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Department of Health Sciences/ Occupational Therapy and Occupational Science,  
Faculty of Medicine, Lund University, Sweden 2013

# Individual Placement and Support (IPS) for persons with severe mental illness

-Outcomes of a randomised controlled trial in Sweden

Cecilia Areberg



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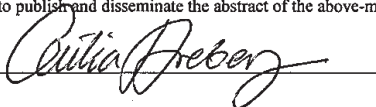
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Title and subtitle Individual Placement and Support (IPS) for persons with severe mental illness -Outcomes of a randomised controlled trial in Sweden		
Abstract  <p>In the light of the limited research on the subject of Individual Placement and Support (IPS) in a Swedish context, this thesis has contributed with knowledge of the effectiveness and experiences of IPS among persons with severe mental illness (SMI) living in Sweden. The thesis has also provided information about the work motivation among those persons with SMI who seek vocational support by IPS. The results revealed that IPS participation can provide a means for obtaining competitive employment, becoming integrated in the community and promoting personal recovery among the participants. The findings indicated that IPS was five times faster in supporting persons with SMI to obtain a competitive employment, as compared to traditional vocational rehabilitation (TVR). The IPS participants were also found to work significantly more hours and weeks, to have longer job tenure periods and better income in comparison to the TVR participants. In addition to obtaining competitive employment, the IPS group became more integrated in community mainstream settings by their gaining internship or studies. By the end of the trial the IPS group perceived higher quality of life and was more empowered than the TVR group. During IPS, the participants were shown to have maintained their work motivation. Furthermore, it was shown amongst the participants that a higher level of occupational engagement was found to be the most important factor for having a high work motivation. Having the motivation to work was also experienced, by the participants as a facilitator during IPS along with the particular skills and empowering approach of the employment specialist. Thus, participating in IPS and having support from an employment specialist brought feelings of hope and meaning to the participants who experienced their relationship with the employment specialist to be a partnership and something beyond the ordinary. To achieve their goals of obtaining competitive employment however, the participants also stated that they needed the parallel support of significant others in the IPS support network. The results in the present thesis support the earlier research findings of the advantage of IPS over TVR and further underpin the recommendation by the Swedish National Board of Health and Welfare to implement IPS in the country's mental health care and municipality services.</p>		
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# Individual Placement and Support (IPS) for persons with severe mental illness

-Outcomes of a randomised controlled trial in Sweden

Cecilia Areberg



**LUND**  
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Faculty of Medicine

Lund 2013

Department of Health Sciences/ Occupational Therapy and  
Occupational Science  
Lund University, Sweden

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*“perhaps the business of getting to work is less about something to do and more about recovering or discovering something to be”*

*(Bebout & Harris, 1995)*



# Table of Contents

Abstract	7
The thesis at a glance	8
List of publications	9
List of definitions and abbreviations	10
Introduction	13
Work situation for persons with SMI	15
Traditional vocational rehabilitation in Sweden	17
Individual Placement and Support	18
The eight principles	19
The effectiveness of IPS	21
Vocational outcomes	22
Non-vocational outcomes	23
Qualitative research on IPS	27
IPS and occupational therapy	28
Implications for research	31
Aim of the thesis	33
The specific aims	33
Material and methods	35
Research context	37
Research planning	37
Participants, selection criteria and procedure	38
Study groups	43
Data collection	44
Instruments and Questionnaires	45
Methods for analysing the data	48
Ethical considerations	50
Results	51



The participants' experiences	51
Work motivation	54
Factors associated with work motivation	54
Participants' work motivation during RCT	55
Effectiveness on vocational outcomes	56
Effectiveness on non-vocational outcomes	57
Discussion	61
IPS and vocational outcomes	61
Community integration	63
IPS and non-vocational outcomes	64
Quality of life	64
Empowerment	65
IPS and the participants' work motivation	66
IPS—a personal recovery process	68
IPS and occupational therapy	68
Methodological considerations	70
Clinical implications	74
Implications for further research	75
Swedish summary/ Svensk sammanfattning	77
De fyra delstudierna	79
Acknowledgements	83
References	85

# Abstract

In the light of the limited research on the subject of Individual Placement and Support (IPS) in a Swedish context, this thesis has contributed with knowledge of the effectiveness and experiences of IPS among persons with severe mental illness (SMI) living in Sweden. The thesis has also provided information about the work motivation among those persons with SMI who seek vocational support by IPS. The results revealed that IPS participation can provide a means for obtaining competitive employment, becoming integrated in the community and promoting personal recovery among the participants. The findings indicated that IPS was five times faster in supporting persons with SMI to obtain a competitive employment, as compared to traditional vocational rehabilitation (TVR). The IPS participants were also found to work significantly more hours and weeks, to have longer job tenure periods and better income in comparison to the TVR participants. In addition to obtaining competitive employment, the IPS group became more integrated in community mainstream settings by their gaining internship or studies. By the end of the trial the IPS group perceived higher quality of life and was more empowered than the TVR group. During IPS, the participants were shown to have maintained their work motivation. Furthermore, it was shown amongst the participants that a higher level of occupational engagement was found to be the most important factor for having a high work motivation. Having the motivation to work was also experienced, by the participants as a facilitator during IPS along with the particular skills and empowering approach of the employment specialist. Thus, participating in IPS and having support from an employment specialist brought feelings of hope and meaning to the participants who experienced their relationship with the employment specialist to be a partnership and something beyond the ordinary. To achieve their goals of obtaining competitive employment however, the participants also stated that they needed the parallel support of significant others in the IPS support network. The results in the present thesis support the earlier research findings of the advantage of IPS over TVR and further underpin the recommendation by the Swedish National Board of Health and Welfare to implement IPS in the country's mental health care and municipality services.

## The thesis at a glance

Individual Placement and Support (IPS) for persons with severe mental illness –Outcomes of a randomised controlled trial in Sweden	
Study I	Experiences of the Individual Placement and Support approach in persons with severe mental illness.
Aim	To investigate participants' experiences of IPS participation and their experiences of receiving support from an employment specialist.
Result	Participation in IPS, as experienced by the participants, could be described as being the centre of attention in a process that brings hope and meaning. The relationship with the employment specialist, in which the employment specialist considered the participants' needs and field of interest, was perceived as something unique. The skills of the employment specialist facilitated the relationship with the participants who found their own motivation and contribution to the process as important as well as the support from significant others.
Conclusion	The findings have endorsed the guiding principles in IPS, and emphasised the employment specialist's role and skills during IPS as well as the participants' motivation.
Study II	Work motivation among people with severe mental illness applying for IPS.
Aim	To investigate how work motivation, conceptualised as an individual's personal causation, interest, and values in work was associated with clinical and socio-demographic characteristics, empowerment, and engagement in daily occupations among people with severe mental illness entering IPS.
Result	Work motivation was associated with fewer symptoms, increased age and empowerment, higher level of occupational engagement, and having rehabilitation support. Two regression analyses showed occupational engagement to be the only significant predictive variable for a high level of work motivation ( $p<0.001$ ; odds ratio 1.14/ 1.48).
Conclusion	The findings underline the importance of providing persons with SMI with opportunities to envision themselves as workers and to cultivate their decision to work.
Study III	The effect of IPS on participants' engagement, quality of life, empowerment and motivation -A randomised controlled trial.
Aim	To examine the effectiveness of IPS in terms of occupational engagement, work motivation, empowerment and quality of life among people with severe mental illness.
Result	At six months, no group differences were found in any of the outcome variables. However, a positive significant change in occupational engagement within the IPS group was shown between baseline and six ( $p=0.003$ ), and 18 months ( $p=0.012$ ). The IPS participants also increased their overall QOL significantly between baseline and six months ( $p=0.002$ ), between six and 18 months ( $p=0.031$ ), and between baseline and 18 months ( $p=0.000$ ). In the TVR group no changes were found in outcomes between these measurement points. At 18 months, the IPS group was shown to have significantly higher scores in overall QOL ( $p=0.002$ ), empowerment ( $p=0.047$ ), and work motivation ( $p=0.033$ ) than the TVR group.
Conclusion	IPS can be anticipated to be part of a recovery process as individuals can increase their life satisfaction and time spent in daily occupations and community life.
Study IV	Individual Placement and Support in Sweden -A randomised controlled trial.
Aim	To test the effectiveness of IPS on vocational outcomes in terms of competitive employment, working hours, income, job tenure and speed to employment, in a Swedish context, among persons with severe mental illness. The aim was also to evaluate the community integration effect of the IPS intervention.
Result	The employment rate in the IPS group (46%) was significantly higher ( $p<0.001$ ) than in the TVR group (11%) (difference 36%, 95 CI 18-54). The number of working hours, weeks worked, job tenure and income were also significantly higher among the IPS participants. According to the Cox-regression analyses, the IPS participants gained employment five times faster compared to those in TVR. The IPS participants also became more integrated in employment, internship and studies in mainstream community settings (90%) compared to those in TVR (24%) (difference 66%, CI 50-80, $p<0.001$ ).
Conclusion	In a Swedish context, IPS was far more effective in terms of vocational outcomes and community integration than TVR. The results, however, reflect the difficulties of achieving a higher competitive employment rate due to the strict internship culture that is promoted by labour market incentives in the welfare system.

# List of publications

I. Areberg, C., Björkman, T. & Bejerholm, U. (in press). Experiences of the Individual Placement and Support approach in persons with severe mental illness. *Scandinavian Journal of Caring Sciences*.

II. Areberg, C. & Bejerholm, U. (2012). Work motivation among people with severe mental illness applying for IPS. Manuscript submitted for publication.

III. Areberg, C. & Bejerholm, U. (in press). The effect of IPS on participants' engagement, quality of life, empowerment and motivation -A randomised controlled trial. *Scandinavian Journal of Occupational Therapy*.

IV. Bejerholm, U., Areberg, C., Hofgren, C. & Rinaldi, M. (2012) Individual Placement and Support in Sweden -A randomised controlled trial. Manuscript submitted for publication.

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# List of definitions and abbreviations

Competitive employment	Is defined as a job in a mainstream setting, a job that is available to anyone.
Community integration	Refers to the fact that persons with SMI can lead their own lives within community mainstream settings (Lloyd, King, & Moore, 2010). Community integration is thus about supporting persons with SMI to move out of their patient role and sheltered environment towards achieving regular life roles (Bond, Salyers, Rollins, Rapp, & Zipple, 2004; Townley, Kloos, & Wright, 2009).
Empowerment	Empowerment refers to a person's perceptions of self-efficacy and self-esteem, power, community activism and control over the future (Rogers, Chamberlin, Ellison, & Crean, 1997).
EBP	Evidence Based Practice is a clinical practice that is based on current best evidence in making decisions about the care of a patient. It means integrating individual clinical expertise and patients' values with the best available external clinical evidence from systematic research (Sackett, 2000).
IPS	Individual Placement and Support is the evidence-based Supported Employment. It is a vocational rehabilitation approach for persons with SMI who wish to obtain competitive employment. The approach is based on eight empirically derived principles (Becker & Drake, 2003; Dartmouth IPS Supported Employment Centre, 2012; Sackett, 2000).
Internship	Internship is a labour market intervention which provides work experience to those who want to

explore and gain relevant skills and knowledge required to take on a particular job or career field that is possible for anyone and not specific to people with a mental health condition or who are disabled.

ITT	Intent To Treat analysis is an analysis of a randomised experiment in which units are analysed in the condition to which they were assigned, regardless of whether they actually received the treatment in that condition (Shadish, Cook, & Campbell, 2002, p. 508).
Occupational Engagement	Is defined as the extent to which a person has a balanced rhythm of activity and rest, a variety and range of meaningful occupations, and routines, and the ability to move around in society and interact socially, implying that occupational engagement occurs over time (Bejerholm & Eklund, 2007, p. 21).
PES	The Public Employment Service is a welfare organisation that provides unemployment and activity support to citizens who are unemployed and administrates related benefits for those involved in their vocational service.
QOL	Quality of Life encircles subjective quality of life, encompassing general life satisfaction, satisfaction with work, finances, social relations, leisure, living situation, family relations, sexual relations, and health (Priebe, Huxley, Knight, & Evans, 1999).
RCT	Randomised Controlled Trial is a study design, often used to test the efficacy of an intervention, in which the study participants are randomly assigned to receive one or the other of the alternative treatments under study. This assignment creates two or more groups of units that are similar to each other on average, and reduces the plausibility of alternative explanations for observed effects (Shadish, et al., 2002).

SIA	The Social Insurance Agency is a public welfare organisation that is responsible for large parts of the social insurance system, and thus provides, administration and control over a broad range of benefits including state pensions.
SMI	The definition of Severe Mental Illness includes persons who have a psychotic disorder or have psychiatric disabilities on a long term basis that interfere with their performance in major life occupations (Ruggeri, Leese, Thornicroft, Bisoffi, & Tansella, 2000).
TVR	Traditional Vocational Rehabilitation is defined as a pre-vocational, stepwise approach to vocational rehabilitation that aims to provide persons with SMI with the necessary skills, support and resources required for future paid work (Corrigan, 2001).
Work motivation	Refers to a person's values and interest in working and personal causation i.e. the perception of one's capacity and sense of self efficacy related to work (Kielhofner et al., 1999).

# Introduction

Work plays a crucial role for persons with severe mental illness (SMI) with respect to maintaining mental health and promoting recovery (Boardman, Grove, Perkins, & Shepherd, 2003; Dunn, Wewiorski, & Rogers, 2008; Provencher, Gregg, & Crawford, 2002). In addition, competitive employment is considered as the top goal for many persons with SMI (Bedell, Draving, Parrish, Gervery, & Guastadisegni, 1998; Rogers et al., 2003). And yet, for a large proportion of those with SMI who want to obtain work, competitive employment continues to be an unattainable goal. That there is a requirement for innovative and evidence-based approaches to vocational rehabilitation that meet the needs and wishes of persons with SMI, has been stressed by the authorities (Socialstyrelsen, 2011; SOU, 2006:100). Accordingly, the Swedish health care and other welfare services are faced with the challenge of planning and providing vocational rehabilitation services that are effective and supported by research. In 2011, the National Board of Health and Welfare recommended that the Individual Placement and Support (IPS) approach to vocational rehabilitation be implemented into the mental health care and municipality services in favour of the traditional stepwise vocational services (Socialstyrelsen, 2011). Despite incentives from the government and the many randomised controlled trials (RCT) accomplished internationally, no research has investigated the impact of IPS on competitive employment and other vocational and non-vocational outcomes in Sweden.

For the majority of people, work is a highly valued aspect in their daily life and persons with SMI are no exception. However, they may be more dependent on support from significant others to be able to enter and maintain a competitive employment. Accordingly, to have SMI includes a range of mental disorders characterised by symptoms and impairments that persist over time and limit a person's ability to fulfil goals in life such as obtaining work. The "two-dimensional definition" of SMI, proposed by Ruggeri, Leese, Thornicroft, Bisoff and Tansella (2000), concerns persons who have a duration of treatment of two years or more and a psychosocial dysfunction. Although this definition of SMI is not diagnose specific, the most represented diagnosis among persons with SMI are schizophrenia and other psychosis.



Even though many persons with SMI may experience limitation regarding work, there is, however, robust evidence from the United States (US) and from studies accomplished in Europe (Bond, Drake, & Becker, 2008, 2012), which indicate that if persons with SMI are provided with the right support, the goal of becoming integrated in the community and the workforce is a realistic aspiration for many of them.

The importance of providing persons with SMI with work opportunities can be viewed from different perspectives. One central perspective is the individual perspective which focuses on the potential, growth and self-construction among persons with SMI. From this perspective, work is considered as a means for persons with SMI to develop capacities and skills and to use their full human potential (Kirsh, Krupa, Cockburn, & Gewurtz, 2010). For persons with SMI, work has shown to have a positive impact on their psychiatric symptoms and well-being, as well as on their self-esteem and self-efficacy (Dunn, et al., 2008; Kirsh, 2000; Leufstadius, Eklund, & Erlandsson, 2009). Furthermore, paid work improves social status and economic independence among persons with SMI (Lehman et al., 2002), and gives a sense of normality and that of being a contributor to the socio- and economical foundation of society (Secker, Grove, & Seeböhm, 2001). This perspective of the potential and self-construct among persons with SMI is central to the recovery movement in the field of mental health care. This movement put emphasis on the individual to take control over their life, to have opportunities to achieve their personal goals, and to feel hope and satisfaction in life regardless of the presence of psychiatric symptoms and disabilities (Slade, 2009).

From a citizenship perspective, work is a fundamental right and responsibility of citizenship. It stems from the ideals of social justice which emphasise equity and fairness among citizens, and that all people, despite disability, have equal right to society's advantages and opportunities (Kirsh, et al., 2010). In Sweden, the idea about inclusion through work is evident in the state social and labour policies (Socialdepartementet, 2008), which are based on the United Nation's convention regarding the rights of people with a disability (UN, 2006). According to the convention, work is seen as contributing to the social capital of a community and as a means to bring together the citizens of a community. The convention also states that discrimination of people with disability at work is prohibited, and that the government that ratifies the convention must take the responsibility to eliminate barriers for participation in work (UN, 2006). The convention was adopted by the Swedish government in 2008. In the new Swedish disability policy for the years 2012-2016, the goal of independence and self-determination, and equality among persons with a disability is clearly stated. In line with this policy, the government has also decided upon a five-

year action plan to find new strategies to enhance the work situation for persons with psychiatric disabilities (Socialdepartementet, 2012).

The importance of providing persons with SMI with opportunities to enter work can also be viewed from an economic development perspective. According to this perspective, all citizens are part of the workforce who together contribute to the society's economy, and development (Kirsh, et al., 2010). For instance, to meet the future challenges of an aging population while still preserving the current level of welfare, the Swedish Government has emphasised the need to get persons with mental disabilities into competitive work (Arbetsmarknadsdepartementet, 2011; SOU, 2006:100). In addition, the Swedish government has clearly emphasised that paid work must be given priority over financial benefit support (Arbetsmarknadsdepartementet, 2011). The importance of including all citizens in contributing towards the wealth of the country was also stressed by the Swedish Prime minister in his 2012 statement of Government policy.

## Work situation for persons with SMI

The word "occupation" is commonly referred to as having a paid work. However, in this thesis occupation as a concept refers to all kinds of human doing, such as activities of daily living, play, and work (Kielhofner, 2002) that is individually experienced and taking place within a temporal, physical and sociocultural context (Pierce, 2001). Further, in occupational therapy, work as an occupation refers to activities, both paid and unpaid, that provide service or commodities to others, and includes activities engaged in as, for example, an employee, a student, or a volunteer (Kielhofner, 2002). In this thesis, work is referred to as being an employee and engaged in paid productive activities in a mainstream setting, i.e. competitive employment. However, with the intent of describing the present work situation for persons with SMI in the following paragraphs it is relevant to do so in accordance with the definition of work, derived from occupational therapy.

Accordingly, when investigating work in terms of being competitively employed, research has shown the employment rate among persons with SMI to be surprisingly low. For instance, in Europe the employment rate among persons with SMI has shown to be 10-20%, and to have declined among persons with schizophrenia over the last 50 years (Marwaha & Johnson, 2004). In Sweden, a large number of persons with SMI are without competitive employment. At the end of the 1900's, an inventory of 43000 people with SMI, living in Sweden, showed that only eight percent had profitable work

(Socialstyrelsen, 1998). More recent figures show that 8.7% of persons with SMI had some form of salary and that nine out of 10 were reliant on sick leave benefit (Nordström, Skärsäter, Björkman, & Wijk, 2009).

When investigating work in terms of being a student, different national reports show that the education level among persons with SMI and other disabilities is much lower when compared to the general Swedish population (Socialstyrelsen, 2010a, 2010b). The Swedish National Board of Health and Welfare (2010a) notes that the low level of education is alarming and that it is important to find strategies for how to help persons with disabilities to get involved in education. This statement is also in line with research showing that education not only provides the target group with the qualifications for paid work, but also helps them to construct a socially acceptable identity and facilitates their integration into the community (Harrison & Sellers, 1998).

Many persons with SMI are to date engaged in unpaid work such as activities at day centers. In Sweden, it is estimated that between 10 000 and 13 000 persons with psychiatric disabilities participate in day centre activities in their municipality (Socialdepartementet, 2012). Since the 1995 psychiatric reform, which involved a clarification of the roles between the county council and the municipality, the municipalities have had the responsibility to support persons with SMI through enabling them to participate in meaningful daily and productive activities including competitive employment (Socialstyrelsen, 1999). About 80% of the Swedish municipalities offer this kind of structured activity in day centres (Socialdepartementet, 2012). The day centres range from being simply meeting places to offering more structured and scheduled productive activities. In qualitative research, the day centres have shown to provide meaningful activities in the attendees' life (Argentzell, Håkansson, & Eklund, 2012; Tjörnstrand, Bejerholm, & Eklund, 2011). However, the centres have also been criticised for lacking the initiative to support the attendees in transiting from the work-like activities to competitive employment (SOU, 2006:100). It has even been stated that the day centres and other services in sheltered settings counter the efforts of the community integration of persons with SMI (Becker & Drake, 2003). Thus, in this thesis community integration refers to the fact that persons with SMI can lead their own lives within community mainstream settings (Lloyd, et al., 2010), and concerns supporting persons with SMI to move out of their patient role and sheltered environment towards achieving regular roles in daily life (Bond, et al., 2004; Townley, et al., 2009).

## Traditional vocational rehabilitation in Sweden

The traditional vocational rehabilitation (TVR) in Sweden can be characterised as a “train then place” approach to vocational rehabilitation. According to this approach, the rehabilitation is divided into several steps from which the individual can progress, from the safest and most protective environment to a competitive employment in mainstream settings. Each step on the rehabilitation ladder is aimed at providing the individual with the necessary skills, support and resources required for a future working life (Corrigan, 2001). This stepwise “train then place” approach to vocational rehabilitation for persons with SMI is prompted by clinical models, such as the bio-medical model and the bio-psycho-medical-model (Corrigan & McCracken, 2005). The biomedical model assumes that a person’s mental illness and disability has a single underlying biological cause and that the removal of this cause would lead to enhanced health (Slade, 2009). The recovery among persons with SMI is thus thought of as a “clinical” recovery and is considered to be a period of time or a state when symptoms and disabilities are controlled or absent. Moreover, the bio-psycho-medical model puts emphasis on a stress-vulnerability diathesis, that an internal vulnerability of a person interacts with an aversive environment to produce psychotic experience (Zubin & Spring, 1977). Thus, the bio-psycho-medical model claims that the stress that may arise through occupational engagement lowers the tolerance for active participation, limits self-efficacy and worsens the acute symptoms (Bebbington, Bowen, Hirsch, & Kuipers, 1995).

The “safe” and lengthy transition between the different steps in TVR has been criticised for being nurtured by a caring perspective instead of a vocational rehabilitation perspective (Corrigan & McCracken, 2005; SOU, 2006:100). The TVR has also been criticised for not being an evidence-based practice (EBP) (Davis & Rinaldi, 2004; Waghorn, Lloyd, & Clune, 2009). This latter shortcoming is also shown in the national guidelines of psychosocial interventions for persons with schizophrenia (Socialstyrelsen, 2011), where TVR or stepwise vocational rehabilitation were given the lowest priority because of this lack of evidence. In addition, there is too little co-ordination among the different welfare services or organizations (Socialstyrelsen, 2011; SOU, 2006:100). This is unfortunate since vocational rehabilitation for persons with SMI involves support from several welfare organisations or services. Each welfare service carries their own costs and is guided by different regulations and responsibilities. Generally, persons with SMI who are about to enter the labour market are in contact with the mental healthcare service for the provision of medical treatment and to some extent rehabilitation. The

municipality may also provide a variety of different work activities, pre-vocational training and assessments in sheltered settings. Moreover, the Social Insurance Agency (SIA) service is responsible for coordinating the person's pre-vocational rehabilitation, which is also likely to involve the Public Employment Service (PES). The PES can provide further pre-vocational training and assessments of work capacity during a person's enrolment in their service.

## Individual Placement and Support

During the last three decades the "train then place" approach has been challenged by a new vocational rehabilitation approach referred to as the "place then train" approach. The IPS, also known as the evidence based Supported Employment (Becker & Drake, 2003), is a "place then train" approach to vocational rehabilitation. In international research, IPS is considered as being the most effective approach to support persons with SMI to obtain competitive employment (Bond & Drake, 2008; Crowther, Marshall, Bond, & Huxley, 2001).

The development of the IPS was influenced by different philosophies, values, and different vocational rehabilitation programmes in the US, for instance the Program for Assertive Community Treatment (PACT) which claimed that skills training in sheltered settings was ineffective and that clients needed assistance to learn the important skills in the settings and community environment in which they would actually use their skills (Russert & Frey, 1991). Accordingly, the PACT model did not assume work related skills to generalise well from one situation to another. The developers of IPS also considered other interventions which emphasised the importance to integrate vocational rehabilitation within the psychiatric teams (Allness & Knoedler, 1998; Liberman, Hilty, Drake, & Tsang, 2001). Another influence came from the consumer movement and the Boston University's Center for Psychiatric Rehabilitation which gave prominence to the consumers' choice during rehabilitation and to offer vocational opportunities that matched consumers' interests and preferences (Anthony, Cohen, & Farkas, 1990). The IPS was also strongly influenced by the Supported Employment in development disabilities which is characterised by a "place then train" approach to vocational rehabilitation (Wehman & Moon, 1988).

The "place then train" approach to vocational rehabilitation claims that individuals who have the desire to obtain work should be placed directly in a competitive employment without any pre-vocational activities and training.

The intention is to find a natural match between the individual's strengths and the demands at work and in addition provide individualised support and find ways to adapt the physical and social work environment to fit the person's needs (Corrigan, 2001; Corrigan & McCracken, 2005). Accordingly, recovery of a person with SMI according to the "place then train" approach is not viewed as a clinical outcome that must be achieved before entering competitive employment. Instead recovery is viewed as a unique and personal process leading to the result that persons with SMI can live satisfying and productive lives even though they have a mental illness and experience symptoms (Anthony, 1993).

Since 2011, the IPS is recommended by the Swedish National Board of Health and Welfare in the National Guidelines for Psychosocial Practice for people with schizophrenia and related disorders (Socialstyrelsen, 2011). A three-year project, from 2011 to 2013, has also been instigated to support the municipalities to implement IPS in their services (Socialdepartementet, 2011). The National Board of Health and Welfare has however, stressed that evidence of the effectiveness of IPS in Sweden is lacking (Socialstyrelsen, 2011). Accordingly, there is a need to complement existing international research findings of IPS with studies of the effectiveness of IPS in a Swedish context.

## The eight principles

The IPS approach involves eight evidence based principles (Table 1), which are recognised as being important for determining success when helping persons with SMI to gain and retain employment (Becker & Drake, 2003; Bond, 1998; Dartmouth IPS Supported Employment Centre, 2012; Socialstyrelsen, 2012a). To note is that the principles are not performed by the employment specialist, the key person in the IPS, in a chronological order. The foremost principle of IPS, *Competitive employment is the goal*, is based on the belief and research that most persons with SMI want to obtain competitive employment (Becker & Drake, 1994). The employment specialist supports the participants' goals for obtaining competitive employment and helps counter the participants' perceptions of low self-esteem and doubts about their own potential. The principle, *Rapid job search*, is related to the principle of finding work, since its focus concerns looking for a suitable job early on in the IPS process, usually after a month. Thus, the employment specialist engages the participants in a variety of activities to get in contact with the employment market and employers. According to Corrigan and McCracken (2005) this principle of a rapid job search challenges the assumption within the "train then place" approach which put emphasis on pre-vocational training. According to the principle, *Eligibility is based on the participant's choice*, no persons are

excluded from participation in IPS due to the severity of their mental illness, anticipated work readiness, ongoing drug-abuse or poor-vocational history which is in contrast to TVR. This zero exclusion principle asserts that all persons with SMI who are motivated to work can enter IPS.

The principle, *Attention to the participant's preferences*, is supported by research which suggests that persons with SMI who obtain work in accordance with their preferences are more likely to stay longer in work, and feel satisfied (Becker, Drake, Farabaugh, & Bond, 1996). The principle, *The vocational rehabilitation is an integrated component of the mental health care team*, puts emphasis on the employment specialist's development of an IPS vocational rehabilitation plan and shared job-related information with the treatment team. Through this cooperation with the team members, the employment specialist tries to counter perceptions of stress and relapse of the participants in IPS. In addition, to counter feelings of dependency among the participants and the fear of jeopardising their private economy, the principle, *Early benefit counselling*, is another critical component during IPS (Bond, et al., 2004). The benefit counselling is also instigated to help the participants make an informed choice of employment. Moreover, the IPS support starts and then proceeds continuously, even after the participants have obtained competitive employment. The participants are thus provided with support from the IPS-support network, which can involve both on-worksites and off-worksites support (Lexén, Hofgren, & Bejerholm, 2012). The principle, *Ongoing time-unlimited support*, thus acknowledges that many persons with SMI also need support to retain employment. During the years of implementation of IPS it has been increasingly clear that the employer plays a critical role in the IPS support. A further principle, *Systematic recruitment and engagement with employers*, has thus been added (Dartmouth IPS Supported Employment Centre, 2012). This principle requires that the employment specialists use most of their working time on finding jobs. This means that the employment specialists contact possible employers frequently to build up a good network. The employment specialists are also prompted to make analyses of different work settings, visit presumptive employers, and help participants introduce themselves to an eventual employer.

**Table 1.**  
The eight principles of IPS

Competitive employment is the goal
Rapid job search
Eligibility is based on the participant's choice
Attention to the participant's preferences
The vocational rehabilitation is an integrated component of the mental health care team
Early benefit counselling
Ongoing time-unlimited support
Systematic recruitment and engagement with employers

When implementing and working according to the eight principles it is important to accrue knowledge regarding to what extent the IPS principles are translated into practice. The Supported Employment Fidelity Scale (Becker, Swanson, Bond, & Merrens, 2008; Socialstyrelsen, 2012b, 2012c) is therefore used to assess the fidelity of the support given, and is administered regularly during IPS. The rationale to accomplish fidelity assessments is based on the literature which claims fidelity to be associated with better employment outcomes (Becker, Smith, Tanzman, Drake, & Tremblay, 2001).

## The effectiveness of IPS

Since 1996, fifteen RCTs comparing IPS with a variety of traditional stepwise vocational services have been accomplished worldwide (Bond & Drake, 2008; Bond, et al., 2012; Drake & Bond, 2011). The majority of studies have been performed in the US. During recent years several RCTs have also been accomplished in Europe. The EQOLISE trial was the first, which involved six European countries; The United Kingdom, Germany, Italy, Switzerland, The Netherlands, and Bulgaria. Recently, two RCTs were carried out, one in Switzerland (Hoffmann, Jackel, Glauser, & Kupper, 2012) and one in the UK (Heslin et al., 2011; Howard et al., 2010). No RCT on the effectiveness of IPS has, however, been accomplished in a Scandinavian country. Accordingly, we know less than most about the effectiveness of IPS in terms of vocational



outcomes such as competitive employment, number of weeks and hours worked, job tenure, and income in a Swedish context. Nor do we know if IPS has an impact on non-vocational outcomes such as quality of life (QOL), work motivation, empowerment, and level of occupational engagement among persons with SMI.

## Vocational outcomes

Vocational outcomes, such as gaining competitive employment, number of weeks and hours worked, job tenure, and income, are often the primary outcome variables in most RCTs investigating the effectiveness of IPS. In these RCTs, competitive employment as an outcome measure is defined as working, at any time during follow up, in jobs paying at least a minimum wage and in mainstream settings and which anyone could hold. A review on eleven RCTs with high IPS fidelity (Bond, et al., 2008), accomplished both in the US and Europe, showed the average competitive employment rate to be 61% among the IPS participants as compared to 23% among those in TVR. Moreover, days to first competitive job was twice as fast for participants receiving the IPS, compared to those receiving TVR (Bond, et al., 2008). Notably, when comparing the competitive employment rate among IPS participants enrolled in US trials with participants in non-US trials, a higher percentage of the participants gain competitive employment in US trials (Bond, et al., 2012).

In Europe, the EQOLISE trial showed that the IPS was more effective than the TVR (55% vs. 28%) when studying the proportion of persons with SMI gaining competitive employment across six countries (Burns et al., 2007; Burns, White, Catty, & group, 2008). However, in that trial no differences were found between IPS and TVR in the Netherlands and Germany regarding any vocational outcome. In an RCT accomplished in the UK, the SWAN study, no difference was shown between the groups at the 12 month follow up (Howard, et al., 2010). However, at a two year follow up a difference in employment rate was shown (22% vs. 11%) (Heslin, et al., 2011; Howard, et al., 2010). In the Swiss study the employment rate was also in the favour of IPS (48.2% vs. 18.5%) (Hoffmann, et al., 2012).

When implementing an EBP, such as the IPS, there might be potential obstacles for successful implementation (Tansella & Thornicroft, 2009). It is not uncommon that adaptations to the local context have to be made, which in turn may impact on the fidelity and the outcomes of the service. For instance, in the Swiss study the research group had to adapt the IPS support in order for it to be in line with that country's law, the Swiss Invalidity Insurance, which required prior assessments of functioning and work performance. By excluding

persons who had a substance abuse disorder and <50% of normal work performance, the study did not follow the principle that eligibility is based on client choice and the zero exclusion criteria (Hoffmann, et al., 2012). Another critical ingredient of programme fidelity is the integration of IPS and clinical practice. In the SWAN study, the lack of such cooperation between the employment specialist and the mental health care team may have had negative impact on fidelity and lowered the effectiveness monitored at the study's one year follow-up (Heslin, et al., 2011; Howard, et al., 2010).

As previously mentioned, the competitive employment rate among IPS participants has shown to be significantly higher in the US studies when compared to non-US studies (62% vs. 47%) (Bond, et al., 2012). These differences may be explained by variations in the welfare systems and the labour and disability policies. The challenges for implementing IPS in Europe can be found on different levels. In the Netherlands, on an national and government level, the welfare and unemployment protection system has shown to make employers reluctant to employ a person with SMI (van Erp et al., 2007). In an initial Swedish implementation study of IPS the employment specialists were confronted with an employment culture of free labour because of national labour market incentives, such as internship for example, which could make it difficult for them to argue for competitive employment instead of internship placements (Hasson, Andersson, & Bejerholm, 2011). The IPS implementation research has also reported that there was a fear among the participants that they would lose their welfare benefits if they started paid work (Bejerholm, Larsson, & Hofgren, 2011; Hasson, et al., 2011; Rinaldi, Miller, & Perkins, 2010; van Erp, et al., 2007). Low expectations, among the welfare professionals in the welfare services, that persons with SMI can work, and the difficulties in cooperation between employment specialists and the welfare services professionals have also been suggested as being implementation barriers (Hasson, et al., 2011; van Erp, et al., 2007).

## Non-vocational outcomes

Non-vocational outcomes are often seen as secondary outcome variables in IPS trials. As noted earlier, QOL, work motivation, empowerment, and the level of engagement in daily occupations can be operationalised as being such non-vocational outcomes. However, the impact of IPS on non-vocational outcomes such as global assessment of functioning, hospitalisation and psychopathology have not shown any significant group or time-by group interaction effect (Burns et al., 2009; Heslin, et al., 2011; Hoffmann & Kupper, 1997; Howard, et al., 2010). Nevertheless, the concerns and worries of many of the clinicians in the treatment teams who assume that a rapid placement in competitive

employment worsens the health of persons with SMI have not been confirmed. Neither has research shown that persons improve their health. However, Burns et al. (2009) have noted that there is a lack of accurate measures to estimate change in non-vocational outcomes (Burns, et al., 2009).

### *Quality of life*

The QOL of persons with SMI has been suggested as an important indicator of their community adjustment and personal recovery (Chan, Krupa, Lawson, & Eastabrook, 2005; Slade, 2009) and is identified as a key outcome variable within mental healthcare and in research on the target group (Hansson, 2005). QOL, in general, aims to reflect people's current life situations and is often operationalised as satisfaction with life in different areas of life which applies to persons with SMI (Hansson, 2006). In subjective QOL the focus is on encircling general life satisfaction, satisfaction with work, finances, social relations, leisure, living situation, family relations, sexual relations, and health (Priebe, et al., 1999).

When investigating differences in subjective QOL between the IPS participants and those participants receiving TVR, no differences have been found between the two approaches to rehabilitation (Burns, et al., 2009; Drake et al., 1999; Drake, McHugo, Becker, Anthony, & Clark, 1996; Heslin, et al., 2011; Howard, et al., 2010). These research findings have been explained by the fact that the IPS intervention is not designed to specifically improve the QOL for the participants (Drake, et al., 1996). When studying group changes in QOL over time, positive changes in both the IPS and the TVR group have, however, been found (Drake, et al., 1999; Drake, et al., 1996). It is thus reasonable to assume that the QOL of individuals receiving IPS, or perhaps TVR, might increase along with IPS participation. In addition, there are studies showing that IPS support may bring meaningful personal outcomes for those participants involved such as finding satisfying daily occupations outside the mental health services (Torrey & Becker, 1995), and psychological well-being (Liu, Hollis, Warren, & Williamson, 2007). It is, however, more uncertain whether IPS participants' QOL will differ from those receiving TVR.

### *Work motivation*

Factors that have been suggested to be related to vocational outcomes among persons with SMI are different demographic and clinical characteristics. The most common characteristics mentioned are age, gender, marital status, and diagnosis (Warwaha & Johnson, 2004). However, some researchers claim that it is the intensity and type of symptoms, rather than the diagnosis, that influence vocational outcomes (Cook & Razzano, 2000). Others suggest work history to be the most robust predictor of gaining employment (Catty et al.,

2008), along with work motivation (Heslin, et al., 2011; Howard, et al., 2010; Rinaldi & Perkins, 2007). This latter stance, regarding the significance of motivation is corroborated by one of the leading principles in IPS, that the eligibility in IPS is based on the participant's own choice and motivation to obtain work.

Despite the participants' expressed motivation to obtain work when they apply for IPS, researchers have claimed their motivation to vary over time and to differ among them. This discrepancy of motivation may in turn impact on the participants' style of job-search (Alverson, Carpenter, & Drake, 2006), and engagement with the employment specialists (Howard, et al., 2010). It has therefore been stressed that the participants' level of motivation should be tested before enrolment in IPS (Howard, et al., 2010), and again over the course of vocational rehabilitation (Finch et al., 2007). However, no research has been accomplished to actually explore the constituents of the IPS participants' work motivation, how their motivation may develop over time and whether IPS may impact on their work motivation.

In order to investigate work motivation among persons with SMI in IPS, the volition subsystem in The Model of Human Occupation (Kielhofner, 1995, 2007; Kielhofner, et al., 1999) can be used to operationalise work motivation. MOHO is an occupational therapy conceptual practice model and explains how human occupational behaviour is chosen, patterned and performed. According to this model human behaviour is a function of three subsystems, the volitional, the habitual and the performance subsystem. It is in the volitional subsystem that the motivation process is described. It is when a person experiences, interprets, anticipates and chooses to get involved in an occupation such as work. The critical components are a person's personal causation i.e. perceptions of capacity and sense of self-efficacy in relation to work, a person's values and interest in work (Kielhofner, et al., 1999). Thus, in this thesis, work motivation is defined as an individual's personal causation, interest, and values in work. However, studies regarding work motivation among persons with SMI, within or outside an IPS context, are scarce. Accordingly, when considering the role that a person's work motivation may have for participating in IPS, it seems vital to further investigate work motivation for this group of people. This knowledge may enhance our understanding of how to better support persons with SMI to cultivate their motivation to seek, obtain and retain competitive employment.

### *Empowerment*

Except for the widespread use of empowerment as a concept (Clark & Krupa, 2002) and the connection between empowerment and personal recovery (Jacobson & Curtis, 2000), few efforts have been made to investigate

empowerment as a process or outcome of interventions for persons with SMI (Hansson & Björkman, 2005). This lack of research also applies to IPS. Accordingly, we know little about the impact of IPS on the participants' empowerment and thus their perceptions of self-efficacy and self-esteem, power, community activism and control over their future (Rogers, et al., 1997). It can, however, be assumed that an empowering process is involved when participating in IPS, since IPS concerns the individuals' choice and control and a supportive relationship (Bejerholm & Björkman, 2011; Paulson, Post, Herinckx, & Risser, 2002). In addition, empowerment has been suggested to be relevant in both IPS practice and research (Bejerholm & Björkman, 2011).

Empowerment is generally conceptualised at three levels. The individual level concerns the personal experience of increased control and influence in daily life and community participation. The small group level is when the individuals share experiences, inter dependence and collective actions and the community level revolves around the utilisation of resources and actions in the public and political arena in order to enhance community control (Labonte, 1990; Wilson, 1996). The focus in the current thesis is to understand the concept of empowerment on an individual level. Research on empowerment, on an individual level, shows a relationship, however small, between empowerment and the number of community activities engaged in (Rogers, et al., 1997). Moreover, empowerment has shown to be related to social network and support, and QOL (Hansson & Björkman, 2005; Rogers, et al., 1997), but unrelated to employment status (Rogers, et al., 1997).

### *Occupational engagement*

Another aspect which has not been investigated in IPS research earlier is the impact of IPS on the participants' occupational engagement. The concept of occupational engagement can be defined as the extent to which a person has a balanced rhythm of activity and rest, a variety and range of meaningful occupations, and routines and the ability to move around in society and interact socially, implying that occupational engagement occurs over time (Bejerholm & Eklund, 2007, p. 21). This definition of occupational engagement stems from time use research among persons with SMI which revealed that occupational engagement varied along a continuum, ranging from performing mostly quiet activities and activities that evolved around from fulfilling basic or immediate needs alone and with little sense of meaning, to engaging in meaningful occupations often entailing productive activities and social interaction in a variety of places in the community (Bejerholm & Eklund, 2006b). Accordingly, occupational engagement does not only capture actual involvement in occupations but also subjective aspects and the degree to which occupations are grounded in the broader social and community context

(Bejerholm, Hansson, & Eklund, 2006). It has been shown that a higher level of occupational engagement is related to fewer psychiatric symptoms, internal locus of control, better quality of life and better psychosocial functioning and well-being (Bejerholm & Eklund, 2006a, 2007). Thus, engagement in occupations has been suggested as being an important aspect of health among persons with SMI.

In addition to focusing on competitive employment as a main goal during the IPS it would be interesting to capture the participants' occupational time use pattern, in terms of their level of occupational engagement to get a broader picture of their occupational and community adjustment (Edgelow & Krupa, 2011; Krupa, McLean, Eastabrook, Bonham, & Baksh, 2003). Due to the fact that, in the IPS process it is likely that the participants move from having a quiet lifestyle before entering the IPS to becoming involved in a variety of different occupations grounded in the community. It is also likely that the participants get opportunities to engage in different social environments and a range of interpersonal relationships for support and mutual exchange during IPS. Moreover, as the fidelity in IPS does not account for all the variances in outcomes in the IPS studies (Drake, Bond, & Rapp, 2006), the investigation of occupational engagement may contribute with further knowledge regarding what other features need to be considered during the IPS intervention.

## Qualitative research on IPS

According to the developers of IPS, the relationship between the employment specialist and the participant is suggested to be a prerequisite for IPS and for achieving a successful outcome (Becker & Drake, 2003). This assumption is also supported in quantitative research on IPS. For instance, Catty et al. (2011) found that if a good relationship was established at early stage in IPS it virtually guaranteed obtaining employment. Despite this knowledge, little is known about the experiences of IPS and having support by an employment specialist from the perspectives of the participants. Thus, to understand the usefulness and the features of IPS it is vitally important to highlight the experiences of the participants (Bond, et al., 2004). In comparison to the frequent use of quantitative methodology in IPS research, the utilisation of qualitative methodology to explore experiences of IPS is still rare, and the need of qualitative studies within evidence based mental health have been stressed (Peters, 2010). The qualitative studies that have been accomplished so far reveal that many IPS participants experience their relationship with the employment specialist to be characterised by commitment (Johnson et al.,

2009; Koletsi et al., 2009). In a Swedish study of IPS the participants described their relationship with the employment specialist as a trustful relationship (Nygren, Markström, & Bernspång, 2012). The relationship with the employment specialist has also been emphasised, by the participants, as having a positive impact on their psychological well-being (Liu, et al., 2007).

Furthermore, when IPS participants were asked about barriers to work they emphasised two points, a restricted job market and poor working conditions (Koletsi, et al., 2009). Consequently, to counter difficulties during IPS, the development of coping skills and symptom management have been proposed, by the participants, as being critical ingredients in IPS (Becker, Whitley, Bailey, & Drake, 2007). This finding is corroborated by a Swedish study which revealed that the participants coped with the work environment and handled their working role by using their own specific strategies. These strategies could involve managing their mental illness, having a “right attitude”, and planning their work activities in conjunction with the IPS support (Lexén, Hofgren, & Bejerholm, 2013). In addition, Lexén et al. (2013) stressed the importance of the IPS-support network, i.e. the employment specialist, members of the mental health care team, friends or family members and professionals from the PES and SIA, employers and colleagues during the IPS-process.

## IPS and occupational therapy

Occupational therapists have a long history of being involved in vocational rehabilitation of persons with SMI (Creek, 1997). Within occupational therapy the value of competitive employment, to maintain and enhance health, has been emphasised since the inception of the profession (Ross, 2007). Occupational therapy research also suggests competitive employment to be a meaningful occupation for many persons with SMI (Eklund, Hansson, & Ahlqvist, 2004; Leufstadius, et al., 2009). To support persons with SMI, who want to obtain a competitive employment, it has been suggested that occupational therapists should give priority to psychosocial interventions that are evidence based. (Lloyd, Bassett, & King, 2004). During recent years, occupational therapists working with persons with SMI have been recommended to incorporate IPS into their clinical practice (Arbesman & Logsdon, 2011; Waghorn, et al., 2009).

When studying the literature and research on the concepts of personal recovery, it can be seen that many concepts are familiar to those engaged in occupational therapy in mental health, such as engagement in meaningful occupations, empowerment, and quality of life. In addition, occupational therapists address

recovery-related concepts in both their research and practice (Gruhl, 2005). Consequently, research on IPS and its effectiveness on vocational outcomes, and also on outcomes related to personal recovery, can be suggested to be of particular interest for occupational therapists working with persons with SMI. For instance, one of the basic beliefs in occupational therapy is that the QOL of an individual is closely related to the individual's experience of and meaning in occupations (Wilcock, 1993; Yerxa, 1994). By enabling the client to enhance their engagement in occupations, the occupational therapist tries to promote mental and physical health and also QOL (Wilcocks, 1993). Moreover, occupational therapy is often identified as a profession that focuses upon client strengths and abilities (Sumsion & Law, 2006). Of interest for the profession are thus, the clients' experiences of empowerment during rehabilitation but also empowerment as an outcome (Fisher & Hitchkiss, 2008; Taylor, 2003). During vocational rehabilitation the occupational therapists are also aware of and concerned with the participants' own choice of work and their motivation to approach it (Kielhofner, 2007). The participants' work interest, values and perceptions of their own work capacity are thus the focus of rehabilitation.





# Implications for research

To date, no studies on the effectiveness of IPS in Sweden have been accomplished. Accordingly, we do not know if persons with SMI will benefit from IPS when implemented in the Swedish welfare system and in relation to Swedish labour market incentives and employment culture. What we do know, however, is that the Swedish welfare system has shown to have an impact on the way in which IPS is delivered in several ways (Bejerholm, et al., 2011; Hasson, et al., 2011), which may affect the effectiveness of the IPS. Consequently, there is a clear need to determine the effectiveness of IPS according to vocational outcomes in Sweden. This thesis will therefore aim to compare IPS to TVR in a RCT and thus add to the understanding of the IPS in a European and Scandinavian context.

In comparison to the large number of RCTs focusing on the vocational outcomes fewer studies have investigated the impact of IPS on different non-vocational outcomes. To date, we do not know if IPS has any impact on the QOL, work motivation, empowerment and level of occupational engagement among persons with SMI in Sweden. This perspective on health constitutes another aim of an RCT in this thesis. Thus, studying non-vocational outcomes would increase our understanding of what other effects the IPS may have for persons with SMI except for increasing their chances of gaining employment.

Furthermore, although work motivation has been stressed to be vital for gaining employment there is no clear picture of what characterises work motivation among those who enter IPS or among persons with SMI in general. Accordingly, another aim of this thesis is to explore personal and health-related factors associated with a person's work motivation. This kind of information would be essential for the understanding of how to better provide motivational support in IPS or in any other vocational service.

In order to more fully understand the usefulness and effectiveness of IPS it is mutually important, perhaps even more important, to consider the views of the persons who participate in IPS and how they experience collaborating with the key person of the IPS intervention, the employment specialist. Since we recognise and give prominence to this internal and individual perspective of IPS we have put this study first in the thesis.

The composition of the four studies in this thesis will highlight IPS from different angles. With their different research questions and designs the studies can jointly contribute with knowledge that will benefit professionals in the mental health and community care services in their ambition to implement IPS in their everyday practice. Hopefully, this thesis will also inspire the users of IPS and their relatives and friends to believe that it can increase the possibility of being employed and of being part of a community.

# Aim of the thesis

The overall aim of this thesis was to contribute to the knowledge base of the IPS approach towards persons with SMI, in a Swedish context, by exploring their experiences of IPS and of receiving support from an employment specialist from their perspectives as participants and further, to investigate work motivation and determine the effectiveness of IPS on their vocational and non-vocational outcomes, and community integration.

## The specific aims

### *Study I*

The aim was to investigate participants' experiences of participation in IPS and their experiences of receiving support from an employment specialist.

### *Study II*

The aim was to investigate how work motivation conceptualised as an individual's personal causation, interest and values in work was associated with clinical and socio-demographic characteristics, empowerment, and engagement in daily occupations among people with SMI entering IPS.

### *Study III*

The aim was to examine the effectiveness of IPS in terms of occupational engagement, work motivation, empowerment and quality of life among people with SMI.

### *Study IV*

The aim was to test the effectiveness of IPS on vocational outcomes in terms of competitive employment, working hours, weeks worked, job tenure, income and days and speed to employment. The aim was also to investigate the effectiveness of IPS on integration into the community by people with SMI.



# Material and methods

Study I was a qualitative study and Study II had a cross-sectional design. In these studies the data for each participant was collected at one point in time. Studies III and IV had a RCT design in which data was collected at three measurement points; at baseline, then at 6 and 18 months. The participants in Studies III and IV had to accomplish a baseline interview before entering the RCT and thus were randomly assigned to an IPS or a TVR group. It was not possible to achieve concealment of the allocation to groups, for the participants involved or for the employment specialist and the mental health staff working close to the participants. The research assistants, who collected the data at the measurement points, were not told about the participants' group assignment before performing the data collection at six and 18 months. An overview of the design, selection procedures and methods for the four studies of the thesis are described in Table 2.

**Table 2.**

Design, selection of participants and methodology in Studies I-IV

Study	Design	Selection of participants	Method-data collection	Method analyses
Study I	Qualitative study	<p>A stratified sample technique was used, accomplished in two steps. 17 participants were included in the study.</p> <p>Selection criteria: severe mental illness, age 20-65 years, regular contact with mental health services, interest in working, unemployed the previous year, able to communicate in Swedish and attend an IPS-information meeting.</p> <p>Exclusion criterion: physical disability.</p>	Open-ended interviews. Each participant was interviewed once.	Content analysis (Graneheim and Lundman, 2004; Krippendorff, 2004).
Study II	Cross-sectional study	<p>120 persons enrolled in the RCT.</p> <p>Selection criteria (see qualitative study).</p>	<ul style="list-style-type: none"> <li>- Seven items, encapsulating motivation, in the Worker Role Interview (WRI)</li> <li>-The Profile of Occupational Engagement in people with Severe mental illness (POES)</li> <li>-The Empowerment Scale (ES)</li> <li>-The Brief Psychiatric Rating Scale (BPRS)</li> <li>-Socio-demographic data questionnaire</li> </ul>	<ul style="list-style-type: none"> <li>-Pearson's chi-square test</li> <li>-Mann-Whitney U-test</li> <li>-Spearman's rank correlation test</li> <li>-Logistic regression analysis.</li> </ul>
Study III	Randomised controlled trial	<p>120 persons randomly assigned to either the IPS or the TVR group.</p> <p>Selection criteria (see qualitative study).</p>	<ul style="list-style-type: none"> <li>-The Profile of Occupational Engagement in people with Severe mental illness (POES)</li> <li>-The Empowerment Scale (ES)</li> <li>- Manchester Short Assessment of Quality of Life (MANSAL)</li> <li>-Seven items, encapsulating motivation, in the Worker Role Interview (WRI)</li> </ul>	<ul style="list-style-type: none"> <li>-Pearson's chi-square test</li> <li>-Student's t-test</li> <li>-Wilcoxon Signed Rank Test</li> <li>-Mann-Whitney U-test</li> </ul>
Study IV	Randomised controlled trial	<p>120 persons randomly assigned to either the IPS or the TVR group.</p> <p>Selection criteria (see qualitative study).</p>	<ul style="list-style-type: none"> <li>-Vocational logs. Duration, hours, weeks and income were registered for competitive employment, internship, education, pre-vocational training, work related activities in day centres or sheltered settings throughout the trial and at six and 18 months.</li> <li>-Manchester Short Assessment of Quality of Life (MANSAL)</li> <li>-The Brief Psychiatric Rating Scale (BPRS)</li> <li>-The Profile of Occupational Engagement in people with Severe mental illness (POES)</li> </ul>	<ul style="list-style-type: none"> <li>-Chi-square test</li> <li>-Fisher's exact test</li> <li>-Bootstrap estimates</li> <li>-Student's t-test</li> <li>-Mann-Whitney U-test</li> <li>-Kaplan-Meier survival analysis</li> <li>-Cox proportional-hazard regression analysis</li> </ul>

## Research context

The present RCT research project, comparing IPS to TVR, was conducted in the south of Sweden from 2008 to 2011. The participants were recruited from six mental health care centres in a city with a population of 300 000 persons. The project was financially supported by The Swedish Council for Social Research and Working Life, FINSAM, The Medical Faculty of Lund University and The Swedish Institute for Health Sciences (Vårdalinstitutet). During the 18 month study period there was a large turnover of staff in the SIA and the PES while the staff at the mental health centres generally remained in their positions. During the same time period there was a period of economic regression in Sweden and the government also implemented new rules for sick leave. The RCT was registered with ClinicalTrials.gov with the number NCT00960024 and was approved by The Regional Ethical Review Board of Lund University, Sweden, Dnr 202/2008.

## Research planning

The RCT was set up by the principal investigator and the research group provided the expertise within the areas of psychiatry, work-rehabilitation, occupational therapy, nursing, implementation research, psychology, the IPS approach and quantitative and qualitative methods. During the study period two doctoral students were also recruited one of which is the author of the present thesis. The doctoral position for the present author began after the trial had begun, in December 2008.

To facilitate the implementation of IPS into clinical practice, several information and discussion meetings were held eight months before the recruitment of participants and throughout the study. These meetings involved the executive and non-executive directors and other professionals at the mental health care centres namely the SIA and the PES. Also included was FINSAM, a state-funded organisation whose aim it is to facilitate co-ordination across welfare services. In addition, one project administrator and two research assistants, both occupational therapists, were recruited. For the positions of employment specialists, three persons were recruited, all of whom met the qualification requirements of having an occupational therapy education or psychiatric rehabilitation training with focus on vocational rehabilitation and personal recovery, experience of working with persons with severe mental illness, and an outgoing personality. The persons recruited were two qualified



mental health nurses and one social worker. Two occupational therapists also applied and one of them was offered the job but declined due to maternity leave.

## Participants, selection criteria and procedure

The selection criteria for the participants and thus the four studies were: having a severe mental illness which in this context means having a psychotic disorder or having psychiatric disabilities on a long term basis, an age of 20-65 years, regular contact with a mental healthcare service, expressing an interest in working and been unemployed the past year. Eligibility was also based on being able to communicate in Swedish and having to attend an IPS-information meeting. The exclusion criteria was having a physical disability. One person, having only one arm, was excluded for this reason.

Before the recruitment of the participants a calculation of sample size was carried out. The calculations were based on three previous RCTs (Cook et al., 2005; Drake, et al., 1999; Lehman, et al., 2002) on percentage differences of achieving competitive employment between the participants receiving IPS and TVR. When alpha was set at .05 and power to .80 the suggested sample size ranged from 11 to 31. Thus, a final sample of 40 participants was considered as being large enough for conducting the RCT. However, to counteract the threat of attrition a decision was made to include 60 participants in each arm of the RCT. The final sample size was estimated to 120 participants.

The recruitment process was primarily accomplished at regularly held IPS-information meetings. At these meetings the researchers explained the IPS approach, the RCT and related study designs along with information about the ethical issues of approval. If a potential participant preferred to receive the same information individually this was arranged. Apart from the prospective participants the case managers, relatives and friends were also welcomed to attend these IPS meetings. The participants could submit their written consent to participate during, or at any time, after such a meeting. The IPS project could also be introduced by the participants' case managers who were able to give brief information about the IPS trial and the coming IPS-information meetings. In addition, information brochures advertising the IPS trial were handed out by the case managers. The brochures could also be found in the waiting room at each mental health centre.

The persons who submitted a written consent were invited to take part in a baseline data collection interview. If a person did not have the possibility to

come to an interview appointment two additional dates were set. In those cases where the participants were difficult to get hold of, the research assistants contacted the case managers for further information of how to best approach and contact the prospective participants. If the persons did not attend the third appointment, the persons were not enrolled in the trial. A total of 141 persons submitted a written consent of which 120 attended the baseline interview and were randomised to IPS and to TVR.

### *Study I*

This qualitative study included participants who were selected from the IPS group ( $n=60$ ). The selection was made in two steps. Firstly, participants who had received IPS support for twelve months were chosen ( $n=36$ ). Secondly, as the study aimed to investigate experiences of receiving support from an employment specialist, it was considered particularly important that all three employment specialists were represented by the study participants and that the participants were evenly distributed between the three specialists. Thus, the employment specialist with the lowest number of participants ( $n=9$ ) set up the limit of how many participants should be asked to participate in the study ( $n=27$ ). For the other two employment specialists who had four respectively five participants “too many”, a stratified sampling technique (Patton, 1990) was used to increase heterogeneity in the study sample. It was considered important to select participants who had, or had not, gained employment during IPS and participants who differed in relation to diagnosis, age and ethnicity. If two or more participants having support from the same employment specialist had the same characteristics in relation to some of the selection criteria a lottery was held to decide who to include. Thus, at this stage, 9 participants were excluded

Introductory letters explaining the study aim and procedure were sent to 27 prospective participants. The letter was followed up by a phone call or mail according to the participant’s previous request. Twenty-one participants could be reached of which three announced they did not want to be interviewed. Thus, eighteen participants were recruited and interviewed. However, one participant was excluded as a result of fragmented and incoherent statements during interview. Seventeen participants, seven female and 10 male, were included in the study. Eight participants were in the age bracket 20-39 and nine were in the age bracket 40-59. Three of the participants originated from another country. Eleven participants had schizophrenia or other psychosis, one had bipolar disorder and five participants had depression or social phobia. Fifteen participants had work or study experience during their IPS enrolment.

## Study II

This study had a cross-sectional design and included all 120 RCT participants who were interviewed at baseline. The participants' characteristics are presented in Table 3.

**Table 3.**  
Baseline characteristics of the study sample (N=120) and by randomisation group\*

Characteristic	Study sample		IPS		TVR	
	Number (%)		Number (%)		Number (%)	
<i>Sex</i>						
Men	67	(56)	28	(47)	39	(65)
Woman	53	(44)	32	(53)	21	(35)
<i>Ethnicity</i>						
Native	77	(64)	36	(60)	41	(68)
Immigrant	43	(36)	24	(40)	19	(32)
<i>Diagnosis (n=119)</i>						
Schizophrenia and other psychosis	77	(65)	39	(66)	38	(63)
Bipolar	9	(8)	4	(7)	5	(8)
Other disorders	33	(28)	16	(27)	17	(28)
<i>Living situation</i>						
Own or rented apartment/house	105	(88)	54	(90)	51	(85)
<i>Marital Status(n=119)</i>						
Married/partnership	21	(18)	12	(20)	9	(15)
<i>Education (n=85)</i>						
University level	35	(41)	17	(28)	18	(30)
<i>Work history (n=91)</i>						
Work activities the last five years	51	(56)	26	(56)	25	(56)
<i>Income</i>						
State benefits (n=119)	109	(92)	53	(88)	56	(93)
Family support/Other (n=118)	10	(8)	7	(12)	3	(4)
	Mean (SD)		Mean (SD)		Mean (SD)	
<i>Age</i>	38	(8)	38	(8)	38	(8)
<i>Years of illness (n=117)</i>	11.5	(8.6)	12.6	(9.6)	10.5	(7.4)
<i>Hospital admissions (n=111)</i>	3.6	(5.6)	3.12	(3.7)	4.09	(7.1)
<i>Income</i>						
Net income (€) (n=118)	867 (370)		872 (378)		863 (335)	

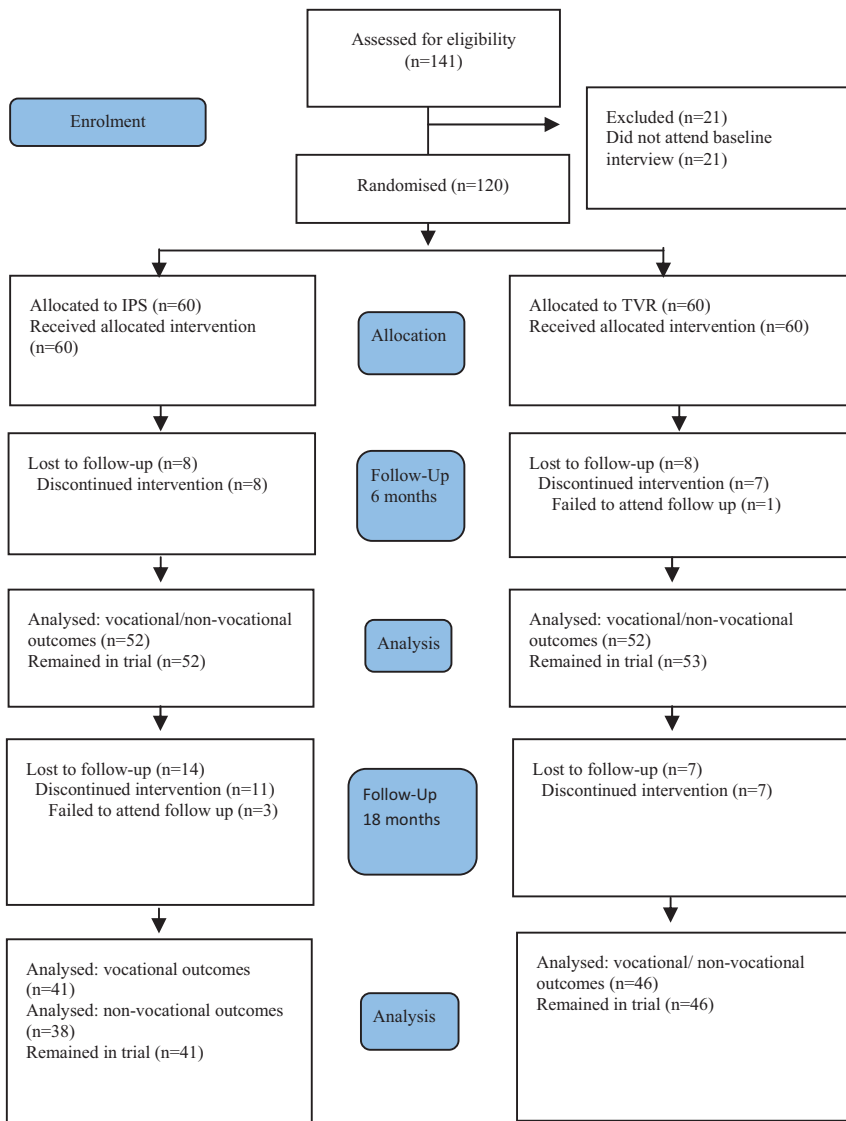
	Median (range)		Median (range)		Median (range)	
<i>Occupational engagement (POES)</i>	28.0	(18-48)	28.0	(11-36)	28.5	(13-36)
<i>Empowerment (ES)</i>	79.0	(52-95)	79.0	(65-93)	78.5	(52-95)
<i>Work motivation (WRI)</i>	22.0	(7-28)	22.6	(11-28)	22.0	(7-28)
<i>Quality of life (MANSA)</i>	48.0	(24-74)	49.0	(24-74)	48.0	(28-63)

\*No statistical differences between randomisation groups were found (5% significant level)

### *Study III and IV*

The 120 participants who had accomplished the baseline interview were randomly assigned to the IPS group and the TVR group. In Table 3 the socio-demographic and clinical characteristics of the participants for both groups are shown. A software programme produced a randomisation plan covering a block size of eight random group allocation numbers at a time (Dallal, 2012). The randomisation was managed by a research assistant at the Swedish Institute of Health Sciences who had no contact with the participants.

A trial profile is shown in Figure 1. The research assistants collected attrition data at the specific follow up points or from the participants, team members, or employment specialists at other times. According to the ethical guidelines of voluntary participation in the present RCT the participants did not have to state a motive for leaving the trial. The attrition rate was 28% and the numbers of remaining participants in each arm were in accordance with the power calculations performed in advance. At the 6-month follow-up no significant differences were found between the participants who stayed in the trial ( $n=105$ ) and those who left ( $n=15$ ) with regard to the baseline socio-demographic and clinical characteristics, occupational engagement, empowerment, work motivation and QOL. Within the IPS group participants who had immigrated into Sweden left the study to a significantly greater extent compared to those who were born in Sweden, ( $p=0.033$ ). The reasons given for leaving the trial among the eight IPS participants were that they had language difficulties ( $n=1$ ) or were leaving the city ( $n=2$ ). Within the TVR group, no differences were found between those who left and those who remained. One of the seven participants who left the TVR group before the 6-months follow up did so due to time pressure. At the 18-month follow-up no differences were found between participants and non-participants within the groups or for the entire group of participants. However, time pressure was reported by two of the TVR participants who left the trial between the 6 and 18 month follow up. During the same period feeling somatically or mentally unwell ( $n=5$ ), seeking long term sick-leave benefits ( $n=3$ ), having language difficulties ( $n=1$ ), and leaving the city ( $n=1$ ) were reasons reported by the IPS participants who left the trial.



**Figure 1**  
Trial profile

## Study groups

### *IPS*

IPS delivery was facilitated by training and supervision of the three employment specialists. The initial IPS training was performed prior to the start of the IPS intervention. The training took a week and was conducted by an IPS specialist and researcher from the UK who had extensive experience in supervising various mental health care professions. During the training the employment specialists were introduced to the theoretical underpinnings of IPS which are, research evidence, descriptions of the support and process in IPS, and the principles of IPS. Discussions about stigma and attitudes towards mental illness were also held and further, how to enable a working relationship with a participant. The supervision was held regularly and targeted the implementation of the IPS principles in the employment specialists' clinical practice. The three specialists were located at mental health care centres but offered support wherever the participant preferred.

The IPS fidelity assessments were performed by means of the Supported Employment Fidelity Scale (SEFS) (Becker, et al., 2008) after six, 12 and 18 months. The IPS specialist performed the ratings and was assisted by the principal investigator in matters of language and cultural issues. The research assistants collected data necessary for performing the assessment. Workshops were arranged in relation to each assessment and professionals from the PES, SIA, the mental health care and the employment specialists were invited. The purpose of the workshops was to jointly improve the IPS delivery concerning those rating areas with the lowest score. According to the SEFS the rating at six months was good (110 points) and at 12 (115 points) and at 18 months (117 points) which was excellent.

### *TVR*

The TVR included the available "train then place" vocational services located in different welfare organisations. The vocational service for a TVR participant was dependent on the participant's care needs and symptom severity as estimated by the mental health care staff, often in co-operation with the SIA and PES. The services monitored were pre-vocational training or work-related activities in sheltered settings run by the municipality, individual support from a member of the mental health teams, the SIA or the PES, and a joint action plan service managed by the SIA and PES. In addition, some participants attended activities at the Fountainhouse which is a clubhouse where the members are supported, by themselves and help from the staff, to break their

isolation, regain their self-confidence and productivity. According to the IPS fidelity assessments none of these services performed IPS. Their average score was 38, and the range was 36-48.

## Data collection

### *Study I*

In Study I, open-ended interviews were used to capture the individual experiences of those participating in IPS and collaborating with the employment specialist. In accordance with the participant's wishes the interview was held either at a mental health care centre, in the participant's home or at the participant's present work place. Before the interview began the participant was oriented concerning the aim of the interview and the use of a hand-recorder. Two participants did not agree to being recorded, so instead, hand notes were made during their interviews. The interviews lasted about one hour. The data was collected over a period of four months beginning in early spring 2010.

The interview guide began with the overall question; "Could you tell me about your experiences so far, of participating in IPS?" Based on this question the interview dialogue was further guided by three themes, 1) Experiences during IPS that are and have been associated with difficulties/frustration, 2) Experiences during IPS that are and have been associated with progress/optimism, 3) Experiences of having the support of the employment specialist. The themes were written down on a piece of paper or on a white board to increase the participant's sense of control. Furthermore, in order to help the participant to respond, and to deepen the conversation, a probing and communication technique was used (Mishler, 1986). Towards the end of the interview dialogue the interviewer summarised what had been said. This made it possible for the participant to add to, confirm or reject information he or she had given. Any kinds of thoughts, feelings and issues raised, that were not part of the question or themes, were followed up immediately after the interview.

### *Study II, III and IV*

The data collection took place at the mental health care centres and was performed by two research assistants. The administration of the instruments at each interview, first at baseline, then at the six and 18-month follow-ups required a session of up to one and a half hours. The research assistants were given education in the theory of the constructs and training for instrument usage in particular with regard to those instruments that involved interviewer

assessments. For example, the BPRS-training involved watching videotaped interviews which were assessed according to a rating scale, by the assistants separately. Afterwards the assessments were compared and discussed. The POES-training meant assessing engagement based on several previously filled-in time-use diaries of the target group. This proceeding helped the research assistants to improve inter-rater reliability through discussing and comparing assessments with the recommended score in the training material. The data for Study II was collected over a period of twelve months starting in the autumn of 2008. The data for Studies III and IV was collected over two and a half years between Autumn 2008 and Spring 2011.

## Instruments and Questionnaires

### *Brief Psychiatric Rating Scale (BPRS)*

In Studies II and IV psychiatric symptoms were assessed by means of a 18-item version of the BPRS (Overall & Gorham, 1962). The items are rated on a seven point Likert scale and aim to measure disorganisation, disorientation, depressive symptoms and hostility. The items can further be divided into the sub-scales of positive, negative, depressive and general symptoms. A higher score indicates more symptoms. The interviewer assessment is based on an interview where both the client's verbal responses and observations are considered. The BPRS has shown to possess good inter-rater reliability (Hafkenscheid, 1993), and concurrent validity when correlated with the General Severity Scale, the Positive Symptom Total and the Positive Symptom Distress Index (Morlan & Tan, 1998). Good inter-observer and intra-observer reliability has been demonstrated (Kolakowska, 1976; Overall & Gorham, 1962). The Cronbach's alpha coefficient for the present RCT was .71.

### *The Manchester Short Assessment of Quality of Life version 2 (MANSA)*

When assessing quality of life in Studies III and IV, the participants were administered the Swedish version of the MANSA (Priebe, et al., 1999), which is a short version of the Lancashire Quality of Life Profile (LQOLP) (Oliver, Huxley, Priebe, & Kaiser, 1997). MANSA contains 16 items rated on a seven-point Likert scale ranging from 1 (could not be worse) to 7 (could not be better). Four items investigate objective QOL and 12 items relate to subjective QOL covering general life satisfaction and the 11 domains: daily routine, relationship with family, sex life, fellow residents, number and quality of friends, work situation, financial status, living conditions, personal safety, physical and mental health. The sum of the 11 QOL domains and general life satisfaction was used in this study to form an overall QOL score. In addition



domain specific QOL, as well as the general life satisfaction of the participants, were also investigated. The Swedish version has been found to have satisfactory internal consistency and construct validity when correlated with social network and psychopathology (Björkman & Svensson, 2005). The Swedish version used in the present context showed a good internal consistency (Cronbach's  $\alpha=.85$ ).

#### *The Empowerment Scale (ES)*

In Studies II and III, empowerment was assessed by means of the ES (Rogers, et al., 1997). In this study, the Swedish version, Making Decisions, was used (Hansson & Björkman, 2005). The ES is composed of five sub-scales measuring self-efficacy–self-esteem, power–powerlessness, community activism and autonomy, optimism and control over the future, and righteous anger. The instrument is a self-administered questionnaire and has 28 items including several reverse items. The items are scored on a four point Likert scale ranging from strongly agree (1) to strongly disagree (4). A high score indicates a high level of empowerment. Psychometric tests of the instrument have shown satisfactory internal consistency (Rogers, et al., 1997) and the Swedish version has shown good construct validity when correlated with quality of life psychosocial functioning and psychiatric symptoms (Hansson & Björkman, 2005). When measuring the internal consistency of the ES among the study participants in study II, the Cronbach's alpha coefficient was .73.

#### *The Worker Role Interview (WRI)*

In Studies II and III, the assessment of work motivation was operationalised by seven items in the WRI (Velozo, 1991). The Swedish version of the instrument (WRI-S) was used (Karlsson & Haglund, 1996). The WRI is a semi-structured interview with an accompanying rating scale. WRI is based on the Model of Human Occupation (Kielhofner, 2007) and conceptualises work performance and behaviour as a function of an individual's motivation, lifestyle and environment. The seven motivation items encircle an individual's personal causation, values and interest in work. On the basis of data obtained in the semi-structured interview each item is rated by the interviewer on a Likert scale from 1 to 4 where a low item score indicates a hindrance for returning to work and a high score indicates a strong support for returning to work. The motivational items have shown acceptable mean square standardised residual (MnSq) values, ranging from 0.70 to 1.15, when tested by the Rasch analysis (Haglund, Karlsson, Kielhofner, & Lai, 1997). Moreover, three of the seven motivational items: Assesses abilities and limitations, Expectations of job success, and Takes responsibility, have shown a predictive validity of an individual's return to work (Ekbladh, Haglund, & Thorell, 2004). In the present study the Cronbach's alpha coefficient was .72.

### *The Profile of Occupational Engagement in people with Severe mental illness (POES)*

Engagement in daily occupations and community life was assessed in Studies II, III and IV by means of the POES (Bejerholm, et al., 2006). POES consists of two parts. Part one concerns data collection by means of a 24-hour yesterday time-use diary which is filled in by the participant. A supplementary interview by the assessor is conducted as a help for the participant to recall the chronological events. The diary sheet has four columns corresponding to the personal, environmental and occupational domains of occupational performance. Part two involves an assessment of the diary content and consists of nine items that are rated on a four point scale encompassing the participant's daily rhythm of activity and rest, variety and range of occupations, geographical and social environment, social interplay, interpretation, meaningful occupations, routines and initiating performance. A higher score indicates a higher level of engagement in daily activities. The instrument has been shown to have satisfactory construct validity when correlated with Global Assessment of Functioning and the Activity level according to the pilot version of the Satisfaction with Daily Occupations (Bejerholm & Eklund, 2006a). Calculation of inter-rater reliability, using mean weighted kappa has been satisfactory (Bejerholm, et al., 2006). Satisfactory internal consistency has also been demonstrated in a previous study (Bejerholm, et al., 2006) and in the present research context where the Cronbach's alpha coefficient was .93.

#### *Clinical and socio-demographic characteristics*

A study-specific questionnaire was used to collect data concerning the participant's age, gender, ethnic group, diagnosis, age at first contact with psychiatric care, psychiatric treatment and hospitalisation. The self-reported information regarding the diagnosis was validated against the participant's medical record and categorised according to the diagnosis system ICD-10. In the thesis the diagnoses are clustered according to the categories commonly used in IPS trials.

Elicited data also concerned the participants' marital status, living situation, having children or not, work history, years of unemployment, rehabilitation support/scheduled productive activities and vocational status.

#### *Vocational data*

The vocational data from the questionnaire was additionally validated against logbooks that were filled in regularly and data retrieved from interviews performed as a participant reached employment, internship, and studies. The vocational data was categorised as 1) competitive employment, 2) internship, 3) mainstream education, 4) pre-vocational training or 5) work related activities

in day centres or other sheltered settings. The categories 1-3 included interventions possible for anyone and not segregated from the rest of society and thus located in a mainstream community setting while the other outcome categories were not. Competitive employment as an outcome was defined as working at any time during follow up in a mainstream setting in a paid job that could be available to anyone.

## Methods for analysing the data

### *Qualitative analysis in Study I*

The transcripts and typed notes collected at the interviews were analysed using qualitative content analysis. Content analysis is a method of analysing written or verbal communication in a systematic way (Downe-Wamboldt, 1992; Krippendorff, 2004). In the first step the author read through each interview to obtain an impression of the whole. In the second step each interview transcript was divided into meaning units, sentences or paragraphs that corresponded to the study purpose and questions. These units were then shortened, and condensed while still preserving their core (Graneheim & Lundman, 2004). In a third step the condensed meaning units were openly coded by making notes and headings in the margin describing different aspects of the content. All of the codes collected from each interview were written down on a separate coding sheet. The codes were then sorted into categories based on how the different codes were linked and related. The categories were finally sorted into larger categories with adherent subcategories constituting the manifest content. Additionally, one main theme emerged capturing the underlying meaning, and the latent content of the categories (Graneheim & Lundman, 2004).

### *Statistics*

Student's t-test was used for calculating differences between groups on continuous vocational and non-vocational variables that were normally distributed (Studies III and IV).

Spearman's rank correlation test was used to calculate relationships between variables on an ordinal level (Study II).

The Mann-Whitney U-test was applied for testing differences between subgroups and randomisation groups on the non-normally distributed continuous and ordinal variables (Studies II, III, and IV).

In Study IV estimates and confidence intervals for the differences in means as well as in rates were done using the bootstrap method since they were highly

skewed and the samples were too small to justify normal approximations. This technique consists of withdrawing a large number of re-samples, in this case 10 000, from the original samples, calculating the means in each group in the re-sample and taking the difference between them. A 95 % confidence interval of this difference is then constructed using the 2.5 % lower and upper quantiles of the 10 000 bootstrapped differences. This technique has been used in a previous IPS study (Burns, et al., 2007). In the present study the calculations were done using Matlab 7.11.0 (R2010b).

The Pearson's Chi-square test and Fisher's exact test were used to reveal any differences between the groups based on socio-demographic and clinical categorical data at baseline concerning work motivation (Study II). These tests were also used in Studies III and IV to reveal any differences between the two randomisation arms according to socio-demographic and clinical categorical variables at baseline, and for attrition analysis at the six and 18 month follow-ups, as well as for differences of proportions of vocational data between the randomisation groups in Study IV.

The Wilcoxon Signed Rank test was used to reveal differences within each RCT group between the follow up measurement points (Study III).

In Study II, logistic regression analyses were performed to explore factors of importance for work motivation. Work motivation was perceived as the dependent variable and variables that correlated with work motivation ( $p < .01$ ) were included in the two regression analyses as independent variables. In the first regression model work motivation was dichotomised according to a median cut. The second model included participants whose scores fell in the upper, respectively lower quartile. The regression analyses were based on a backward stepwise model.

The Kaplan-Meier survival analysis was used in Study IV to analyse the time to event in the two randomisation groups, i.e. number of days to first competitive employment but also internship and the Cox proportional-hazard regression analysis was performed to determine differences between the groups with regard to time to event.

Statistical calculations were done using SPSS for Windows (version 17.0 and 18.0). The alpha level was set to .05 at 80% power. The bootstrap calculations were done using Matlab 7.11.0 (R2010b).

## Ethical considerations

The participants entered the RCT voluntarily and gave their written consent to take part in the RCT and the cross-sectional and qualitative study. The RCT conformed to the provisions of the WMA Declarations of Helsinki. Apart from the written consent the voluntary nature of participation as well as preserving the participants' confidentiality was considered. The participants were thus informed by the researchers at the regular IPS-information meetings and by information given on the consent form about voluntary participation, that the participants were free to leave the trial at any time and without stating their reasons. They were also informed that withdrawal from the trial would not have any influence on their further contact with the mental health care or welfare service. They were also informed that the results from the RCT and the related studies would be presented on a group level and that the findings from the qualitative study would not reveal their identity.

IPS-information meetings were held regularly during the recruitment of the participants and not only the presumptive participants were invited but also their relatives, friends, and their contact persons in the mental health team could also join the meetings. Since the RCT design might raise feelings of rejection and frustration if a participant does not get IPS it was important to inform them that saying yes and handing in their written consent concerning their wish to be part of a research trial was only the start and that from there on there was a 50% chance of receiving IPS. The participants were also informed that if they were to receive TVR nothing would be lost or taken from them based on what they had and what their position was when entering the trial. Instead, it was explained to them that TVR participation also concerned vocational outcome goals. At the IPS-information meeting it was also emphasised that their contribution to the study would also be important in a larger perspective in order to obtain evidence of the effectiveness of IPS.

In order to prevent an abrupt halt of the IPS for the participants after 18 months the employment specialists had two months to reduce their contact and support with the participants and to hand over their responsibility to others in the psychiatric teams, the PES and the SIA.

# Results

## The participants' experiences

The analysis of the experiences of participating in IPS and of receiving support from and collaborating with an employment specialist, seen from the participants' perspective, resulted in one main theme with six adherent categories and sub categories. The main theme: *Being the centre of attention in a process that brings hope and meaning*, describes the participation in IPS as a process in which the participants had the employment specialists' full attention while also being provided with opportunities to discover lust, strengths, and competence. The relationship with the employment specialist was perceived as something unique and constituted the essence of the vocational rehabilitation process from which the participants perceived positive energy. Overall, the statements of the participants showed greater emphasis on possibilities than on obstacles during IPS participation. Table 4 shows an overview of the main theme, categories and related sub categories.

The first category, *Having needs and wishes valued by the employment specialist*, illuminated the fact that the participants valued the person-centered support. For instance, the employment specialist considered each participant's field of interest when looking for a suitable work for them. In addition, the specialist provided flexible support in relation to time and space which involved meeting the participant wherever the participant preferred and matching the pace of the job search process to each participant's psychological state and life situation. The second category, *Benefiting from the skills of the employment specialist*, highlighted the importance of the specialist having previous experience from working with persons with mental illness. This circumstance contributed to the participants not having to explain so much about their mental illness to the specialist, who, in turn, helped the participants give a thorough picture of their illness and work disability to the employer. Furthermore, the employment specialist's knowledge of how to search for work and how to write a CV, use a computer and search for work "on line" was helpful to many participants. The third category, *Being two instead of one*, highlighted a feeling of togetherness when having support from the employment specialist. For instance, when the specialist was physically present

in meetings with authorities there was a shift in power between the participants and the authority which affected the way they approached each other. Furthermore, the participants were encouraged in their job search effort knowing that the specialist also considered their entire life situation. The fourth category, *Bringing own qualifications into the process*, put emphasis on the point that the participants' education and past work experience mattered and increased their chances of getting in contact with employers. Some participants stated that they needed supplementary courses to be able to compete in the open labour market. To be aware of their illness and describe and find strategies to handle their limitations were also perceived as facilitators in the job search process. The fifth category, *Having a motive*, highlighted the importance of the participants having their own vision of the benefits of working, which made it easier for them to persevere with the process during setbacks. The final and sixth category, *Having others who also believe*, illuminated the fact that the participants were dependent on support from significant others in the IPS-network, such as their family and friends, and professionals from the mental health team, the PES and the SIA. They were also dependent on the employers' attitude and good will to give them a fair chance and to look beyond their illness and to see the individual behind.

Even though the statements of the participants indicated greater emphasis on possibilities than on obstacles during IPS, some participants felt that the employment specialist lacked knowledge regarding work opportunities in the private sector. Some participants also experienced the specialist to be too self-centered.

**Table 4.**

The participants' experiences of IPS and having support by an employment specialist (ES)

Main Theme	Categories	Sub-categories
Being the centre of attention in a process that brings hope and meaning	Having needs and wishes valued by the ES	Considering field of interest
		Providing flexible support in time and space
	Benefiting from the skills of the ES	Being familiar with psychiatric disabilities
		Having knowledge of how to search
	Being two instead of one	Having the ES physically present
		Being encouraged by the ES
	Bringing own qualifications into the process	Being aware of the illness
		Having education and previous work experiences
	Having a motive	Wanting something meaningful to do
		Wanting a different kind of support
Wanting to improve economic situation		
Having others who also believe	Counting on the support from the mental healthcare team and welfare services	
	Having employers showing good will	



## Work motivation

The 120 participants who entered the RCT had high scores on work motivation conceptualised as an individual's personal causation, interest and values in work. Thus, the participants' median score was 3 (range 1-4, possible score=4) on the items in WRI exploring expectations of job success, work-related abilities and limitations, work responsibility, work-related goals, enjoyment of work, and work interest. On the item, commitment to work, the participants' median score was 4 (range 1-4, possible score=4).

### Factors associated with work motivation

The associations between work motivation and socio-demographic and clinical variables, occupational engagement and empowerment are shown in Table 5. There were no significant associations between work motivation and the chosen socio-demographic characteristics, except for age and having rehabilitation support. In addition, the result confirmed the hypothesis that there was a relationship between work motivation and a higher level of occupational engagement, empowerment and less symptoms.

To discern the predictive factors of work motivation two logistic regression analyses were performed. The first analysis in which work motivation was dichotomised according to a median cut resulted in a model ( $X^2(3, n= 108) = 33.02, p < 0.001$ ) that explained between 22% and 29.0 % of the variance in work motivation classifying 70.4% of the participants. In this model, having a higher level of occupational engagement was the only significant predictive variable for having high work motivation, with an odds ratio of 1.14. Furthermore, empowerment was found to be close to significant ( $p=0.053$ ).

The second regression analysis in which work motivation was dichotomised according to the lower and upper quartile resulted in a model ( $X^2(2, n= 60) = 38.84, p < 0.001$ ) that explained between 48% and 64% of the variance in motivation and classified 81.7% of the participants. The results showed a higher level of occupational engagement to be the only significant variable for having high work motivation with an odds ratio of 1.48.

**Table 5.**

Associations between work motivation and socio-demographic and clinical variables, occupational engagement and empowerment (N=120)

	Work Motivation	
	Correlation coefficient	<i>p</i> value
Age ( <i>n</i> =114)	0.186	0.048
Gender ( <i>n</i> =114)		0.293
Ethnicity (Native/ Immigrant) ( <i>n</i> =114)		0.178
Diagnosis (Psychosis/ Not psychosis) ( <i>n</i> =114)		0.608
Work history (<5 years/ >5 years) ( <i>n</i> =88)		0.787
Having rehab support and productive activity * (Yes/ No) ( <i>n</i> =110)		0.003
Years of unemployment ( <i>n</i> =88)	-0.095	0.377
Occupational Engagement* ( <i>n</i> =114)	0.544	0.000
Empowerment* ( <i>n</i> =111)	0.330	0.000
Symptoms		
Negative symptoms* ( <i>n</i> =114)	-0.314	0.001
Positive symptoms* ( <i>n</i> =114)	-0.299	0.001
General symptoms ( <i>n</i> =114)	-0.196	0.037
Depressive symptoms* ( <i>n</i> =114)	-0.340	0.000

Psychosis included schizophrenia and other psychosis and bipolar disorders

\*Independent variables included in the two logistic regression analyses

## Participants' work motivation during RCT

A close to significant change of work motivation was found between baseline and the 18-month follow-up among those IPS participants who remained in the study ( $p=0.055$ ) (Figure 2), which direction of result was confirmed by an ITT analysis which showed to be significant ( $p=0.030$ ). Among the TVR participants there was a decrease in work motivation between the same measurement points, however, this was not significant in both the follow-up and ITT analyses.

The diverse results of work motivation within the groups resulted in a significant difference between those participants in the IPS and the TVR groups ( $p=0.033$ ;  $r=0.24$ ) who were still in the trial at 18 months. The ITT analysis was close to significant ( $p=0.061$ ).

## Effectiveness on vocational outcomes

No differences between the groups could be found at the six-month follow-up, among participants who remained in the RCT, with regard to competitive employment, number of weeks and hours worked and job tenure. Among the 41 IPS participants who were still in the trial at 18 months, 46% ( $n=19$ ) were or had been competitively employed for at least one week during the RCT as compared to 11% ( $n=5$ ) of the 46 TVR participants (difference 36%, CI 18-54,  $p<0.001$ ). When ITT analyses were conducted, in which we assumed that the lost to follow-up participants had either had competitive employment or not, both calculations resulted in a statistical group difference in favour of the IPS group. There was also a group difference concerning the other vocational outcome variables (number of weeks,  $p=0.007$ ; hours worked,  $p=0.003$ ; job tenure,  $p=0.004$ ) among the participants who were still in the trial at 18 months. Furthermore, the mean number of days to first employment was lower in the IPS group (462.5, CI 406.30-518.78) compared to the TVR group (541.2, CI 515.57-566.83). Further analysis showed that the IPS group gained employment five times faster than the TVR group (5.0, CI 1.8-13.4,  $p=0.002$ ). The IPS group also had a significantly higher net income ( $p=0.01$ , CI € 82-475) per month.

When internship was incorporated into the calculations of differences in vocational outcomes between the two arms, the IPS and TVR groups differed to an even greater extent in the vocational outcome variables (competitive employment/internship: 80% vs. 20%, difference 61%, CI 44-77,  $p<0.001$ ; weeks worked,  $p<0.001$ ; working hours,  $p<0.001$ ; job tenure,  $p<0.001$ ). The IPS participants came in contact with a work-place eight times faster (8.6, CI 4.0-18.9,  $p<0.001$ ).

Finally, 90% ( $n=37$ ) of the IPS participants who were still in the trial at 18 months had obtained competitive employment (46%), internship (34%) or taken up studies (10%) which as occupations were integrated into community mainstream settings as compared to 24% ( $n=11$ ) in the TVR group (difference 66%, CI 50-80,  $p<0.001$ ).

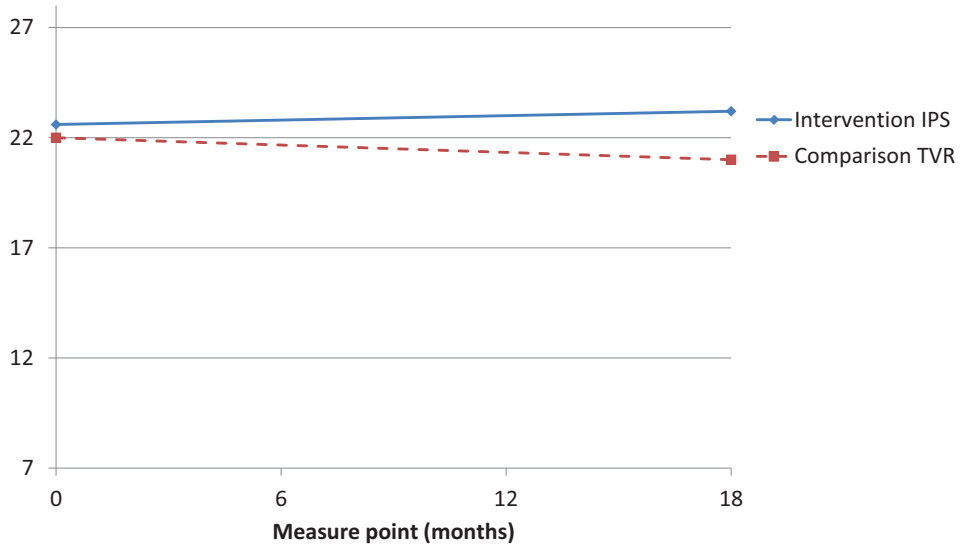
## Effectiveness on non-vocational outcomes

Within the TVR group no significant differences were found in overall QOL, occupational engagement and empowerment between baseline and six and 18 months and between six and 18 months. However, further analyses of changes in general life satisfaction and the different QOL domains between baseline and 18 months, showed that their general life satisfaction had changed significantly during the RCT ( $p=0.040$ ,  $r=0.20$ ). Also a trend towards a positive significant change in satisfaction with the number and quality of friends and financial status was apparent in the TVR group. Between baseline and 18 months, the TVR participants increased their level of symptoms (BPRS total,  $p=0.003$ ) and in particular their depressive symptoms ( $p=0.01$ ). The ITT analyses pointed in the same direction, however, the TVR participants' overall quality of life had increased significantly ( $p=0.011$ ,  $r=0.20$ ).

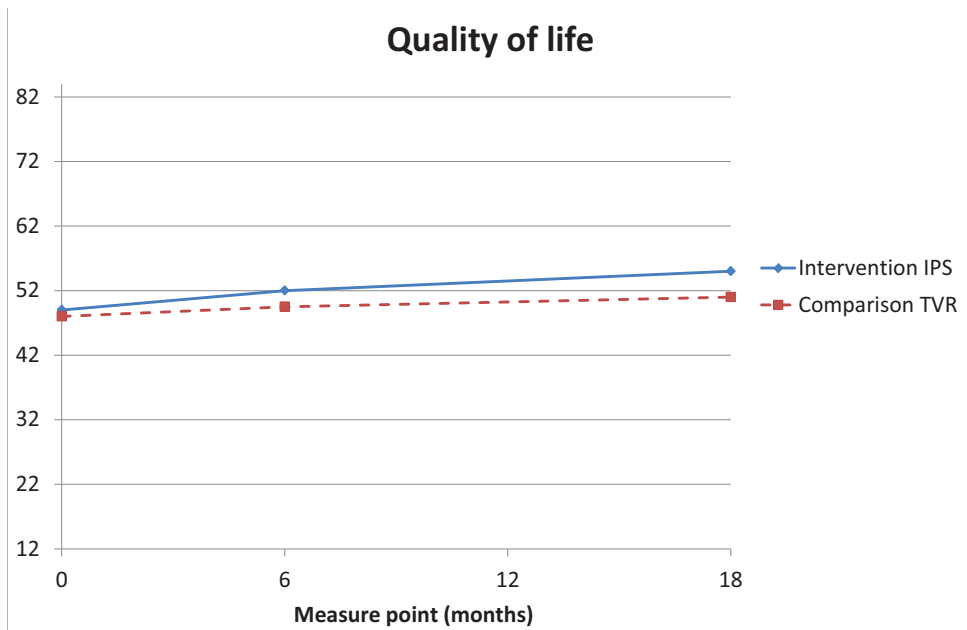
The IPS participants had increased their level of occupational engagement ( $p=0.003$ ,  $r=0.28$ ) and overall quality of life ( $p=0.002$ ,  $r=0.30$ ) between baseline and six months. Between the interval of six and 18 months the participants' overall quality continued to increase significantly ( $p=0.031$ ,  $r=0.23$ ), and an increase in empowerment was shown to be close to significant ( $p=0.053$ ). From baseline to the 18-month follow-up, occupational engagement ( $p=0.012$ ,  $r=0.27$ ) and overall quality of life ( $p<0.001$ ,  $r=0.38$ ) increased in the IPS group. When investigating changes in general life satisfaction, satisfaction with work situation, financial status, number and quality of friends and mental health, these were shown to be significant. Within the IPS group no differences in level of symptoms were shown between the measurement points. The ITT analyses showed similar results.

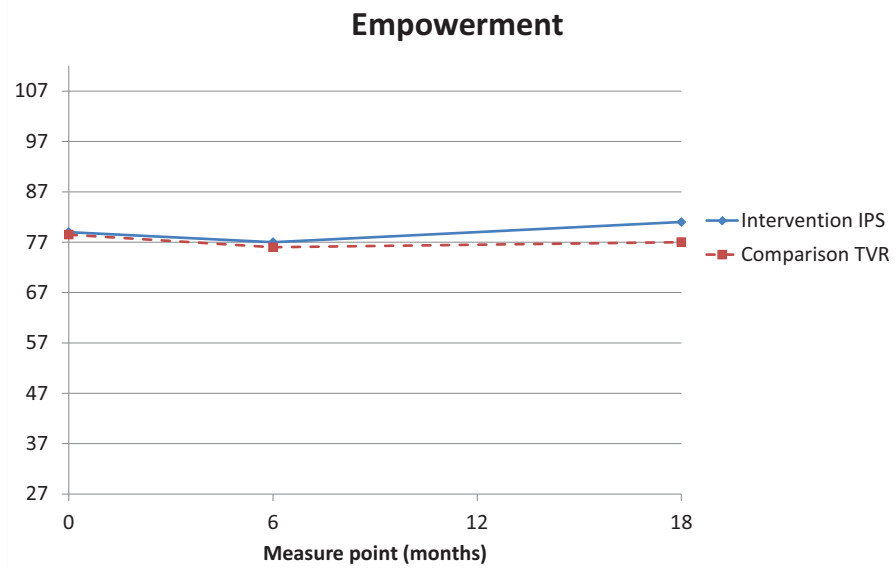
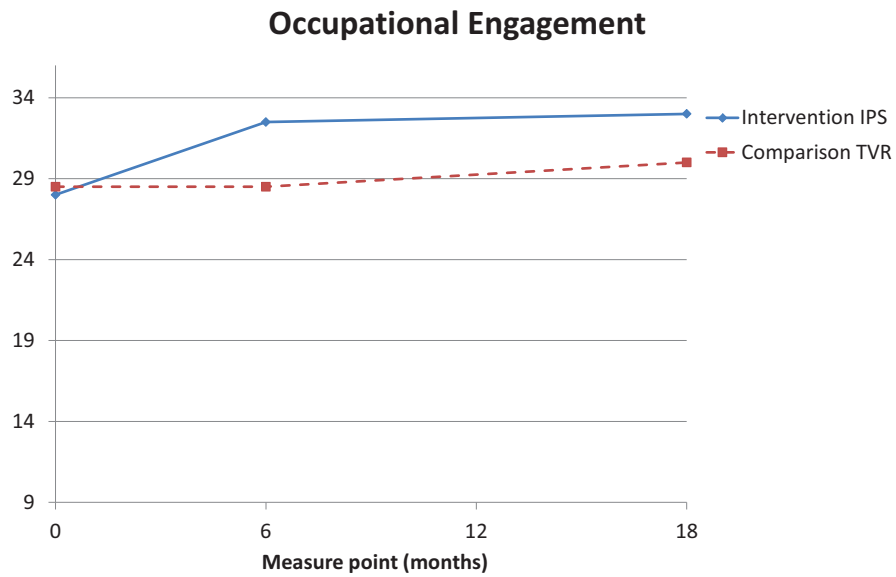
At the 6-month follow-up, no significant difference between the groups was shown in occupational engagement, empowerment, symptoms and QOL, although the difference in overall quality of life between the groups was shown to be close to significant ( $p=0.059$ ), in favour of IPS. At the 18-month follow-up, overall quality of life ( $p=0.002$ ,  $r=0.33$ ) and empowerment ( $p=0.047$ ,  $r=0.29$ ) were significantly higher in the IPS group. A trend towards a significant difference in occupational engagement between the groups, in favour of IPS, was found ( $p=0.058$ ). In the ITT analyses at 18 months, overall quality of life was shown to differ significantly between the groups. In Figure 2, the scores for occupational engagement, empowerment and QOL at each measurement point, for both groups are shown.

## Work motivation



## Quality of life





**Figure 2.** Non-vocational outcomes at each measurement point in the intervention (IPS) and the comparison (TVR) group.



# Discussion

The overall aim of this thesis was to contribute to the knowledge base of IPS for persons with SMI, accomplished internationally and to generate evidence of the effectiveness of IPS within a Swedish context. The aim was also to gain knowledge about the experiences and characteristics of those persons who apply for and participate in IPS. The present thesis is the first of its kind to include studies on the effectiveness of IPS in Sweden. Study IV showed that IPS was more effective than TVR in supporting persons with SMI to obtain competitive employment and to be integrated into community life. In addition, Study III showed the IPS participants to enhance their QOL continuously throughout the study as well as their level of occupational engagement. In comparison to TVR the IPS shows a positive effect on QOL, empowerment, and work motivation. The persons who applied for IPS appeared to be well motivated to work (Study II) which was connected to their having a rather active and meaningful lifestyle that supported their aspirations. The statements of the participants in Study I, who received IPS support, claimed IPS to be a meaningful and person-centered support which brings hope to them for a working life.

## IPS and vocational outcomes

When studying the proportion of competitive employment between the RCT groups a significant difference was found between IPS (46%) and TVR (11%) at 18 months. This finding, which was further confirmed in the ITT analysis, corroborates with the findings from other IPS trials. In comparison to the average competitive employment rate (62%) in nine RCTs accomplished in the US (Bond, et al., 2012) the employment rate in the Swedish IPS sample was lower. This is, however, in line with the findings by Bond, Drake and Becker (2012), who claim that the non-US studies, in particular European studies, have poorer employment rates. The difference between the US and non-US studies can be explained by the context, namely the differences in labour and disability policies. For instance, the employment protection act (widely referred to by the initials LAS), which protects employees in Sweden against arbitrary or



unjustified dismissal, may have led to a greater reluctance among the Swedish employers to take the risk of hiring persons with SMI. Furthermore, the Swedish national social insurance system is likely to have made the IPS participants experience less financial incentive to work for wages and to take a risk of losing their benefit income to take work on an unstable work market. In our Swedish sample, a few IPS participants dropped out from the trial and instead applied for long term sick leave. This dropout may, however, be explained by what Bejerholm, Larsson and Hofgren (2011) found in their case study; that some participants were forced by the professionals in the welfare services to enter pre-vocational rehabilitation which was not consistent with their own vocational plan.

When putting the competitive employment rate from Study IV into perspective in relation to other RCTs, the percentage difference between the IPS and the TVR group was larger (36%) than in the European EQOLISE trial (26.9%) (Burns, et al., 2007). In addition, the IPS group in the Swedish sample secured competitive employment five times faster which is a result that is in contrast with previous research findings showing that IPS was twice as fast in supporting persons with SMI to obtain a competitive employment (Bond, et al., 2008). These findings underline what has been claimed by the Swedish National board of Health and Welfare (2006) that TVR in Sweden does not support persons with SMI in their transition from pre-vocational training in sheltered settings to paid work in mainstream settings. Furthermore, the large difference in employment rate and speed to employment between the RCT groups in Study IV may also be explained by the fact that the IPS support was delivered with high IPS-fidelity, which is suggested to be closely associated with positive employment outcomes (Becker, et al., 2001).

In line with most of the RCTs accomplished internationally (Bond, et al., 2008), job tenure, hours and weeks worked also differed significantly in Study IV. The mean number of days to competitive employment for the IPS participants in Sweden was, however, higher (462 days) when compared to the average mean number of days to competitive employment among other IPS trials (206 days) (Bond, et al., 2008), however less in comparison with the British SWAN study (630 days) (Heslin, et al., 2011). This finding shows that the Swedish IPS participants reached competitive employment in the later phase of the study period. This circumstance is illustrated in a case study by Bejerholm et al. (2011) in which the participants had to accept the obligatory route of vocational rehabilitation and thus complete work assessments and internship before being able to apply for a competitive employment. These authors stressed that the IPS process and the principles of *competitive employment as the goal* and a *rapid job search* appeared to have been “put on hold” and that time has been added to IPS and the participants’ vocational

rehabilitation. In that case study it was also shown that this obligatory route was especially applied for those participants who received a certain type of time limited sickness benefit which meant that the participants had to be part of the PES/SIA joint action plan and collaboration. Moreover, the case study also revealed that it was difficult for the employment specialist to circumvent the services' claim for the vocational rehabilitation to be stepwise where asking employers about hiring a person was the last step. Notable is that this obligatory route was intimately linked with policies and guidelines in the Swedish national social insurance and benefit system which is controlled and run by the PES and SIA organisations on a local level, however, ultimately by the government (Bejerholm, et al., 2011). Thus, an implementation of IPS in Sweden, in accordance with the IPS principles, has to be responded to, not only on an individual and local level but also on a national level. According to Tansella and Thornicroft (2009), barriers and facilitators exist on each of these levels when introducing a new work practice, such as an EBP.

## Community integration

While the majority of the participants in TVR remained in pre-vocational activity settings during the study, the IPS participants were shown to have significantly increased their engagement with "regular" community life through their IPS participation (Study III) and competitive employment, internship or education (Study IV). These findings indicate that IPS supports persons with SMI to fulfill the values and goals of the government and thus the mental health policy in Sweden which is, to integrate persons with disabilities into the community and into normative adult roles (Socialdepartementet, 2008). The findings on community integration further implies that the TVR approach lacks the initiative not only to support persons with SMI to transit from sheltered settings to paid work in mainstream settings but also to support these persons to discover and develop their work capacity and competence in settings outside the care and welfare system.

In this thesis community integration refers to the fact that persons with SMI can lead their own lives and perform productive activities within community mainstream settings. However, the community integration of persons with SMI is likely to involve more aspects than simply being physically present in the community. Recently, it has been suggested that the concept of community integration is multi-dimensional involving not only physical integration but also social and psychological integration (Wong & Solomon, 2002). Although the aim of Study III was not explicitly to encircle community integration among the study participants, the administration of the POES instrument, that involves gathering time use data in social and geographical environments, has

in addition contributed with valuable information concerning the participants' social integration, i.e. social and reciprocal contact with neighbours and community members. Accordingly, our findings in Study III of a significant difference in occupational engagement within the IPS group during the trial and between the RCT groups at 18 months was in line with our hypothesis that by participation in IPS which is based on assertive outreach to find work opportunities and to engage the participants in activities such as visiting different work settings, occupational engagement is encouraged. In this sense the increased engagement level among the participants can also be said to reflect the high fidelity ratings of the employment specialists' IPS delivery since they were assessed to spend minimal time behind a desk, a large amount of time seeking work opportunities with employers, and communicating with the professionals in the team and from PES and SIA.

In research among persons with disabilities, the psychological integration i.e. sense of community and belonging (Townley & Kloos, 2011) assumed to constitute the defining features of community life (Sarason, 1974) has in particular been found to be positively related to QOL and psychological well-being (Prezza, Amici, Roberti, & Tedeschi, 2001). Thus, the enhanced overall QOL among the IPS participants, as shown in Study III may indicate a positive change also in the participants' sense of community and belonging. However, no research on IPS has explicitly investigated the participants' psychological integration during participation. Accordingly, we do not know if those participants who become physically engaged in productive activities in mainstream settings through the IPS support will also become more psychologically integrated and thus experience a stronger sense of community and belonging as a result of IPS.

## IPS and non-vocational outcomes

### Quality of life

The overall QOL score differed significantly between the groups at 18 months, in favour of the IPS participants (Study III). This finding is novel since IPS has shown no effect on QOL in any previous IPS trial. The IPS participants also showed a change in their overall QOL and their score within the specific QOL domains of; general life satisfaction, satisfaction with work situation (being involved in paid work, an education or a vocational rehabilitation), financial status, number of friends and mental health. However, the significantly higher employment rate in favour of the IPS group may be one prominent factor that

helps explain the changes in QOL within the IPS group and between the IPS and TVR participants. This observation is corroborated in previous QOL research suggesting that persons who are employed are more satisfied and have a significantly better rating on QOL compared to persons with mental illness who are unemployed (Eklund, Hansson, & Bejerholm, 2001; Priebe, Warner, Hubschmid, & Eckle, 1998), especially in QOL domains which are related to having a work (Eklund, et al., 2004). At the same time, however, most of these studies are cross-sectional and do not reveal any information about a causal relationship between employment and QOL. In addition, no difference in QOL has been shown in IPS research between IPS and TVR or between those who had been working and those who had not (Burns, et al., 2009). Perhaps the higher QOL among the IPS participants in Study III can be explained by mediating factors which have to do with the quality of the IPS support provided by the employment specialist. Accordingly, there is evidence from qualitative studies, including Study I, that QOL is likely to be enhanced among persons with SMI if they are provided with the opportunity to make choices and maintain their control (Laliberte-Rudman, Yu, Scott, & Pajouhandeh, 2000), and have their preferences considered during IPS (Siporin & Lysack, 2004). Another mediating factor for enhanced QOL may be the increased engagement in daily occupations and community life as shown in study III. This suggestion is supported by the findings in previous research showing a moderate correlation between the level of occupational engagement and overall QOL among persons with schizophrenia (Bejerholm & Eklund, 2007).

It is important to note that the TVR participants also significantly increased their general life satisfaction during the trial and showed a trend towards a significant increase in their overall QOL, satisfaction with the number and quality of friends and financial status. Perhaps this improvement can be explained by the fact that they too had changed their current life situation after entering the RCT and thereafter redirected their life which was possibly further supported by the TVR services. This assumption is supported by previous IPS findings which suggest that participation in a vocational rehabilitation has a positive impact on the QOL of persons with SMI (Drake, et al., 1999).

## Empowerment

Feelings of empowerment have been found to be a cornerstone in the recovery process among persons with mental illness (Resnick, Fontana, Lehman, & Rosenheck, 2005). When considering the experiences of the participants (Study I), feelings of power were evident as a consequence of the IPS support in particular when having contact with the authorities. One participant explicitly said that she experienced a shift in power between her and the staff from the

SIA when having the employment specialist physically present at meetings. The participant stated that she gained more confidence in herself by having the employment specialist present. This moment of power-sharing, experienced by study participants, can be defined as an act of empowerment and confirms the assumptions made by Bejerholm and Björkman (2011) of IPS as an empowering approach.

Empowerment in the context of a client-professional relationship has been described as a process or an approach in which the client takes control over the change process and determines the goals as well as what means to use during the process of change (Tengland, 2008). In practice, this means that the professional collaborates with the client and gives primacy to the client's preferences, wishes and values and avoids, as much as possible, taking a paternalistic approach to the client (Slade, 2009). This definition can be anticipated to go hand in hand with the empowering approach of the employment specialists as discerned from the statements of the participants in Study I and as indicated in the results in Study III.

Despite the participants' statements of choice and sharing power during IPS no significant change in empowerment could be detected within the IPS group in Study III. However, it is difficult to compare empowerment in this sense since these studies embrace different constructs in relation to empowerment. Nevertheless, the change was close to significant within the IPS group ( $p=0.053$ ) in Study III. It might be that empowerment as a process is better reflected or understood in relation to the participants own expressions, as in Study I, as compared to the Empowerment Scale in use. In the light of these results IPS appeared to play a vital role for empowerment as was anticipated in a study on the relevance of empowerment as a construct in relation to IPS research and practice (Bejerholm & Björkman, 2011). Moreover, it can be assumed that empowerment may increase even more when all the new routines and events in daily life that IPS bring about, have settled a bit including starting to work.

## IPS and the participants' work motivation

The findings in Study I show that the participants had a clear vision of what they stood to gain by starting to work. Furthermore, the participants stated that their work motivation helped them persevere with the IPS process during eventual setbacks. These statements are further supported by the finding in Study III which showed that work motivation among the participants had been maintained during IPS. Thus, the findings from both Study I and Study III may

indicate that the employment specialist continued to encourage the participants' work motivation during the study. In addition, the generally high rating of motivation among the study participants at study entrance is in congruence with the eligibility in IPS and could also help to explain why the participants' motivation was not significantly enhanced during IPS enrolment. However, when investigating differences in work motivation between the IPS and the TVR group at 18 months, the IPS participants were shown to have a significantly higher work motivation compared to the TVR participants whose work motivation had declined during the study.

As shown in Study II the two logistic regression analyses showed occupational engagement to be the only significant factor for predicating work motivation, at study entrance among the participants. These findings are in line with Kielhofner et al. (1999) who pointed out that the presence of functional routines in daily occupations was important for a successful return to work. The potential of engaging in occupations has further been affirmed in occupational therapy theory (Christiansen, Baum, & Bass-Haugen, 2005; Kielhofner, 2007; Townsend & Polatajko, 2007), in which it is stated that individuals who engage in occupations learn about their own abilities and develop new skills and confidence and strategies to adapt to different environments. This functional way of dealing with daily life and of gaining knowledge and confidence may explain our results of the relationship between occupational engagement and work motivation in Study II. Accordingly, this result may suggest that professionals who have an ambition to help persons with SMI cultivate and maintain work motivation should encourage these persons to have a balanced rhythm of activity and rest, to engage themselves in a variety of meaningful activities in the community and to have contact with others on a regular basis.

When accomplishing attrition analyses at six and 18 months no significant difference was found concerning baseline scores on work motivation between those who dropped out of the trial and those who remained. Nor between those who stayed and remained in each RCT group. However, no specific investigation of the participants' work motivation at the time of attrition was accomplished. Consequently, we do not know if those who chose to leave the trial were less motivated than those who stayed, nor do we know if the dropouts felt less motivated at the time of attrition than when entering the RCT. In addition, we do not know what characterises those participants who stayed in the trial but did not get competitive employment. In fact, regardless of high fidelity to method and country, on average, one third of the participants in IPS do not get employed (Drake & Bond, 2011).

## IPS—a personal recovery process

The IPS approach as well as other EBP within mental health care have been claimed to have been developed without an understanding of personal recovery and for not promoting recovery-oriented outcomes. For instance, Anthony, Rogers and Farkas (2003) claimed the outcomes of EBP such as variation in hospital relapse, days in the community, psychopathology, or the dichotomous counts of employment to be less important to a person's recovery than meaningful roles in society, empowerment, feelings of hope, self-efficacy and satisfaction in life. However, as the IPS principles concern that eligibility is based on the participant's own meaningful and desirable goal to work and that the job seeking and support process is compatible with his or her own preferences and interests then the IPS is consistent with personal recovery as also suggested by Bond et al. (2004). This resemblance is evident in Study I in which the participants' overall experiences of IPS brought out feelings of hope and meaning, the opportunity to discover both lusts and strengths and own work competence. Moreover, by having an employment specialist who showed a positive attitude towards them, the participants felt encouraged and disposed to act. They felt that future paid work was achievable despite their limitation caused by mental illness and obstacles in everyday life which is all in accordance with a process of personal recovery (Leamy, Bird, Le Boutillier, Williams, & Slade, 2011). The results in Study III showing IPS had an effective impact in relation to empowerment, engagement in occupations and QOL also showed to be in line with the critical ingredients of a personal recovery process which are, *Hope and optimism for the future*; motivation to change, positive thinking, *Connectedness*; support from others and being part of the community, *Identity*; rebuilding/ redefining a sense of identity, overcoming stigma, *Meaning in life*; the meaning of mental illness experiences, QOL, social goals/roles and *Empowerment*; personal responsibility, control, focusing on strengths (Leamy, et al., 2011). Accordingly, this thesis underlines IPS to be both an EBP and a personal and recovery oriented approach.

## IPS and occupational therapy

In Study I it was evident that the employment specialists' were highly valued by the participants. Their experiences from the psychiatric field and their knowledge about psychiatric disabilities were perceived as an enabling factor that facilitated the participants' alliance with the employment specialist and the employers. This quality was also addressed in another IPS study where it was

noted that the understanding of symptoms and disabilities helped the employment specialists to provide appropriate support (Kostick, Whitley, & Bush, 2010). Together, these studies suggest that experience or education concerning mental illness may affect the alliance and thus the efficacy of IPS. On the other hand however, it has been proposed that the employment specialist's role is not tied to a certain profession, and should suit anyone who takes an interest in vocational rehabilitation as suggested by Drake and Becker (2003). In Sweden, an SIUS-consultant in the Swedish PES or a work consultant in the municipalities can, tentatively, work as an employment specialist.

Within the present RCT context it was however, important that the employment specialist had an education equivalent to that of an occupational therapist with regard to a client-centered practice, knowledge of mental health and mental illnesses and psychosocial interventions that correspond to the clients' capacities and their occupational and work goals in life. N.B. the author of this thesis and the principal investigator of the RCT are occupational therapists by profession as is also Ulla Nygren of Umeå University who recently defended her thesis on the implementation of a naturalistic IPS study in a social psychiatry context (Nygren, 2012). This clearly reflects that occupational therapy researchers take an interest in vocational rehabilitation and IPS in Sweden. In addition, the profession has also been referred to in the National Guidelines for Psychosocial Practice for people with schizophrenia and related disorders for which implementation of the IPS approach is recommended. (Socialstyrelsen, 2011). Internationally, the IPS has also been highlighted by occupational therapy researchers who suggest IPS to be within occupational therapy's scope of practice (Arbesman & Logsdon, 2011; Lloyd & Williams, 2009; Waghorn, et al., 2009).

In practice, occupational therapy education and training and the IPS principles are very consistent. For instance, both the occupational therapist and the employment specialist 1) consider the links between employment progress and personal recovery 2) have a client-centered focus 3) use problem-solving strategies to help persons with SMI to reach their vocational goal and 4) have the skills to analyse a work environment to identify what adaptations to make to improve work performance (Porteous, 2007). In addition, this skill of the occupational therapist to analyse competitive employment into activity components and thereby identify specific forms of adjustments is partly nurtured by the theoretical occupational therapy Person-Environment-Occupation model (PEO) (Law, 96), which has been used to discern workplace environments, support and accommodation in previous IPS research (Lexén, Hofgren, & Bejerholm, 2012). Thus, occupational therapists are educated in and are aware of the complex interactions between the participant's



characteristics, his or her social and physical work environment and the work task. This kind of knowledge is crucial for the development of a good job-match, suitable work-accommodation and adjustment to the worker role as a whole.

However, the “place then train” approach of IPS challenges the practice of occupational therapy which traditionally is characterised by a “train then place” approach. Many of the occupational therapists currently working in mental health are trained to look at their clients through a medical model lens and thus to assess and help the clients train their work capacities in sheltered settings before entering competitive employment. Still, the values and philosophy of IPS and the delivery of vocational support by the employment specialist are very compatible with the values and practices within occupational therapy. In the current shift in vocational rehabilitation strategies in Sweden the occupational therapists with an interest in vocational rehabilitation are urged to become familiar with the IPS approach for the reason that the vocational career of persons with SMI can be assumed to be facilitated even further.

## Methodological considerations

### *Study I*

Scientific rigour in quantitative research, such as a study’s validity and reliability has, in qualitative research, often been referred to as trustworthiness involving the credibility, confirmability, dependability, and transferability of a study (Graneheim & Lundman, 2004; Lincoln & Guba, 1985). Thus, in an attempt to strengthen the credibility of Study I participants with different personal characteristics such as age, gender and work experiences during IPS were chosen. The intention with this increase of heterogeneity was to enhance the possibility of various perspectives of IPS among the participants. What is important to consider though is that nine participants declined to participate in the qualitative study, either actively or passively, which may have limited the variation of the statements. It is possible that those with a less positive experience of IPS were those who did not take part. Of course, participants who were working for example probably had difficulties in getting away to perform an interview.

The interviews in Study I had the exploratory aim of catching new perspectives and dimensions of the IPS approach. When using open-ended interviews (Dahlberg, Dahlberg, & Nyström, 2008) the interviewees have the opportunity to decide how to interpret the questions and decide what to tell from their experience. This procedure is likely to have strengthened the credibility in

relation to the purpose of the study. The extended data collection of four months may, however, have impacted on the way the author formulated questions during the interviews. The risk of inconsistency during data collection was thus imminent. This circumstance may have affected the dependability of the data. However, to strengthen the transferability of the study a description of the selection procedure, the characteristics of the participants and the interviews were given.

Another aspect worth discussing concerns the role of the author and the balancing act of interpretation (Graneheim & Lundman, 2004). Even though Study I had an exploratory design the author involved had knowledge concerning the IPS model and previous experiences from the psychiatric field. These circumstances may have tinged the way the analysis was accomplished thus guiding the interpretation of the text in a given direction. However, it is more likely that this previous knowledge made the author even more alert and sensitive when interpreting the interviews. In addition, in an attempt to establish credibility, the second and third authors of Study I were part of the analysis process and assisted the author of this thesis to evaluate the steps and the results of the content analysis. Credibility was further enhanced by describing as much detail as possible about the analysing process which helped to demonstrate a link between the data and the results. However, no member checking occurred which may have limited the confirmability of the results.

#### *Studies II, III and IV*

The presence of internal validity of a study concerns whether it is possible to draw conclusions about a causal link between an independent and a dependent variable and tell which direction this causality has taken (Shadish, et al., 2002). Threats to the internal validity thus concern a difficulty to discern causality and a difficulty to control for other variables that may interfere and have an effect on the dependent variable. However, a viable way to concur these threats to internal validity is to use an experimental design, for example a RCT where the study participants are randomly assigned into groups (Shadish, et al., 2002). In this thesis, the results from Studies III and IV were based on such a design. Thus, the randomisation into one experimental and one control group helped to create two units of participants with the same average characteristics concerning variables that are suggested to have a relationship with the ability to obtain work, for instance work history, work motivation, and age (Catty, et al., 2008). Consequently, the differences between the groups concerning vocational outcomes were most likely caused by the IPS intervention.

Although power calculations with regard to competitive employment rate were made previous to setting up the trial no calculations of power or effect size were performed with regard to the non-vocational outcomes. This limitation

may have had an impact on the possibility to detect true effect due to a small sample size. Moreover, to counter the threat of attrition, which lowers the statistical power, a decision was made to include more participants in each RCT arm than was suggested in the sample size calculation. Another action was to inform all participants that a randomisation implied a 50% risk that they would not receive IPS. The researchers also held several meetings with the mental health staff and sent them news letters about the research progress. This was done to create a good implementation atmosphere that was assumed to benefit the participants. It was also important that the follow-ups were arranged in a personal and flexible way to meet the needs of the participants.

In addition to violating statistical power, attrition may violate the equivalence between the groups during the trial (Shadish, et al., 2002). Consequently, attrition analysis was accomplished during the study and revealed no significant differences between the IPS and the TVR group at each measurement point. However, the collection of attrition data may not have been thorough enough since a few of the participants were lost to follow-up without having given a reason. Therefore we do not know if the reasons for leaving the trial may be confounded with the rehabilitation given. At the same time it was not correct to contact these participants if they did not reply after several attempts had been made to reach them as the trial was of a voluntary nature.

Another threat to internal validity is the unreliability of measures (Shadish, et al., 2002; Streiner & Norman, 2008). When estimating the Cronbach's alpha for POES, the Empowerment Scale and the motivation subscale in WRI, the instruments showed good internal consistency in this study context. However, no further reliability tests of the instruments were accomplished, such as test-re-test and a test of inter-rater and intra-rater reliability. Accordingly, little is known about the potential bias connected to the two research assistants who collected the data. This shortage may have been mitigated by the fact that the two research assistants were provided with a thorough training for each of the instruments before the trial and the possibility to discuss the instruments together. Another limitation related to the reliability of the instrument used in Studies II and III may be their shortage of reflection on the variation in the data. Many participants were assessed to have high occupational engagement and work motivation, already at baseline, which may have generated a ceiling effect to the instruments. As the intention in Study III was to identify changes during IPS participation, the design of the instruments may have limited the way the participants' actual improvements were reflected in the scores obtained from the instruments. On the other hand, the study participants' rating can also be said to reflect a group that was engaged and motivated to work to begin with. In this case the instruments in use were adequate and sensitive enough,

since they captured both changes within the groups and differences between groups even though the sample size was limited.

With regard to external validity, the question about whether the effectiveness of IPS would hold over variations in persons and settings (Shadish, et al., 2002; Streiner & Norman, 2008), it is likely that the results in Study IV may be generalised to countries with the same welfare context and labour market regulations. When generalising the results from Study IV however, it is important to consider the way the IPS intervention was provided and implemented. In Studies III and IV the employment specialist gained high IPS fidelity and followed the principles of eligibility by choice and integration of their vocational support with the mental health teams. In other research studies on IPS the IPS support had to be modified to better fit the local context which in turn impacted on the fidelity score (Heslin, et al., 2011), the IPS integration into the mental health teams (Nygren, Markström, Svensson, Hansson, & Sandlund, 2011), and the principle of eligibility (Hoffmann, et al., 2012). When generalising the effectiveness of vocational outcomes in this particular study and also between different IPS studies it is important not only to compare the employment rate but also to consider the studies' fidelity to the IPS principles.

In Study II, a cross-sectional design was used. It can provide descriptive data of a population and be analysed to look at relationships between naturally-occurring variables such as the relationship between work motivation, occupational engagement and empowerment. However, in such a design no direction of causality can be discerned. However, the correlation and logistic regression analyses in Study II provided knowledge of what variable/s may be influential in predicting work motivation. This kind of knowledge was for example suitable for setting up the hypothesis in Study III regarding the impact the IPS may have on work motivation and occupational engagement.

## Clinical implications

- The effectiveness of IPS, on both vocational and non-vocational outcomes, stresses the importance for the welfare services in Sweden to change their focus from prevocational training in sheltered settings to supporting skills training and work-place accommodations in mainstream work settings.
- IPS can be characterised as a personal recovery oriented process. Thus, for those welfare services that have the intention to incorporate IPS in their daily practice it seems relevant for these services to become aware of and incorporate a recovery oriented approach.
- To deliver high fidelity IPS it is important that the principles of IPS are anchored in the different welfare organisations both at a local and national level. At an individual level the persons who take on the role as employment specialists need to receive appropriate training in the approach and be offered continuous supervision.
- By considering the time-use and supporting persons with SMI to engage in a variety of meaningful social activities in different environments the work of the professionals can provide these persons with opportunities to cultivate a decision to seek work.
- Recruiting an employment specialist who has profound knowledge of mental illness and psychiatric disability, and who acknowledges the potential of the IPS approach, may increase the efficacy of IPS.
- The employment specialist needs to be aware of and address the balance of power situation during rehabilitation. For the employment specialist it is important to shift power towards the participant to achieve a relationship characterised as a partnership based on mutual interdependence.
- Occupational therapists may take on the role as an employment specialist. By doing that they can strengthen their own role as an occupational therapist since both the vocational and non-vocational outcomes in IPS are compatible with occupational therapy outcomes of vocational rehabilitation.

## Implications for further research

The result showing IPS to have an impact on a participant's physical in the community would instigate further qualitative research on participants' social integration and in particular their experiences of psychological integration during IPS. The finding of the effectiveness of IPS on the QOL is interesting and differs from the findings in other RCTs. Thus, further qualitative studies are warranted to deepen the understanding of the QOL among the participants during IPS and also the critical ingredients for a recovery process among persons with SMI receiving this kind of vocational support. In addition it is important that the present RCT is replicated in further RCTs, with a larger sample size, investigating the vocational, and in particular, the non-vocational outcomes.

Today, few long-term follow-up studies on IPS have been accomplished internationally. Accordingly, less is known about the career development of the participants after they have enrolled in IPS. For instance, due to the internship culture, discerned in the present thesis, the participants found competitive employment relatively late during enrolment. The effects of IPS may thus be more visible after accomplishing a follow up study. Such a study would also elucidate the potential of the IPS support in helping the participants to succeed in finding satisfying long-lasting jobs. Further investigation should also be accomplished to discern what aspects during IPS help the participants keep their employment. Studies with an aim to look at the development of a good job-match and suitable work-accommodations are thus warranted. In the light of the research showing that cognitive and social impairments impact on vocational outcomes, further studies on the participants' cognitive and social functioning during IPS ought to be accomplished. Currently, the research group, in which the author of the present thesis is part of, are trying to fill this gap in research by exploring the relationship between cognitive functioning and vocational outcomes such as gaining competitive employment, job tenure and income (Lexén, Hofgren, Stenmark, & Bejerholm, 2012).

As was shown in this thesis, far from all participants found employment through the support of IPS. One critical research issue is thus to improve outcomes for those participants who did not benefit from IPS and to examine a variety of enhancements to amplify outcomes. By adding different services such as social skills training, cognitive training, and also motivation interviewing, possible enhancements for non-responders could be investigated. Such research would help identify further ways to support persons with SMI to obtain and keep competitive employment. Notably, the findings in the present thesis, however, indicate the IPS approach to bring positive outcomes for the participants beyond obtaining competitive employment.

In line with the results in our qualitative study regarding the participants' requests for supplementary courses or education, research should also be instigated to investigate the effects of IPS by adding supported education. In the present thesis eight IPS participants were found to be in an education at the end of the trial. Accordingly, if finding ways to further enhance the education opportunities for persons with SMI it is possible to counter entry level employment, lower paid jobs and also less skilled and satisfying jobs for the target group as also suggested by Killacket and Waghorn (2008). Finally, further studies on the implementation of IPS in a Swedish context, at different sites, must be undertaken to complement the existing research (Bejerholm, et al., 2011; Hasson, et al., 2011) on the implementation challenges and barriers to IPS in Sweden. However it is important to consider that IPS is a psychiatric rehabilitation approach to vocational rehabilitation to help persons with SMI obtain competitive employment. When implementing IPS in the municipalities in the coming years it is particularly important to investigate the extent to which the municipalities involve themselves and find strategies to cooperate with the mental healthcare services. As the vocational rehabilitation for persons with SMI in Sweden also includes support from other welfare organisations, such as the SIA and the PES, it is important that these organisations also have a mandate to collaborate around IPS.

# Swedish summary/ Svensk sammanfattning

Den arbetsrehabilitering som traditionellt erbjuds personer med psykisk funktionsnedsättning kan beskrivas som en trappa där varje steg består av olika åtgärder för att öka personernas arbetsförmåga. Målet är att personerna successivt skall bli friskare, öka sin funktionsnivå och utveckla fler färdigheter innan de kan ta steget ut till ett konkurrensutsatt arbete. För personen med funktionsnedsättning blir vägen tillbaka till arbete ofta en utdragen process av för-rehabilitering, färdighetsträning och bedömning av arbetsförmåga, där själva arbetssökandet får vänta till senare. Denna arbetsrehabiliteringsmodell kallas för "train then place" i internationell litteratur. I Sverige har denna rehabiliteringsmodell kritiserats för att inte vila på tillräcklig evidens vad gäller effekterna. De organisationer som är involverade i rehabiliteringen dvs. sjukvården, kommunen, Försäkringskassan (FK) och Arbetsförmedlingen (AF) har också kritiserats för att brista i samverkan kring den enskilde personen som på egen hand lämnas att navigera mellan de olika organisationerna.

Under de gångna åren har efterfrågan på evidensbaserade behandlings- och rehabiliteringsmetoder för personer med psykisk funktionsnedsättning ökat i Sverige. I Socialstyrelsens Nationella riktlinjer för psykosociala insatser för personer med schizofreni och schizofreniliknande tillstånd, från år 2011, rekommenderas en internationellt evidensbaserad arbetsrehabiliteringsmetod vid namn Individual Placement and Support (IPS). I ett flertal randomiserade kontrollerade studier (RCT) runtom i världen har IPS visat sig vara mer effektiv än den stegvisa och traditionella arbetsrehabiliteringen för att hjälpa personer med psykisk funktionsnedsättning att nå, få och behålla arbete. I IPS får deltagarna hjälp av en arbetsspecialist att nå sina arbetsmål. Arbetsspecialisten vägleds i sin tur av åtta principer; 1) arbete på den öppna arbetsmarknaden är målet 2) sökandet efter arbete inleds i ett tidigt skede 3) alla som vill arbeta skall få stöd av IPS 4) arbetssökandet grundar sig på personens intresse och preferenser 5) insatserna integreras i det psykiatriska teamet 6) ekonomisk rådgivning ges i ett tidigt skede 7) insatserna ges till personen så länge hon eller han önskar 8) mycket tid avsätts till att engagera arbetsgivare och rekrytera arbetstillfällen.



Utmärkande för IPS är att deltagaren inte genomför någon för-rehabilitering eller bedömning av sin arbetsförmåga innan arbetssökandet startar. Istället tränas och bedöms deltagarens arbetsförmåga på den arbetsplats där hon eller han skall utföra sitt arbete. IPS kallas därför ofta för en ”place then train” modell. Förutom att stödet från arbetspecialisten samordnas med det psykiatriska teamet, samarbetar arbetspecialisten även med deltagarens personliga nätverk, arbetsgivare, samt med FK och AF.

Trots Socialstyrelsens rekommendationer att IPS ska erbjudas till personer med psykisk funktionsnedsättning saknas idag kunskap om huruvida IPS är en effektiv metod under svenska förhållanden, för att hjälpa dessa personer till arbete. Framförallt är det oklart om och hur IPS passar in i de regelverk som finns inom AF och FK, som väsentligen bygger på en ”train then place” modell. Implementeringsstudier av IPS i Sverige har bland annat visat att praktikplatsystemet begränsar möjligheterna att följa IPS principen om att söka arbete direkt, och att de olika ersättningsformerna och tillhörande regelverk från AF och FK kan påverka möjligheten att arbeta programtroget. Vidare finns även en brist på kunskap om huruvida IPS har effekt på deltagarnas livskvalitet, arbetsmotivation och aktivitetsengagemang i vardagslivet. Likaså vet vi inte så mycket om hur deltagarna själva upplever IPS och kontakten med en arbetspecialist.

För att fylla dessa kunskapsluckor genomfördes under åren 2008 till 2011 ett IPS-forskningsprojekt i södra Sverige. Rekruteringen av deltagare pågick mellan maj 2008 till augusti 2009. För att kunna delta i projektet, som hade en RCT-design, var de sökande tvungna att; vara i arbetsför ålder, ha en pågående kontakt med psykiatrin, ha en vilja arbeta inom en överskådlig framtid, inte ha arbetat på ett år, samt ha förmåga att kommunicera på svenska. Det var även viktigt att samtliga deltagare hade fått information om IPS, syftet med forskningsstudierna och vad det kan innebära att med slumpens hjälp bli fördelad till antingen IPS insatsen eller rehabilitering som vanligt. Under rekruteringen av deltagare skrev 141 personer på en blankett om att de önskade medverka i projektet. Av dessa genomförde 120 personer en baslinjeintervju och blev därefter randomiserade till antingen IPS (60 personer) eller traditionell arbetsrehabilitering (60 personer). Vid baslinjeintervjun och de två uppföljningstillfällena, efter sex respektive 18 månader, fick deltagarna fylla i olika självskattningsinstrument som administrerades av två forskarassistenter. Instrumenten innehöll frågor om bakgrundsfaktorer (t.ex. ålder, kön, familjesituation, sjukdomshistoria, arbetslivserfarenhet), uppfattning om egenmakt och livskvalitet. Även tre bedömningsinstrument användes där forskningsassistenterna skattade deltagarnas symtom, arbetsmotivation och grad av aktivitetsengagemang. Skattningarna gjordes utifrån den datainsamling

som var kopplad till respektive instrument, såsom intervju, observation och tidsdagböcker.

## De fyra delstudierna

Studie I syftade till att belysa värdet av IPS utifrån ett individfokuserat och kvalitativt perspektiv. Detta perspektiv är betydelsefullt att ha med sig för att kunna sätta in de andra delstudierna, med sina kvantitativa resultat, i ett meningsfullt sammanhang. I ett första steg valdes de deltagare ut som erhållit IPS i 12 månader. Av de 27 deltagare som tillfrågades kom 17 personer att ingå i studien. Intervjuerna inleddes med en öppen fråga om deltagarnas erfarenheter av IPS mer generellt och följdes därefter av en dialog kring vad som var mindre bra respektive bra med att delta i IPS, och hur det var att få stöd av en arbetsspecialist. Samtliga intervjutexter transkriberades och analyserades sedan med hjälp av innehållsanalys. Resultatet speglade deltagarnas överlag positiva erfarenheter av IPS. Deltagarna berättade att de satte stort värde på att arbetsspecialisten såg till deras behov och önskemål gällande arbete. Att specialisten hade kunskap om psykisk sjukdom och arbetsrehabilitering var särskilt uppskattat. Deltagarna upplevde också att de blev stärkta och mindre utsatta genom arbetsspecialistens stöd och närvaro, framförallt i kontakten med myndighetspersoner. Utöver detta stöd från arbetsspecialisten framhöll deltagarna att det var viktigt att de själva bidrog med egen kunskap och kompetens i processen med att söka och få arbete. Dessutom framhöll de att det var viktigt att andra i IPS-nätverket, framförallt läkare och arbetsgivare, också trodde på deras förmåga att arbeta. Sammantaget upplevde deltagarna att de var centrala i sin rehabiliteringsprocess, och att medverkan i IPS gav dem både hopp och mening.

Syftet med Studie II var att belysa arbetsmotivationen hos de personer som anmält sig till IPS och därmed haft en uttalad önskan om att arbeta. Studien genomfördes som en tvärsnittsstudie och kom att inkludera de 120 personer som deltagit i baslinjeintervjun för RCT studien, där information kring deltagarnas arbetsmotivation, aktivitetsengagemang, egenmakt och olika sociodemografiska och kliniska faktorer inhämtats. Resultatet visade att en starkare arbetsmotivation hos deltagarna var förknippat med färre symtom, högre ålder och att ha någon form av arbetsrehabiliterande stöd. Graden av arbetsmotivation var också relaterat till en högre nivå av aktivitetsengagemang och en starkare upplevelse av egenmakt hos deltagarna. I de fortsatta analyserna framkom att den viktigaste faktorn för en stark arbetsmotivation var en högre nivå av aktivitetsengagemang dvs. en livsstil som utmärks av bra rytm

mellan aktivitet och vila, en variation och bredd av olika dagliga aktiviteter, meningsfullhet, dagliga rutiner, och sociala kontakter i olika när- och samhällsmiljöer. Resultatet understryker betydelsen av att ge personer med psykisk funktionsnedsättning möjligheter till att utöka sitt aktivitetsengagemang, utveckla sin motivation och sitt beslut om att arbeta, och att skapa en bild av sig själv som någon som kan arbeta.

Syftet med Studie III var att studera om IPS hade någon effekt på icke-arbetsrelaterade utfallsmått såsom arbetsmotivation, livskvalitet, grad av aktivitetsengagemang och upplevd egenmakt, i jämförelse med traditionell arbetsrehabilitering vid sex och 18 månader, samt studera förändringar över tid inom respektive RCT grupp. Vid 18-månadersuppföljningen framkom att det fanns skillnader mellan grupperna vad gäller livskvalitet, egenmakt och arbetsmotivation till förmån för IPS deltagarna. I den RCT grupp som fick traditionella insatser framkom inga förändringar av aktuella utfallsmått över tid. Däremot ökade livskvaliteten bland deltagarna i IPS gruppen, liksom deras aktivitetsengagemang mellan de olika uppföljningstillfällena. Resultaten i Studie III visade att IPS inte enbart ökar chansen för målgruppen att erhålla arbete, utan även bidrar till att öka deltagarnas personliga återhämtning i form av ökad upplevelse av egenmakt och livskvalitet.

Delstudie IV syftade till att undersöka effekten av IPS avseende arbetsrelaterade utfallsmått såsom andelen som får arbete, tidsåtgång fram till anställning, antal arbetstimmar och arbetsveckor, inkomst och varaktighet i arbete jämfört med traditionell arbetsrehabilitering. Ett ytterligare syfte var att undersöka huruvida IPS deltagarna var aktiva i miljöer som inte var åtskilda från samhället i övrigt. I resultatet framkom att 46% (n=41) av IPS deltagarna fick arbete jämfört med 11% (n=46) av de som erhöll traditionell rehabilitering vid 18-månadersuppföljningen. Resultatet visade även på skillnader mellan grupperna, till IPS deltagarnas fördel, vad gäller antal timmar och veckor i arbete, inkomst och varaktighet i arbete. IPS deltagarna fick dessutom arbete fem gånger så snabbt som de i traditionell rehabilitering. För att spegla den praktikplatskultur som ingår i arbetslivet i Sverige beräknades även skillnader mellan grupperna beträffande praktikplats/arbete. Resultatet visade att 80% av IPS deltagarna mot 20% av deltagarna i traditionell rehabilitering hade arbete eller praktik vid 18-månadersuppföljningen. Som svar på studiens delsyfte framkom att 90% av IPS deltagarna kom ut i arbete, praktik eller studier i miljöer som inte är åtskilda från samhället i övrigt, jämfört med 24% av deltagarna i traditionell rehabilitering. Majoriteten av deltagarna som fick traditionella insatser stannade därmed kvar i miljöer förknippade med sysselsättning och för-rehabilitering.

Sammantaget bidrar den aktuella avhandlingen med vetenskaplig evidens om IPS som arbetsrehabiliteringsmodell. IPS är effektivare än traditionell arbetsrehabilitering även i Sverige, både när det gäller arbetsrelaterade och icke-arbetsrelaterade utfallsmått, som mått på hälsa. Avhandlingen visar att personer med psykisk sjukdom och funktionsnedsättning i onödan hålls åtskilda från ett arbets- och samhällsliv, som en konsekvens av den traditionella, stegvisa arbetsrehabiliteringsmodellen. Genom att implementera IPS, utbilda och anställa IPS arbetsspecialister och införliva IPS i den psykiatriska behandlingen, finns stora chanser att öka förutsättningarna för målgruppen att arbeta, integreras i samhället och uppleva återhämtning i form av ökad livskvalitet, egenmakt, hopp och mening. I framtida forskning är det viktigt att delstudierna i detta avhandlingsarbete kompletteras med ytterligare studier av IPS och dess effekt i Sverige. Likaså behöver studier genomföras kring implementeringen av IPS i Sverige och då i större skala än i det aktuella forskningsprojekt som avhandlingen handlar om.



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