that they experienced a feeling of being in control of the situation (Kosciulek 2005, Askheim & Starrin 2007). The team listened to the clients i. e. they received help to manage the conflict between work and health. The clients were provided with the information necessary to find out what the different organisations can contribute with to help them solve their problems. The clients also experienced being helped to point out the way towards future goals. They felt that they were actually in the centre of the process, in the sense that the organisations worked towards the same goals as the clients themselves. Most clients felt “empowered” in the process, and as a result of this their motivation to set goals rose. Another aspect is the matching process between the client and different VR measures that the client received. It appears likely that the co-operation model of SMCVR leads to improved matching between clients and suitable VR measures.

2) Another important part of “the black box” is the contribution of the professional as team members, which could be seen as one of the determining factors when building the SMCVR model (Lundgren & Molander 2008). They work close together, have regular meetings several times a week, and they work towards common goals. The situation affords them chances to capture the possibilities and limitations in the rehabilitation process, and consequently their roles in the process became clearer. It is possible here to connect to social psychology theories about forming a group (Lauvås & Lauvås 2006).

The meeting between the rehabilitation professionals and the clients is a sensitive, crucial and difficult situation to handle. What is most important here is (based on interviews with the co-workers and observations) to create a situation in which the clients feel secure and trusting. Further it is also important to note that no one in the team has a higher dignity, or “status”

than anyone else because this can have a negative impact on the feeling of shared responsibility. Due to the observations and interviews no specific part dominated the meetings, however, some parts could play a more prominent role during the meeting (Johansson-Hidén 1998, Lauvås & Lauvås 2006).

3) The third factor is the organisational aspects, the whole structure and support of the model in connection to the different “parent organisations”. In both SMCVR models the professionals worked part time in the project and the rest of their working time in their “parent organisations”. Subsequently the professionals are not being experienced as something apart. Furthermore the superiors created a leading group where problems and ideas from the team could be discussed and solved. This group also functioned as a “defender” of the model. There are always threats against when using “imaginary” organisations. Society changes and organisations continually draw up new goals to cope with. Authorities often have to concentrate on certain measurable goals, and in a situation like this it can be difficult to support this co-operation, which was not legally stipulated. However, new opportunities have emerged in the form of a new law (SFS 2003:1210) Due to this law the rehabilitation actors in the Kungsbacka municipality were able to establish a co-operative alliance based on a common public foundation for vocational rehabilitation purposes. But it is a complicated decision to take and a majority of municipality politicians must be in agreement.

METHODOLOGICAL ASPECTS

The results in study I and IV were based on matched pairs with a “social twin” from other municipalities (LG), a county (CG) and a national sample (NG). A randomised study would have been the ideal design, but laws and ethical aspects limit the opportunities for carrying out such a study. No comparable individuals were found in Kungsbacka as the majority of those in the target group had already been in contact with SMCVR I. The two comparison municipalities (LG) were chosen because their socioeconomic circumstances and labour market resemble those in Kungsbacka. The comparison municipalities represent conventionally co-ordinated rehabilitation. A group was also chosen from the SPES register to represent the “conventional model” (NG). The “conventional model” represents various forms of ordinary co-operation from “no contact”, to formally organised co-operation though not of the same intensity and extent as in the SMCVR models. It cannot be excluded that some clients in the national group could have had their rehabilitation coordinated in ways similar to that of the SMCVR models.

Study I and IV were based on records obtained from the SPES data base. This type of register may contain incorrect data because officers have made mistakes in their coding or clients have given incorrect information, but these shortcomings are judged to be equal for the groups compared. Clients may also have quit their jobs or studies shortly after the coding. This, however, is unlikely because clients have to be registered as unemployed immediately to get unemployment allowances. A client is coded as employed if the reason for removing him or her from the SPES register is “unknown” or “lost contact”. Only 2-3 clients of 51 in each group studied were removed because the outcome of their vocational rehabilitation was unknown, which is judged not to distort the conclusions of the present study. A similar situation was studied by researchers who found that about 50 % of the “drop outs” had employment (Bring & Carling 2000, Sanesi 2002).

Participatory observation was used as method in study II and III, a data collection method with both advantages and disadvantages. Its greatest asset is that the phenomenon can be observed directly and in pure form. A disadvantage is possible problems of validity. Would the communication in the groups be the same without the observer's presence? It may be assumed that the observer's presence affects what happens, and that the validity problem lies in what form the influence takes and how great it is (Douglas 1976, Svensson & Starrin 1996). A probable effect is that there was greater caution within the present groups, both because of the observer's presence and because the discussions were being recorded. A feedback session in interview form showed that the participants did not experience the observer or the tape recorder as disturbing. The VR actors themselves reported that they very soon felt secure during the observed sessions. Similarly, clients interviewed directly after the meeting stated that they did not feel the meeting would have turned out differently without the presence of an observer (Jakobsson et al 2000).

The content analysis in study II was based mainly on a quantitative method and afforded primarily a total impression. This method worked well for answering the questions "who participated in the discussions?", "what was discussed during the meetings?" and "did any specific rehabilitation actor dominate the rehabilitation meetings?". The mediated results rest partly on the researcher's own values. As a supplement, the participants' own opinions on the phenomenon of domination would have been of value. Questions, interviews or questionnaires could have been suitable for gathering data. The fourth question concerned the general character of the discussions. Characteristics were found that could apply to most of the meetings, though obviously no two meetings were alike. A risk with this presentation is that an image emerges of an "average" meeting that never really existed. In contrast to this general picture, the more qualitative content analysis in study III was applied to find unique characteristics of the interaction in the rehabilitation groups.

SUMMARY OF MAJOR RESULTS AND CONCLUSIONS

With systematic multi-professional cross-sector co-operation in vocational rehabilitation (SMCVR I):

- a larger proportion of clients exposed to the particular form of developed co-operation studied became employed during the first 2 years than among similar clients in neighbouring municipalities or among those in a national register,
- the higher employment rate showed a peak two years after completed rehabilitation,
- the chance of becoming employed after completed rehabilitation in the 2-year follow-up was about twice as high compared to both of the comparison groups, which used conventional co-operation.

With SMCVR I a greater proportion of clients are in employment over a 6-year period compared with matched pairs in a county group and in a national group representing "co-operation as usual".

Following the peak of two thirds of the clients being employed 2 years after intervention there is a moderate yearly decrease in employment, but half of the clients are still in employment 6 years after intervention.

The effect with more clients in employment of the SMCVR I model studied could be statistically demonstrated to last at least 3 years after intervention.

Clients with mental/social type of work limitation have less opportunity of becoming employed after a SMCVR I intervention than clients with a somatic work limitation.

The communicative pattern in a SMCVR II model

The systematic multi-professional cross-sector group meetings studied possess the following distinctive features:

- the client gives most of the utterances,
- the discussions deal with the client's situation regarding work, health and financial support,
- none of the professionals dominate the meeting but these have different roles as initiators and coordinators,
- scope is allowed for the client's requirements, thoughts and feelings,
- differences in attitude is apparent during the rehabilitation meetings, some clients are passive and exercise less influence on the planning than the other more active clients,
- a few clients tend to be somewhat passive, answering questions rather than asking them,
- 'adaptation' is a pervading theme in the discussions.

Female clients experiences of the VR process

- 'adaptation' was a pervading theme in the discussions during the observations,
- the 'importance of work' for the clients emerged as a sub-theme; positive and neutral aspects occurred,
- the conflict between health and work is an ever-present theme of great importance for vocational rehabilitation, and some people need more time for this discussion than others,
- the importance of the employer's and workmates' support during the client's return to work,
- the support appeared as both a positive and a negative force in the vocational rehabilitation.

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