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Work integration of people with severe mental illness in social enterprises

Advisor:

Prof. Franco Fraccaroli

Co-advisor:

Prof.ssa Paola Venuti

Prof. Marc Corbière

PhD candidate:

Patrizia Villotti

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CHAPTER 1: INTRODUCTION

1.1 Relevance of work in psychological health

In societies where employment is the norm and a symbol of adulthood and full citizenship (Parsons, 1951 cited in Bond, Drake & Becker, 1998) work becomes central to a person's identity, social roles and community status. Having a job is a significant part of most people's lives and paid employment is the common means of achieving adequate economic resources which are essential for people to fully participate in society (Turner, 2010; Hensel et al., 2007). Work represents perhaps the most consistent and profound way in which individuals interface with their social, economic, and political context (Blustein, 2008). It provides access to resources that help people to ensure continued survival: without work, individuals often struggle considerably to obtain money or other sources of sustenance that furnish food, shelter, and clothing. Another critical need that working provides is access to social support and relational connections. Many jobs involve indeed some structured and informal interactions with other and people who work often report that they feel more connected to the economic and social welfare of their communities (Bowe et al., 2000; Blustein, 2006).

The benefits of employment do not stop at a social level but also impact on our physical and mental health. According to Rinaldi and colleagues (2008) work is generally beneficial to health and quality of life. Working can indeed promote connection to the broader social and economical world, enhance well-being, and provide a means for individual satisfaction and accomplishments (Blustein, 2006, 2008; Brown & Lent, 2005). People who are employed experience a lot of benefits, including the possibility to develop and use their abilities, to develop a socially valued identity, "a chance to contribute meaningfully to their societies, communities and families, increased income to meet their basic needs and to plan for their future, and access to opportunities and events that enrich their quality of life" (Krupa, 2010 p. 93).

On contrast, research into job loss and continuing unemployment has clearly established that in general unemployed significantly impairs mental health. According to Shortt (1996) unemployment is itself pathogenic with many ill effects on health, such as increased general health problems, specifically emotional and cardiopulmonary diseases,

particularly among the younger people, the economically marginal and middle-aged men. Perhaps the most obvious indication of how important work is to mental health is the fact that individuals who lose their jobs often struggle with mental health problems, such as depression substance abuse, and anxiety (Blustein et al., 2004; Vinokur et al., 2000). From an individual perspective, the loss of work has been consistently linked to problems with self-esteem, relational conflicts, substance abuse, alcoholism, and other more serious mental health concerns (Blustein, 2006). Form a broader community perspective, unemployment can lead to social exclusion (Turner et al., 2009). According to Evans and Repper (2000), without employment the risk of social exclusion and poverty is dramatically increased and "poverty, unemployment, social exclusion and mental health are intricately linked" (p.15, cited by Turner, 2010).

During the past decades, many attempts have been made in the effort to develop conceptual models that relate job characteristics with employee well-being (Warr, 1987; Kahn & Byosiere, 1992). Two main theoretical perspectives have been particularly prominent in the literature: models that assume linear relationships (i.e., the Job Characteristics Model by Hackman and Oldham, 1980) and models that stipulate non-linear relationships (i.e., the Vitamin Model by Warr, 1987) between job characteristics and mental health outcomes, including employee well-being. The first perspective states that, for example, autonomy on the job is linearly associated with job satisfaction: the more autonomy a worker experience, the more satisfied he/she is with the job. Peter Warr in his Vitamin Model (1987) argues, instead, that the effect of job characteristics upon mental health parallel the ways in which vitamins act upon the human body. The analogy is that as vitamins are required for physical health, a similar pattern can be observed with the environmental features on the mental health and well-being of individuals. In particular, the availability of vitamins is important for physical health up to, but not beyond, a certain level. Low levels of vitamin rise to physiological impairment and ill health, but after attainment of certain levels, there are no benefits from additional quantities. As likely, the presence of job characteristics (such as opportunity for control and interpersonal contact, variety, environmental clarity, physical security) initially has a beneficial effect on employee mental health, whereas their absence impairs mental health. But beyond a certain level, they have no positive effect anymore, and the level of mental health remains constant. Again, further increase of job characteristics may produce a constant effect or may be harmful and impair mental health (Warr, 1987; Jonge & Schaufeli, 1998). For example, high levels of job autonomy may be harmful to the

employee's level of well-being, since it involves high job responsibility, uncertainty and difficulties in decision making (Warr, 1987).

Existing qualitative evidence suggests that people with psychiatric disabilities experience the same benefits that people in the general population receive from employment, including increased self-esteem, decreased social isolation, and improved quality of life (Salyers et al., 2004) as well as financial gains, personal growth, and improved mental health (Honey, 2004; Marwaha & Johnson, 2004; Strong, 1998). Work is perceived by employed people with mental disabilities as a means of coping with the illness, a way of develop a sense of self-empowerment (Dunn et al., 2008), as well as a way to develop future plans and the willingness to expose themselves to new learning experiences (Alverson et al., 1995). Work is often seen also as a significant opportunity for pursuing further self-development, making additional improvements in quality of life, and enhancing the experience of wellness (Strong, 1998; Yong & Ensing, 1999). Overall, these findings provide support for the role of work as a vehicle of self-transformation in recovery. Work participation indeed plays a central role in the acknowledgement of the mental illness, and the construction of an acceptable self and public identity (Krupa, 2004).

There is growing evidence that employment is central to recovery from severe mental illness (Killeen & O'Day, 2004; Krupa, 2004; Provencher et al., 2002; Dunn et al., 2008). Recovery is about taking back control and finding one's own way of overcoming barriers and getting on with life (Deegan, 2001; Kristiansen, 2005; Borg, 2007). According to Anthony (2004), recovery does not necessarily mean a cure, but rather may be defined as the process of overcoming symptoms, psychiatric disability and social handicap. It can involve a redefinition of the self, the emergence of hope and optimism, empowerment and the establishment of meaningful relationships with others (Resnick et al., 2004). Recovery is oriented towards the reconstruction of meaning and porpoise in one's life, the performance of valued social roles, the experience of mental health and well-being and life satisfaction. Waghorn and Lloyd (2010) defined recovery as "maximizing well-being within the constraints imposed by health status" (p.10). Having a reason to get out of bed and something meaningful to do during the day is essential for the well-being of people with mental illness, and many of the general goals of rehabilitation and recovery are best served by addressing the person's vocational aspirations (Corrigan, 2003). Employment is also an important factor in recovery as a way of building a sense of meaning in life (Andersen et al., 2003; Svanberg et al., 2010;

Corbière & Lecomte, 2009). Furthermore, many workplace features, such as a culture that values the full utilization of worker capacities and skills, opportunities for decision-making and for a variety of activities, the involvement of the employee, reasonable job demands, clear and predictable work conditions, interpersonal contacts and productivity connected to gains and rewards, are itself associated with psychological health (Kirsh & Gewurtx, 2011; Krupa, 2007; Vézina et al., 2004, Krupa, 2010).

In short, employment is beneficial for people with severe mental illness in making them feel useful, giving them a sense of purpose, providing them the opportunity for social interaction and enabling them to focus on something besides their disability (O'Day et al., 2006).

1.2 Employment and people with severe mental illness

1.2.1 The unemployment situation for people with severe mental illness

People with severe mental illness are among the most marginalized members of the community from a social and economic point of view (Waghorn & Lloyd, 2005). The term mental illness is used here to refer to a group of chronic and disabling psychiatric conditions as defined by international classification systems (e.g., DSM-IV-R, ICD-10) (American Psychological Association, 2000; World Health Organization, 1993) that result in functional impairment or role incapacity in one or more life domains, including vocational functioning (Dunn et al., 2010; World Health Organization, 2001). Examples of severe mental illness are the anxiety, affective and psychotic disorders. In specific, psychotic disorders refer to schizophrenia spectrum disorders, bipolar disorders, depression and other mental disorders involving disturbance of thought and perception (Waghorn & Lloyd, 2005). Because of the extent and pervasiveness of mental health problems, the World Health Organization recognizes mental health as a top priority. Five of the ten leading cause of disability worldwide are indeed mental problems, and depression alone constitutes the second highest burden of disease worldwide (Murray & Lopez, 1996). Furthermore, all predictions indicate that the future will see a dramatic increase in mental health problems (Brundtland, 2000; World Health Organization, 2000), with significant impact on any working population.

Difficulties with employment are a feature of severe mental illness, despite the fact that just like members of the community without mental disorders, they want to work (South Essex Service Research Group, Secker and Gelling, 2006) and view not working as leading to a lack of money, inactivity and not perceiving themselves as being "well" (Evans & Repper, 2000). In particular, several studies identified that 55-70% of people with severe mental illness are interested in employment (McQuilken et al., 2003; Mueser et al., 2001). Studying the working plans of a group of workers with mental disabilities employed in Italian social enterprises, Zaniboni and colleagues found that the predominant pattern of intentions in this population is related to continuing to work (Zaniboni et al., 2011). In general, there is consistent evidence to support that people with mental illness place a high value on employment, which is consistently identified as an important goal for them (Cowther et al, 2001; Dunn et al., 2008; Krupa, 2010). Kirsh in 2000 provided an in-depth understanding of the meaning of work for this population. In particular, she investigated how work relates to social identity and self-image and she described three major ways in which participants of the study regarded employment as meaningful. Firstly, participant saw employment as a way of "giving-back" to society, as a way to be seen by others and to see themselves as contributing parts of the community. Secondly, work contributes in their opinion to a shift in focus from the ways in which they are seen as different from others to the way in which they are similar to others, and this helped them to feel more normal. Work also promotes a shift in focus from illness to wellness by enabling people with severe mental illness to focus on something different than their illness. Thirdly, work was seen as an opportunity to experience a sense of accomplishment that increased feelings of self-worth and self-esteem.

Yet, a large number of workers are unable to work because of disability arising from various health problems, either physical or mental. The disruption in vocational functioning for people with severe mental illness is impressive, with unemployment rate approaching 90% (New Freedom Commission on Mental Health, 2003; Center, 2011; Corbière, Mercier & Lesage, 2004; World Health Organization, 2000; Corbière, Lesage, Mercier & Villeneuve, 2005; Corbière, Lesage, Villeneuve & Mercier, 2006; Corbière & Lecomte, 2009; Corbière, Lanctôt, Sanquirgo & Lecomte, 2009; Waghorn & Lloyd, 2005; Honey, 2002). It is important to note that in the literature it is difficult to distinguish between the portion of people with mental disorders who are not in the labor force (e.g., early retirement, discouraged individuals, people incapable of work) and those who are unemployed (i.e., people who find it difficult to find a job, even when actively

seeking for a job). For sure, it is true this population is less likely to be working (Bowden, 2005; Ettner et al., 1997; Marwaha & Johnson, 2004; Mechanic et al., 2002; Patel et al., 2002; Waghorn & Lloyd, 2005; Drewa & McDaid, 2011), due to the inability either to obtain or to retain employment (Lerner et al., 2004). Thus, the unemployment rate includes people who are no longer actively looking for employment or that are discouraged and no longer believe that they can find a job, but also individuals who are actively seeking work, who are willing and capable to work. In both cases, individuals are affected by social and economic negative consequences, such as social isolation, discouragement and lack of income. Individuals with less severe disabilities, while more likely to be employed than severely disabled people, still experience a 26% unemployment rate (National Organization of Disability, 2001; New Freedom Commission on Mental Health, 2003; Center, 2011). In Italy, it is estimated that about 750.000 Italians have disabilities related to mental disorders (ISTAT, 2005), but disabled who really work do not even rise to 150.000 units, that is to say 19% of disabled person in working age, while 55.8% of people with their same age, but without a disability, have a job. Thus, rates of unemployment are extraordinary high among individuals with severe mental illness (Dunn et al., 2008) and successful outcomes from vocational rehabilitation are consistently lower than for other disability groups (Marshack et al., 1990; McCue & Katz-Garris, 1983; Rimmerman et al., 1995).

Furthermore, those who are working tend to be underemployed and have poor job retention (Mueser et al., 2001; Twamley et al., 2003; Dunn et al., 2010). Several studies show that job tenure in this group is often brief, with an average of 3 to 7 months and nearly half of all clients that leave their supported employment positions within six months (Gervey et al., 1995; Shankar, 2005; Becker, Drake et al., 1998; Roessler, 2002; Corbière, Lanctôt et al., 2009; McGurk & Mueser, 2006; Xie et al., 1997; Fabian, 1992; Corbière, Lesage, et al. 2006; Corbière, Mercier & Lesage, 2004). These data highlight how for many people with psychiatric disabilities sustaining employment is often more challenging than acquiring a job (Shankar, 2005; Becker, Drake et al., 1998), and many experts have indeed noted that this population have at least as much difficulty maintaining jobs as finding jobs (Anthony & Blanch, 1987; Black, 1988; Bond & McDonel, 1991; Cook, 1992; General Accounting Office, 1993; MacDonald-Wilson et al., 1991; Drake, Bond et al., 1998).

Thus, there are compelling ethical, social and clinical reasons for helping people with severe mental illness gain and maintain work. From an *ethical standpoint*, the right

to work is enshrined in the Universal Declaration of Human Rights (1948). In particular, Article 23 of the Universal Declaration of Human Rights (1948) states that everyone has the right to work, to be free to choose the kind of job to do, to be provided of just and favourable conditions of work and to be protected against unemployment. Everyone, without any discrimination, has the right to equal pay for equal work and everyone who works has the right to just and favourable remuneration ensuring for himself and his family an existence worthy of human dignity. The right to work in suitable conditions, which reflect equity, security, human dignity and respect for all community members is a principle that has been incorporated into national legislation worldwide. From a *social standpoint*, high unemployment rates are an index of the social exclusion of people with severe mental illness which governments worldwide are committed to reducing (Waghorn & Lloyd, 2005; Boardman et al., 2003) and from a *clinical standpoint*, employment may lead to improvements in outcome through increasingly self-esteem, alleviating psychiatric symptoms, and reducing dependency (Crowther et al., 2001; Cook & Razzano, 2000; Corbière & Lecomte, 2009).

1.2.2 The impact of mental illness on employment

Non-participation in the labour force and brief job tenure do not mean that people who suffer from a severe mental illness are incapable of working (Waghorn & Lloyd, 2005). Despite that, it is true that mental health problems have an impact both for the individual and the productivity of the enterprise. At the individual level, having a mental illness brings about a redefinition of self and identity which affects work considerations. The onset of the illness often leads to loss of job prospects, goals, self-esteem and self-confidence (Bassett et al., 2001). On enterprise level, employee performance, rates of illness, absenteeism, accidents and stuff turnover are all affected by employee's mental health status. Crown in 1995 identified several consequences of mental health problems in the workplace, such as frequent short periods of absence from work due to physical conditions (e.g., high blood pressure, sleeping disorders, headache) and poor health (e.g., depression, stress, burnout), reduction in productivity, increase in error rates and deterioration in planning and control of work. All these consequences indirectly affect staff's attitude and behavior and relationships at work, with increased tension and conflicts between colleagues and increase in disciplinary problems.

The idea that mental illness impacts employment makes intuitive sense, but the nature of this relationships has proven very complex. According to Waghorn and Lloyd (2005), any symptom associated with a mental illness can act as a barrier to employment. In particular, several symptoms and impairments have been found in the literature to be generally predictive of poor employment outcome. While medications have demonstrated effectiveness in reducing positive symptoms of psychosis, such as hallucinations, they have been less successful in reducing negative symptoms. In particular, people experiencing affective flattering, poverty of speech, impairment of attention and poor social skills can present as a general disturbance in motivation, impaired decision making, a reduced capacity to initiate a particular course of action and a reduction in personal drive (Krupa, 2010). This often is translated in employment into lack of attention to important work-related behaviors, impaired interest to work activities, discomfort in social relations and problems with sustaining the commitment to manage the challenges and demands that employment requires (Bond & Meyer, 1999; Cook & Razzano, 2000).

Schizophrenia. Mental illnesses such as schizophrenia are characterized often by deficits in cognitive functioning, such as difficulties in attention, concentration and judgment, as well as difficulties in perception, memory, planning, mental flexibility, insight, processing speed, executive functioning and psychomotor speed (Tsang et al., 2000; Lewis, 2004). These deficits impact on employment by compromising social skills at work, with limited interactions with others, difficulties in managing emotions and the capacity to assess one's own work performance. Furthermore, the nature of contemporary work settings, which are demanding and characterized by jobs that are complex, requires high capacity in executive functioning. According to McGurk and colleagues (2003), cognitive impairments can indirectly restrict industry and job choices, limit work hours and work performance and increase the need for ongoing assistance to retain employment. Even though measures such as intelligence tests are poor predictors of work performance (Anthony & Jansen, 1984; Stauffer, 1986), it is true that cognitive abilities can affect employment for people with schizophrenia and other mental illnesses (Bell & Bryson, 2001; Goldberg et al., 2001, Mueser et al., 2001).

Depression. Another mental disorder that affects at least 4.9% of the working age population (Blazer et al, 1994, cited in Lerner et al., 2011) is depression, a chronic, episodic condition that causes substantial limitation and social role disability (Wells,

1985, 1997; Wells et al., 1991). Depression can rob an individual of the drive and the energy for work, the ability to concentrate on task and can undermine personal confidence and self-esteem at work (Krupa, 2010). Wang and colleagues (2004) found that depression can negatively impact focus on work task, while Adler and colleagues (2006) demonstrated that it can create difficulties with mental-interpersonal tasks, time management and output tasks. Furthermore, the need to attend frequent medical appointments could interfere with the individual's ability to maintain expected full-time work hours. Depression has also been linked to both absenteeism, that means lost work day, and presenteeism (Goetzel et al., 2004), defined as coming to work but performing below par. Symptoms such as difficulty concentrating, distractibility, fatigue, and difficulty sleeping, which are often reported in association with depression, have been found to have a strong relationships to presenteeism (Lerner et al., 2011). Finally, depression can be misunderstood by employers and vocational services providers as poor motivation for work or as low motivation for working productively while employed (Waghorn & Lloyd, 2010).

Anxiety disorders. Persons with anxiety disorders are likely to experience a myriad of work-related problems as well. Anxiety disorders are among the most represented group of mental illness in the workforce (APA, 2000; Sanderson & Andrews, 2006) and in the general population (APA, 2000; Kessler et al., 2005). These disorders usually follow a chronic course and are accompanied by substantial functional impairment that often leads to work absenteeism, presenteeism and unemployment. Each of the major anxiety disorders is defined by specific symptom criteria the international classification systems (e.g., The Diagnostic and Statistical Manual of Mental Disorders, DSM-IV-R, APA, 2000), but they share a number of common features, such as the persistent mood state of anxiety accompanied by several behavioral, emotional, cognitive and physical symptoms. For example, a person with anxiety can avoid anxiety-provoking situations, experience intense fear or panic, have impaired concentration and memory, experience muscle tension, sweating or fatigue (Wald, 2011). All these symptoms cause significant distress and functional interference that can have an impact on work performance: the occurrence of frightening thoughts, images and physical sensations can indeed contribute to reduced productivity (e.g. difficulty with maintaining regular work attendance), difficulties with time management (e.g., difficulties in initiating, organizing and completing task within a schedule – see Lerner et al., 2001), and difficulties performing tasks requiring

concentration and other mental efforts (e.g., difficulties in performing work activities requiring sustained attention) as well as difficulties at the interpersonal level (e.g., problems communicating and interacting with supervisors, coworkers).

Personality disorders. Personality disorders are another common mental disorder that impact on vocational outcomes. As defined by the DSM-IV-TR (APA, 2000), personality disorders are "pervasive, inflexible, and enduring patterns of inner experiences and behavior that can lead to clinically significant distress or impairment in social, occupational, or other areas of functioning" and that reflect "inappropriate, ineffective, or painful ways of behaving and interacting" (APA, 2000). Even though each personality disorder is associated with different symptoms and behaviors, they are generally characterized by maladaptive coping mechanism that can have negative consequences on interpersonal relationships, including work relationships (Ettner, 2011). For example, people with personality disorders may have difficulty praising the performance of subordinates, or are controlling and manipulative, or deceptive and vengeful, leading to interpersonal problems on the job. Moreover, working with a person that suffer from a personality disorder is not always easy. As reported by Trimpey and Davidson (1994), employees with supervisors or co-workers with personality disorders often become irritated, frustrated, angry, resentful, or even depressed. Consequently, productivity declines and turnover tends to be high (Ettner, 2011).

Pharmacological treatments. Treatment factors and complications arising from medication can also interfere with vocational outcomes. Pharmacological treatments have had considerable success in reducing the symptoms associated with mental illness and preventing the relapse of acute exacerbations of illness, but unfortunately they also have serious side effects that interfere with employment. For example, drugs used in the treatment of psychosis can cause drowsiness, sluggishness, shakiness and other disturbed movement patterns. Also, side effects such as weight gain (Lieberman et al., 2005) can compromise self-esteem and confidence and this may negatively impact work participation.

Disruption of mental illness and Education. There are also other characteristics of mental health that can indirectly cause difficulties in employment, long-term unemployment and limit career prospect. For example, many mental health disorders are episodic and

recurrent. This means that exacerbations in symptoms and deterioration in functioning may recur over time. Also, the experience of severe mental illness typically begins during the adolescence and young adulthood, disrupting career planning, work experiences and education. The typical onset age of psychotic disorders is indeed from 10 to 30 years, which usually coincide with formal education and work training. It is the critical time period for developing a work identity, gaining experiences, relationships and completing education and training associated with adult work. Also, the complex and cyclical nature of mental health disabilities can be exacerbated by a wide range of stressors, inherent in daily life and work environments (Schultz et al., 2011, Baldwin and Marcus, 2010, Wang, 2011).

In conclusion, since research to date has not consistently shown psychiatric diagnosis to be a predictor of who can or will work (Tsang et al., 2000), Krupa (2010) suggests that the impact of mental illness on employment is expressed through some outcomes, but not others. For example, the specific diagnosis does not predict participation in employment (Razzano et al., 2005), but it predicts intensity of working, with those having schizophrenia working fewer hours in a month. Still, intensity of working in this population may be understood by side effects of some treatments (e.g., sedative effects of the anti-psychotic medications) or by debilitating effects of some psychiatric symptoms (e.g., apathy, reduced energy) frequently experienced by people with schizophrenia. Also, being many mental illness episodic in nature, such as schizophrenia and affective disorders, the experience of symptoms and their negative impact on work capability may be time limited. This has implication, not only for the ability to perform consistently within the structure of a work environment, but also for feelings of stability and self-esteem (Rutman, 1994).

It is then clear that the relationship of symptoms to employment outcomes is multi-faceted and cannot be understood by measuring overall symptom severity or diagnosis alone. The nature of the interference between mental illness and employment will depend on the interaction between the individual's experiences of symptoms coupled with the actual work demands and context. Only throughout the understanding of how people with mental illness experience their symptoms in relation to employment can probably help researchers to uncovering the facets of any relationship that may exist between outcomes, diagnosis, and symptoms.

1.2.3 External barriers to employment for people with severe mental illness

As adding to internal barriers arising from the features of mental disorder they are suffering from, people with severe mental illness face other difficulties and barriers in their attempts to gain and maintain employment (Shankar, 2005; Ozawa & Yaeda, 2007; O'Day et al., 2006). According to Boardman (2003), these barriers are made up of several components.

Nature of the labour market and structure of social welfare system. Historically, disabled people were not supposed to be able to work. For many decades mental illness was thought to be permanent and untreatable, recovery process was thought to be not possible, and consequently people suffering from a mental illness were separated from the rest of society through institutionalization in mental hospitals. People with mental illness have long been viewed with fear and suspicion (Porter, 1998), thought to look strange and behave in bizarre fashion, seen as incompetent and totally dependent by others. For years it was believed that serious mental illness have a deteriorating course that is not consistent with the ability to work (Krupa, 2010). Consequently, the employment of disabled people, if any, have been principally in the form of sheltered employment. Thankfully, there have been some positive changes in general population attitudes over time. Researchers worldwide have shown that the life course of mental illness is quite heterogeneous and that recovery of function in social roles, such as employment, is possible even after prolonged experiences of mental illness (Strauss, 2008). Long-term studies have also shown that the majority of people with severe mental illness show genuine improvement over time and lead stable, productive lives (for a summary, see Krupa, 2010). Yet, the nature of the labor market nowadays, complex and multifaceted, lead to a lack of choice and opportunity for this population. Some industries and jobs have only full-time opportunities, require shift of work, use overtime extensively or do not offer flexible hours to attendance. The structure of social welfare system is another barrier to employment, in the way that in-builds disincentives to returning to work. Usually, health benefits associated with income support is lost when part-time employment is obtained, and this often leads to the fact that individuals with mental illness are financially better off staying on benefit rather than returning to work. Also, in some countries, individuals claiming disability benefits are explicitly banned from seeking work (Svanberg et al., 2010; Henry & Lucca, 2004; Killeen & O'Day, 2004).

Stigma and discrimination. Research has shown that adults with mental illness are unable to attain work, housing and other independent life goals because of stigma and discrimination (Corrigan & Kleinlein, 2005; Link & Phelan, 2001; Page, 1995; Wahl, 1999; Corrigan et al, 2007). Community stigma and unfair discrimination are frequently reported in the literature (Waghorn & Lloyd, 2005; World Health Organization, 2001; Long & Runck, 1983). Stigma is described nowadays as 'a severe social disapproval due to believed or actual individual characteristics, beliefs or behaviors that are against norms, be they economic, political, cultural or social' (Lauber, 2008). It is characterized by a lack of knowledge about mental health, fear, prejudge and discrimination. In its most advanced forms, stigma leads to exclusion of the person from several spheres of social functioning, including vocational function. Evans and Repper (2000) found that people with mental illness have fewer opportunities to work than the general population, mostly owing to the many misperceptions and prejudices about their abilities and needs. The general tendency for employers and mental health professionals is to underestimate the capacities and skills of people with mental illness. In particular, there is a reluctance to employ them and a perceived risk of failure (Manning & White, 1995). Unger (2002) in his study found that employers express greater concern with hiring individuals with mental or emotional disabilities than individuals with physical disabilities. Usually, the reluctance to employ people with mental disabilities derives from existing myths and misconceptions and not from direct experiences with workers with such disabilities. In fact, employers who have previous experience with workers with disabilities report more favorable perceptions of this population in the workforce and willingness to hire them. Negative employer attitudes have a number of implications, including that an employer will not hire a person with psychiatric disability or advance or retain people with these disorders (Spillane, 1999). Rejection by such employers can erode self-esteem and self-efficacy for employment in people with mental illness and negative career experiences can disrupt hope of one day restoring a suitable career path (Waghorn & Lloyd, 2010). The attitudes of employers towards people with mental illness usually reflect the ignorance and stigma prevalent in the wider community. The single most public perception of people living with mental illness is that they are violent, and this misperception usually leads to more social distance and can ultimately lead to the social exclusion of this population. Unfortunately, these public perceptions are still very common, even though public fears are demonstrated to be out of proportion with reality. Several empirical studies show indeed that the risk of violence by someone with mental

health problems are no greater than those for the general population as a whole, and only a minority of people with mental illnesses are violent (Swanson et al., 1990 cited in Link et al., 1999). An additional issue is that some people with mental illness also endorse stigmatizing attitudes about psychiatric disability, starting to believe that he/she deserves to be treated in such a way. The internalized stigma affects the individual's self-perception and has the potential to impact on the success or failure of employment opportunities. Furthermore, the lack of work serves to reinforce negative stereotypes and social exclusion associated with severe mental illnesses (Caltruax, 2003). In addition, past stigma experiences may exert a strong influence on disclosure preferences throughout psychiatric vocational rehabilitation (Waghorn & Lewis, 2002). This may cause them to be afraid of returning to work or to have low self-efficacy with respect to employment.

Limited access to supportive and non-discriminatory workplaces. Other factors that contribute to poor employment outcomes include the scarce evidence relating to the types of service and approaches that are effective in getting those with mental illness back to work and keeping them in employment. Limited access to supportive and non-discriminatory workplaces is indeed found to be a major barrier to employment for people with mental illness in the recent literature (Williams et al., 2010). Despite the last decades have witnessed the advancement of a range of innovative employment initiative for this population (e.g., supported employment), vocational outcomes (e.g., job tenure) remain poor. A promising and not yet widely explored alternative to rehabilitation programs is social enterprise, a non-profit organization that offers to disadvantaged workers several benefits, such as work accommodation and social support, that seems to be well placed in facilitating the access to work and job tenure in people with severe mental illness (Svanberg et al., 2010; Corbière & Lecomte, 2009; Fossey & Harvey, 2010).

Stress and mental health. As adding to the above mentioned difficulties, the assumption that work for people with psychiatric disabilities is too stressful and may exacerbate the severity of symptoms is still prominent (Anthony & Liberman, 1986). Yet the nature of the relationship between stress and mental health is poorly understood, and certainly not in support of avoiding important and meaningful social roles, such as employment status. Several authors (Bond, 1998; Drake et al, 1994; Russert & Frey, 1991) report that no hard data exist showing that helping people move into employment is bad. On contrast, rather than increasing stressors, work helps distract people from their symptomatology and helps

make each day more interesting. Each day takes on a cumulative dignity and provides a sense of belonging. Marone and Golowka (2005) argued that unemployment is at least as stressful as working, given the difficulties of poverty, lack of meaning and social isolation that it brings. Furthermore, stress can be mediated by important factors such as the positive meaning given to work, the capacity of the individual to learn adaptive coping abilities and the potential for the social and task structure of work to be modified to enable performance.

In sum, despite the proliferation of vocational and rehabilitation services, people with severe mental illness experience high level of unfair discrimination and poor job retention, and despite the efforts of the society to fully integrate these persons in the community the work integration of this population is still difficult and challenging.

1.3 Rationale, objectives and structure of the study

1.3.1 Rationale for the study

Lack of employment and short job tenure are still a major issue for people that suffer of a severe mental illness. In contrast with the increases of the employment rate in the general population and in those with physical disabilities, over the past years there has been very little change in the portion of adults with mental illness participating in the workforce. This has lead to an increasingly interest in the subject of work for those with severe mental illness in researchers worldwide, as well as the appearance of newer service models with the aim to help this population in obtaining employment. But despite the increase in the number of programmes and vocational interventions suitable for people with mental illness, employment outcomes continue to be poor, though many are ready and available to integrate into the workplace. Rates of competitive employment for people with severe mental illness still range between 10-20% (Corbière & Lecomte, 2009). Furthermore, dropout rates for those who are employed remain high, in excess of 40% (Provencher et al., 2002). Maintaining the job is also a major issue for this population, considering 70 days is the average job tenure in a supported employment program (Xie, Dain et al., 1997).

One of the main issues in the rationale for this thesis was the opportunity to deeply investigate and better understand why getting and sustaining a job for this population is so difficult and challenging. In particular, we focused on individual and environmental factors associated with the work integration of people with mental illness employed in social enterprises and that can be significant determinants of job tenure for this group. We decided to collect data in Italian social enterprises for several reasons. *Firstly*, social enterprises are a business that contains a significant number of employees who are people with a disability or other disadvantage (Svanberg et al., 2010). *Secondly*, social enterprises have the specific social purpose to create job for people who find it hardest to get them, and that means that the environmental is more flexible and allow a better integration with less stigma and better accommodation for people with mental disabilities. *Thirdly*, social enterprises allow us to focus on both individual and environmental variables linked to job tenure of people with mental illness. For example, social enterprises often make work accommodation available, provide support, immediate supervisors usually have a positive attitude and, most importantly, there is supposed to be less discrimination about mental disabilities. *Finally*, since work integration social enterprises (Italian Type B) represent a new and almost unknown phenomenon, there are still very few studies which seek to evaluate their economic and social outcomes. Social enterprises have not been studied in detail even though several aspects of these organizations seem very useful for job tenure (Corbière & Lecomte, 2009).

Until now, most of studies conducted in the attempt to predict employment status in people with severe mental illness, focus only on individual characteristics, such as clinical and demographical factors. As suggested by Bond (2008), environmental factors are presumed to have greater impact on employment than patient characteristics. Thus, to provide a more complete model of employment success, the present study aim to focus on both individual and environmental factors. Behind this study, there is also the belief that improving job retention strategies is one of the most important way to reduce the overall unemployment of people with severe mental illness, as suggested by several authors in the literature (Roessler, 2002; Shankar, 2005; Corbière et al., 2006). Hopefully, knowing more about psychosocial and organizational characteristics of social enterprise will provide new information about people with mental illness, as well as key factors impacting job retention for this vulnerable population of workers.

1.3.2 Objectives of the study

The study is guided by a main research question that is: *Which are the most significant variables for predicting vocational outcomes (e.g., maintaining job, job satisfaction) for people with a mental disability working in Social Enterprises?* More specifically, the current study aimed to collect information about the work integration process for people with severe mental illness working in Italian social enterprises. The focus was primarily on individuals and their own experiences as workers, their perceptions of the organizational environment, their daily life at work. Beside this, information was gathered on organizational and environmental aspects of social enterprises.

Thus, in order to answer to the research question, the following specific objectives were pursued:

1. To establish the profiles of employees that suffer of a severe mental illness working in Italian social enterprises. We wanted to describe individuals on the basis of socio-demographic data (e.g. age, gender, educational level, type of work, previous work experiences), psycho-social variables (e.g., self-esteem), clinical variables (diagnosis, gravity of symptoms perceived), environmental and organizational features (e.g., workplace accommodation, social support) as well as their work motivation, career plans and job satisfaction.
2. To describe the features of Italian social enterprises in helping people with severe mental illness in their work integration process. We wanted to understand more about the social enterprise model, their connection between mental health services, training programs, how disadvantaged workers are welcomed and accommodated in the business to facilitate their work integration process.
3. To analyze which variables are the most important in predicting vocational outcome in people with severe mental illness: individual factors (e.g., motivation to work), environmental factors (e.g., workplace accommodation, job satisfaction) or the integration of both?

The research project here presented differs significantly from previous studies in a number of ways. Firstly, and in response to the narrower focus of previous work, the current study aims to employ a purposely broad approach to issues surrounding employment rather than choosing to pay attention to one area of concern. For this reason,

we included variables form different concepts, such as background characteristics, work personality, work environment, work adjustments and work intention. The study also differs in integrating different information collected both directly from persons with severe mental illness and form the figure of "*Responsabile Sociale*", which is the person inside the social enterprise who follows the work integration of disadvantaged people, regarding organizational aspects of the social enterprise in which they are employed. Finally, the study focused on social enterprise, which is a business venture created specifically to provide employment and career opportunities for disadvantaged people. Until now, little research has been undertaken in social enterprises, despite the evidence that specific features of these vocational services may be well placed to help people with severe mental illness in their work integration process.

1.3.3 Structure of the thesis

After this introduction and the presentation of the survey development and design of the study, a theoretical background will be outlined. Here, an overview of the historical perspective on mental health and of related Italian legislation, as well as a description of psychiatric and vocational services for people with severe mental illness are provided. In particular, a special attention will be given to the presentation of the social enterprise model. After that, a review of previous research on determinants of job tenure for people with severe mental illness will be presented (chapter 2).

In the methodology section, the battery of questionnaire used to collect data will be presented, as well as the description of participants, including inclusion criteria, recruitment strategies and data collection. In the same section, a description of social enterprises will be outlined, followed by ethical considerations (chapter 3).

The main results of each study conducted are presented in the results part, which is a collection of papers (chapter 4). These papers have been prepared during the develop of the thesis, and some of the main results have been presented to national and international conferences in order to transfer and disseminate our findings.

Chapter 5 is a general overview of main results. Here, limitations of the thesis are addressed. Furthermore, a discussion on how the findings impact on previous studies and literature will follow, as well as ideas of possible future studies and research venues based on my experiences during this study. At the very end final conclusions are provided.

1.4 Survey development and study design

The survey adopted three main perspectives of analysis:

1. *socio-economic analysis*: analysis of the structural, social and productive features of social enterprises which are involved in the work integration process of individuals with severe mental illness;
2. *organizational analysis*: study of the strategies implemented by the social enterprise model to help people with severe mental illness to integrate in the workplace (e.g., training, social support from co-workers, career development);
3. *psycho-social analysis*: study of the individual characteristics and the description of how people with severe mental illness adapt to the workplace context. Particular emphasis has been placed on the conditions that may pose an obstacle to work performance (e.g. organizational constraints), affective and motivational dimensions (e.g., self-esteem, perceived self-efficacy, work values), as well as career plans and their job satisfaction.

To address the objectives of the thesis, a longitudinal study design was implemented. Thus, the study consisted of two main phases: baseline (phase 1) and one-year follow up (phase 2).

At baseline, in order to collect information that would allow us to provide a description of employees with severe mental illness working in Italian social enterprises, participants filled out a battery of questionnaires on the following areas of interest:

- Socio-demographic (e.g., age, gender, education, type and location of employment, how long they have been employed in the social enterprise, previous work experiences);
- Clinical aspects (e.g., gravity of symptoms perceives, psychiatric diagnosis);
- Condition that may interfere with work performance (e.g., organizational constraints, stigma, prolonged absence from work);
- Psycho-social aspects related to the person (e.g., self-esteem);
- Psycho-social aspects related to the job (e.g., job characteristics, work motivation, career plans);
- Psycho-social aspects related to the work environment and organization (e.g., social support, organizational constraints).

At the same time, data on features of social enterprises were collected through the figure of *"Responsabile Sociale"*.

A one-year follow up phase occurred after baseline and was chosen because previous studies have shown job tenure to be brief for this population. Another similar battery of questionnaire was filled out by workers who were still employed in the same social enterprise. Such a study design allowed us to compare samples obtained from baseline time to samples obtained from the same individuals at a different time (12 months later). A more specific description of the battery of questionnaires used is provided in chapter 3.

In both phases of the study, questionnaires were administered in individual interviews or filled out in small groups, under the supervision of an expert clinical psychologist. This allowed us to ensure the protection of sensitive data respecting rules on privacy and to ensure a particular attention to the psychological condition of participants. Participants received a symbolic amount of money as compensation for their time (15 Euro).

Previously to the implementation of the two main phases of the study, an in-depth review of national and international literature and tools on the theme of work integration of people with mental illness was conducted.

Finally, funding for this study was provided by the Municipality of Rovereto (Italy) and by the Federation of Cooperatives in Trentino. The research project was reviewed and approved in 2009 by the Ethics Committee of the University of Trento.

1.5 Definition of terms

The following definitions are to clear up and focus on the terms as they pertain to this thesis.

Severe mental illness. Severe mental illness encompasses a wide range of human problems which require mental health services. With this terminology we refer in this thesis to mental disorders when combined with a level of disability that significantly interfere with interpersonal relationships, social skills, basic and functional capacity in the production of a work. Thus, a severe mental illness is defined through diagnosis, disability and duration, and includes disorders with psychotic symptoms such as schizophrenia, schizoaffective disorder, manic depressive disorder, as well as severe forms of other disorders such as major depression, panic disorder and obsessive

compulsive disorder. In accordance to this definition, disability refers to the fact that difficulties interfere with or severely limit an individual's capacity to function in one or more major life activities; the mental disorder has been designated by a mental health professional (e.g., schizophrenia, mood disorders, personality disorders) and there have been a significant level of service usage over the past years (e.g., hospitalizations, health care services). This definition is in accord with the Department of Health and Human Services of Québec, Canada and the National Alliance on Mental Illness.

Social Enterprise. With this term we generally refer to "Type B socio-cooperative" as defined by Italian Law 381/91. This kind of vocational service developed to furnish welfare services to the "economically weaker layers of society" and aim to specifically create employment opportunities for certain disadvantaged groups, such as physical or mental invalids, psychiatric patients, drugs addicts, alcoholics, young workers from troubled families, and criminals subject to alternatives to detention. In social enterprises, employment standards and benefits are basically those of the Italian state, but with certain advantaged to the cooperatives.

CHAPTER 2: LITERATURE REVIEW

2.1 Promoting the work integration of people with severe mental illness

2.1.1 Historical perspective

Until the early 1950s individuals with severe mental illness were housed in institutional settings, usually in long-term hospitalization such as psychiatric hospital, and labeled unemployable. Few effective treatments were available at that time, and the emphasis of mental health care providers was on establishing a diagnosis and treating psychiatric symptoms (the so-called medical model of care). The focus was on the defect, or physical dysfunction, within the patient. Thus, attention was mainly paid to physical and biological aspects of specific diseases and conditions.

The first comprehensive law on mental health in Italy dates back to 1904. This law defined the person who suffer from a mental illness as "a danger to himself and others" and "a public scandal" (Del Giudice, 1998). To avoid the danger, these persons were confined inside mental hospitals, which admitted "individuals with all types of mental disorders of any cause whatsoever" (Law 36/1904[1]). In this kind of institutions, "the ill individual does not exist, stuck as he is in a passive role which both codifies and cancels him out" (Basaglia, 1967 cited in Del Giudice, 1998). Admission to a mental hospital could be requested by anyone "in the interest of the patient or the society" (Law 36/1904) and even by the police on the basis of a medical certificate (Piccinelli et al., 2002). People with mental illness were compulsory admitted to mental hospitals for an indefinitely duration of time. The internments caused to these persons several inhuman consequences, such as the impossibility of any kind of social exchanges, relations and roles, the deprivation of any identity beyond that one provided by the illness, and the psychological violence of being treated like objects of guardianship, in addition to the physical violence. Once admitted, they lost their civil and political rights, and were deprived of freedom and power.

It was not until the 1950s and 1960s that the situation changed, thanks to the introduction of psychotropic drugs complementing other biological treatments, such as

[1] Law 14 February 1904, N. 36 "*Disposizione sui manicomi e sugli alienati. Custodia e cura degli alienati*". Published on the *Gazzetta Ufficiale* N. 43, 22 February 1904.

electroconvulsive therapy (ECT), and the altered social and political climate of those years, with the fight against social discrimination and inequalities, including those suffered by individuals with mental illnesses. The advent of deinstitutionalization in the 1960s and 1970s has finally led to the closing of psychiatric hospitals and to the development of community-based mental health care models in many countries worldwide, shifting the care and support for people with severe mental illness from psychiatric custodial institutions to community-based settings. Proponents of psychiatric rehabilitation started to emphasized that mental illness not only causes mental impairments or symptoms, but also causes the person significant functional limitations, disabilities, and handicaps (Anthony, 1982; Anthony & Liberman, 1986; Anthony et al., 1990; Cohen & Anthony, 1984), and that prolonged hospitalization had several negative effects on patients, who had the tendency to lose social skills required in order to live in society (WHO, 2000).

Italy was the first country worldwide to start the deinstitutionalization process of psychiatric care and to develop a community-based system of mental health. This deinstitutionalization movement was led by Franco Basaglia, a psychiatrist with a phenomenological orientation. In early 1970s, Basaglia with his colleagues were able to transform the psychiatric hospital of Gorizia, a small city located in north-eastern Italy, by gradually open the wards and make all patients allowed to move freely within the hospital and in the town. From 1971 to 1974, the efforts of Franco Basaglia and his équipe were directed at changing the rules and logic which governed the institution, putting the hierarchy in question, changing the relations between patients and operators, inventing new relations, opportunities and spaces, and restoring freedom and rights to the inmates. Any form of physical containment and shock therapy was suppressed, the barriers and mesh which had enclosed the wards were removed, doors and gates were opened, compulsory hospitalizations became voluntary and definitive ones were revoked, thus the patients regained their political and civil rights. The equivalence mental illness-social danger were denied, the person with mental illness gained access to social citizenship and the construction of new psychiatric hospitals was prohibited (Del Giudice, 1998). On contrast, several innovations based on the recognition of patients' needs were introduced, such as the creation of new services outside the psychiatric hospital. The original model experimented in Gorizia was then replicated in other cities and these pilot experiments succeeded in demonstrating that it was possible to replace outdated custodial care in psychiatric hospitals with alternative community care. The demonstration

consisted in showing the effectiveness of the new system of care per its ability to make a gradual and ultimate closure of psychiatric hospitals possible, while the new services, which can appropriately be called "alternative" instead of "complementary" to the psychiatric hospitals, were being created. These services include unstaffed apartments, supervised hostels, group homes, day centers, and cooperatives managed by patients. These experiences became the model for the 1978 Italian psychiatric reform and community mental health system. The 1978 reform law (Law 180, "*Legge Basaglia*"[2]) inaugurated fundamental changes in the care system and decreed the shift from segregation and control in psychiatric hospitals to treatment and rehabilitation in the context of society and was then incorporated into a more comprehensive legislation setting up the National Health Service. Law 180 prohibited admissions to state mental hospitals, including readmissions, and instead of hospitals the law fixed the implementation of community-based services, which are responsible for the full range of psychiatric interventions. A gradual closure of existing psychiatric hospitals had to be planned. Law 180 prescribed also voluntary and involuntary hospitalizations only in emergency situations and only when community alternatives have already been tried and failed. In these cases, hospitalizations have to take place in small general-hospital units, no larger than 14-16 beds. The new departmental organization of patient services were thought to ensure a comprehensive system of interventions for the prevention and rehabilitation of psychiatric discomfort, besides the care of mental illness.

Implementation of the psychiatric reform law has been now totally accomplished, and the year 1998 marked the very end of the state mental hospital system in Italy, thanks to the Financial Law of year 1996[3], which initially mandated the closure of all state mental hospitals by the end of 1996, later postponed to 31 March 1998. Between 1996 and 1998 26 mental hospitals were officially closed and the number of patients dropped from 17.068 (on 31 December 1996) to 7.704 (4.769 in public and 2.935 in private mental hospitals on 31 March 1998) (Burti 2001).

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[2] Law 13 May 1978, "*Accertamenti e trattamenti sanitari volontari e obbligatori*". Published on the *Gazzetta Ufficiale* N. 133, 16 May 1978.

[3] Law 28 December 1995, N. 550 "*Legge Finanziaria*". Published on the *Gazzetta Ufficiale* N. 302, 29 December 1995.

2.1.2 Italian Legislation supporting disabled persons

As noted by the World Health Organization (2000), most countries worldwide have legislation which postulates that disability shall not be a barrier to a meaningful life.

The Italian Constitution (1947) recognizes and guarantees the inviolability of human rights and requires the performance of fundamental duties of political, economic, and social solidarity. Among these, the duty to work is grounded in article 4. The right of work is recognized for all citizens and the State is bound to promote the conditions that render this right effective. On the other hand, work is considered a citizen's duty to be carried out according to personal abilities, opportunities and to one's own free choice. Working is the way to contribute to the material and spiritual progress of the society, based on the principle that all citizens have equal social standing and are equal in front of the law, without distinction of sex, race, language, religion, political opinion, or social and personal conditions.

The rights of disabled people and their assistance and social integration are regulated also by special legislation. The definition of disabled person is set out in the framework law 104/92[4] enacted in 1992 ("Law for the assistance, the social inclusion, and the rights of disabled people"), that define people with disability as "persons with stabilized or progressive physical, mental or sensorial impairment, causing them problems with learning, relationships or occupational integration likely to bring about a disadvantageous and marginalizing process" (Law 104/92, article 3, paragraph 1). The law promotes the non-discrimination, equal treatment and full integration of people that suffer from a disability. It also states that everyone is involved in resolving the situations of need of these persons and their families. This law represented a revolution in the history of social policy in Italy, and involved fundamental innovation for social policies regarding disabled people, thereby creating the premises and conditions for full affirmation of civil rights and their participation in the social life. Law 104/92 also fully acknowledges a disabled person despite the extent of his/her disability, and takes into consideration their development from birth to participation in the family, school, at work and during leisure time. Law 162/1998[5] ("Modifications of the Law 5 February 1992, n.104, concerning support measures towards people with grave handicap") integrated

[4] Law 5 February 1992, N. 104 "*Legge quadro per l'assistenza, l'integrazione sociale e i diritti delle persone handicappate*". Published on the *Gazzetta Ufficiale* N. 39, 17 February 1992.

[5] Law 21 May 1998, N. 162 "*Modifiche alla legge 104/92 concernenti misure di sostegno in favore di persone con handicap grave*". Published on the *Gazzetta Ufficiale* N. 123, 29 May 1998.

Law 104/92 by promoting new forms of domiciliary care, daily assistance, welcome and emergency services and projects aimed at promoting the autonomy and independence in disabled persons. It seeks to guarantee the right to independent living for people with disabilities in the conduct of one or more essential functions of life. Further amendments to the Law 104/92 are the Law 53/2000[6] and the legislative decree 151/2001[7]. Law 67/2006[8] ("Measures for the judicial protection of persons with disabilities who are victims of discrimination") promotes the full implementation of the principle of equal treatment and equal opportunities for disabled persons, while the legislative decree 380/2001[9] ("Elimination or overcoming of architectural barriers in public and private buildings open to the public") aims to help disabled people within their movements in the open spaces.

As regard the participation of disabled people in social life, the general policy law 328/2000[10] ("Framework law for the achievement of the integrated system of social measures and services") was enhanced by the Italian Government with the aim to "promote action to support quality of life, equal treatment, non-discrimination and urban rights, and to prevent and reduce circumstances of infirmity, individual and family need and hardship resulting from inadequate income, social problems and loss of independence". This law introduced individual projects for people with severe disability (article 14), domiciliary support for elderly people lacking self-sufficiency (article 15), and the promotion and support of family responsibilities (article 16). To achieve these goals, the Italian state is also calling on trade union organizations and social associations offering support for their members: in general, the Italian system of social protection is organized along categorical provision of benefits, that means for each branch of social policy (e.g., pensions) there is a separate administrative body (e.g., National Insurance Institute for Employment Injuries, INAIL; National Social Security Institute, INPS; National Health Service, NHS) that is responsible for the collection of contributions and

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[6] Law 8 March 2000, N. 53 "*Disposizioni per il sostegno della maternità e della paternità, per il diritto alla cura e alla formazione e per il coordinamento dei tempi delle città*". Published on the *Gazzetta Ufficiale* N. 60, 13 March 2000.

[7] Legislative decree 26 March 2001, N. 151 "*Testo unico delle disposizioni legislative in materia di tutela e sostegno della maternità e paternità, a norma dell'articolo 15 della legge 8 marzo 2000*", N. 53. Published on the *Gazzetta Ufficiale* N. 93, 26 April 2001.

[8] Law 1 March 2006, N. 67 "*Misura per la tutela giudiziaria delle persone con disabilità vittime di discriminazioni*". Published on the *Gazzetta Ufficiale* N. 54, 6 March 2006.

[9] Legislative decree 6 June 2001, N. 380 "Testo unico delle disposizioni legislative e regolamentari in materia edilizia". Published on the *Gazzetta Ufficiale* N. 239, 20 October 2001.

[10] Law 8 November 2000, N. 328 "*Legge quadro per la realizzazione del sistema integrato di interventi e servizi sociali*". Published on the *Gazzetta Ufficiale* N. 265, 13 November 2000.

the provision of benefits. Government departments are responsible for supervising the implementation of legislation and other operational aspects of social protection delivery.

With respect to access to work for disabled people, the Law 482/1968[11] aimed to the enrolment of physical disabled persons in the public administration and private enterprises. It established a quota system that required firms and public bodies with more than 35 employees to hire a quota of disabled people equal to 15% of the total amount of workforce. Only after many years of unsuccessful attempts, the Italian Parliament reformed the law in 1999 and it was definitively provided that this law should be applied also to the mentally ill persons. Law 68/1999[12] "Regulation on the right to work of disabled people" focuses on people in working age with physical, psychic, sensorial, intellectual and relational disabilities, furthermore to people with civil disability up to 45%, working disability up to 33%, total blindness or with a blindness residual of no more than one tenth in both eyes with a correction, deafness at birth, war disability, civil disability of war and disability for service. The main goal of law 68/99 is to promote the integration and occupational placement of disabled people in the working world, with target support and placement services. The law states that as much effort as possible must be made to help disabled persons to find suitable employment, and that discriminations against workers with disabilities in the workplace is prohibited. Also, the same standards of legislative and collectively agreed treatment must apply to disabled workers as to other workers. The law provides that for every person with disability a diagnosis must be conducted in order to trace the social-working profile, so that the employment agency ("*Agenzia del Lavoro*") can, through the fulfilling of personal schedules, have a detailed knowledge of the work potential of the person with disability. So, it is necessary to submit an enquire to the local sanitary agency (ASL) for the recognition of the disability condition. According to article 18, companies with more than 15 workers have to employ disabled workers, in particular for companies with 16-35 employees, 1 disabled worker have to be employed, for companies with up to 50 employees, 2 disabled workers and for companies with over 50 workers, a number of disabled workers equal to 7% of the total workforce must be employed. A found of 31.000.000 Euro is arranged every year in order to exempt the companies from social security taxes up to 100% and up to eight years proportionally to the disability of the disadvantaged worker employed. For companies,

[11] Law 2 April 1968, N. 428 "*Disciplina generale delle assunzioni obbligatorie presso le pubbliche amministrazioni e le aziende private*". Published on the *Gazzetta Ufficiale* N. 109, 30 April 1968.
[12] Law 12 March 1999, N. 68 "*Norme per il diritto al lavoro dei disabili*". Published on the *Gazzetta Ufficiale* N. 68, 23 March 1999.

there is also a partial reimburse of expenses for the adaptation of the work environment (workplace accommodations). It is also important to remark that this law contains rules aiming to punish the companied who do not implement its dispositions, in particular: sanction of 516 Euro for delayed sending of info prospectus, sanction of 26 Euro per day of delay of info prospectus and 52 Euro per day for each disabled worker without employment. The amount of sanctions given will integrate the Regional Found for the job of Disabled Persons with the aim to place and finance work inclusion projects.

2.1.3 Psychiatric services for people with mental illness in Italy

The process of deinstitutionalization has prevented long-term hospitalization of persons with severe mental illness, and the closure of many of psychiatric hospitals was associated with the development of community-based mental health services and the expansion of employment initiatives. The Italian reform law 180/78 made radical changes to the whole concept of Italian mental health care, which until then had combined some components of community care with a prevalent mental hospital care. Italy has a national health system funded through central taxation. Italy's national health services (SSN) replaced the previous system of state insurance founded after the Second World War. The aim of the SSN was to create an efficient and uniform health system covering the entire population. It provides free or low-cost health care to all residents and their families plus university students and retirees and emergency care to visitors. Currently, Italy has a health care service that is organized in 21 Regions that are each responsible for healthcare policies and budged, leading to a great variation in regional health systems. Indeed, Italian regions commonly receive governmental funding for mental health collectively with the rest of health care funding and each region has a large degree of autonomy in allocating its overall health budget. Moreover, law 180/78 was essentially a guideline law, and each region in Italy were entrusted with the specific task of drafting and implementing detailed norms, methods and timetables for the organizational translation of the law's general principles. These conditions have led, over time, to a rather national situation, with different regions adopting different standards in terms of service provision and different organizational frameworks (de Girolamo, Bassi, Neri et al., 2007; Lora, 2009). Anyway, each region has responsibility for meeting the conditions of the Italian framework law on mental health services and essential level of care that are discussed and approved in a State-Region Joint meeting.

More specifically, mental health care is delivered on decentralized basis in each region through the Departments of Mental Health (DMH), which is the health organization responsible for specialist mental health care in the community. The DHM is in charge of planning and management of all medical and social resources related to prevention, treatment, and rehabilitation in mental health within a defined catchment's area. The 211 Departments of Mental Health cover the entire country, and each of them is responsible for a geographically defined area. Within the Department there are various facilities: Community Mental Health Centers (a domiciliary setting), Day Care Facilities (ongoing service during specific periods in the day), General Hospital Psychiatric Units and Residential Facilities (housing).

2.2 Vocational services for people with severe mental illness

In recent years, there has been growing emphasis on finding ways to assist people with mental illness recover and maintain meaningful social roles, including the role of worker (Dunn et al., 2010). Various vocational services have been implemented and evolved over time internationally to help people with mental illness get and maintain competitive employment, and to make work, with its benefits of economic participation and social inclusion, a reality for this population (for a review, see Corbière & Lecomte, 2009).

Traditional vocational rehabilitation for people with severe mental illness was linked to the large mental hospitals in the form of sheltered workshops (Boardman, 2003). The prevailing thought was that it was necessary to train people prior to placing them in a real work situation (Lloyd, 2010). Corrigan in 2001 defined this philosophy in terms of *Train and Place* services. These services aim to develop abilities and specific skills to allow people with mental illness to reintegrate the workplace. People have to learn how to live with their symptoms and overcome their disability prior to be placed in challenging vocational and independent-living situations (Corrigan, 2001). Vocational abilities and skills must be developed incrementally through a step-by-step process whereby individuals complete a rehabilitation program before getting competitive employment (Corrigan, 2001; Blankertz & Robinson, 1996; Bozzer et al., 1999; Corbière & Lecomte, 2009). According to Crowther and colleagues (2001) the *Train and Place* programs could

all be considered prevocational activities or traditional psychiatric rehabilitation, including:

- *Sheltered Workshops*. Traditional sheltered workshops do not provide employment in the open market (Boardman, 2003), but offers to people who find open employment difficult an opportunity to develop basic work skills and habits (Jacobs, 1991). This kind of service was conceived for people with mental illness who presented a low level of functioning and who were not ready to participate in the workplace. In sheltered workshops, individuals are paid at the piece rate or achievement, and the pay is usually low. Everyone working there has a mental illness, the work is repetitive and monotonous, and they are time-unlimited (Lloyd, 2010). The focus of sheltered workshop may be on individual's rehabilation and therapy, or on production and performance (Yip & Ng, 1999). In the past, sheltered workshops usually did factory contracts and operated in a protected and segregated environment such as a psychiatric institution (Corbière & Lecomte, 2009).
- *Clubhouse*. Clubhouses are communities where members can achieve confidence and support to lead vocationally productive and satisfying live (Lloyd, 2010). The clubhouse is organized around the participation in activities (work-ordered day) which provides opportunities for members to contribute within a rehabilitative environment, by developing the motivation of individuals to enter transitional employment (Corbière & Lecomte, 2009). Clubhouses assist with career development, job search and job choice (McKay et al, 2005). An intensive on-site support is continuously available (Bilby, 1999) and the close relationship formed between Clubhouse staff and employers enables a suitable training environment to be created for assisting new members at work and for countering stigma by educating others in the workplace about mental illness and mental health (Waghorn & Lloyd, 2010).
- *Transitional program*. Transitional employment is a form of psychiatric vocational rehabilitation developed specifically for people with psychiatric disabilities (Henry et al., 2000). The main aim of this kind of services is for individuals to attain a certain level of self-confidence and independence that will help them get competitive employment (Corbière & Lecomte, 2009). Transitional programs are typically part time, linked to a prior participation in Clubhouse day programmes and limited to a duration of 6-9 months. Individuals are paid award wages, all work is entry level and does not require qualifications. For these reasons, the absence of experience and/or hospitalizations does not affect an individual's chance to obtain a position (Mental

Health Council of Australia, 2007). Intensive form of on-site assistance are provide, in particular the staff member provides full on-the-job training and assists the member with any issues that may arise.

The evidence now supports the opposite approach, "*Place then Train*" (Bond et al, 2008). In particular, this philosophy introduced the concept of rapid entry into employment with wraparound supports. The cornerstone of this approach is the philosophy that the majority of individuals with mental health disabilities who want to work, can work. So, the *Place then Train* philosophy aims to place the person in real work situations prior to offering them specific training, to help them quickly achieve their vocational goals. Training is offered on-site, with ongoing support by vocational coach, and the job is selected according to the person's abilities and interests (Corrigan, 2001; Corbière & Lecomte, 2009). According to Williams and colleagues (2010), two services models that share the goal of securing ongoing jobs on equal pay for people with psychiatric disabilities alongside other co-workers are:

- *Supported employment.* Supported employment programs, in particular the Individual Placement and Support model, have developed a considerable evidence base in the last 10 years (Drake & Bond, 2008). This kind of services have been particularly effective (Bond, 2004; Bond, Drake et al., 1997; Bond, Becker and Drake, 2001; Crowther et al., 2001) with employment rates averaging 56% for supported employment and 19% for controls across nine randomized controlled trials (Bond, 2004 cited in Salyers et al., 2008). However, this success is often tempered by short job tenure or unsatisfactory job endings (Drake and Bond, 2008; Waghorn et al., 2009; Williams et al., 2010). These programs exist with the goal to support people to move into competitive employment as soon as possible and to assist people to find job they are interested in (Canadian Mental Health Association Ontario and Centre for Addition and Mental Health, 2010). Bond and colleagues (2001) defined supported employment as programs developed to provide "individual placements in competitive employment – that is, community jobs paying at least minimum wage that any person can apply for – in accord with client choices and capabilities, without requiring extended prevocational training (…) They actively facilitate job acquisition and they provide ongoing support once the client is employed" (cited in Corbière & Lecomte, 2009, p.43). In Supported Employment programs, service eligibility is based on consumer choice and no attempt is made to screen out participants on grounds other

than individual preferences, prior work interest and motivation. When provided, other intervention are done in parallel and not in series with job searching or job placement.

- *Social firms*. Social Firms are a growing area of promising practices, in which flexible environment is provided and in which feelings of belonging, success, competence and individuality are promoted (Svanberg et al., 2010). They were created specifically for the employment of people with a disability or other disadvantage in the labour market. They offer remunerative work and promote the physical, social, and mental health of their employees (Corbière & Lecomte, 2009; Svanberg et al., 2010). About half the staff is disabled people.

2.3 Social Enterprises

A promising, though not widely explored, alternative to existing vocational programs for people with mental disability is the social firm, or social enterprise (Corbière & Lecomte, 2009; Svanberg et al., 2010). A social enterprise is a business venture created specifically to provide employment and career opportunities for people who are unemployed, disabled, or otherwise disadvantaged. It differs from organizations which gave a merely generic support for work integration, such as sheltered employment, by enabling people with occupational difficulties to secure genuine jobs and to receive incomes therefrom. In Italy these new initiatives are mainly organized into co-operatives, in particular social co-operatives. Little research has been undertaken in social enterprises yet, so their vocational outcomes are unknown (Schneider, 2005; Williams et al., 2010), even though its characteristics, such as support availability and the implementation of workplace accommodations, may be well placed to help people with mental disability to maintain their job in time. Social Enterprises appear indeed to be effective in supporting the job tenure for people with severe mental illness by promoting feelings of competence and by designing a work environment that is naturally supportive. Historically, social enterprises developed in Italy during the 1980s, a period of poor economic performance and high unemployment. At that time, there was the emergence of innovative experiences of firm aiming at the integration into work of disadvantaged people. The roots of these initiatives came from both the process of de-institutionalization (especially for people affected by mental disorders) and the development of the demand for work integration of disabled people who, in the previous years, had followed educational and training paths

(Borzaga & Loss, 2002). The new experience developed as an alternative to the traditional framework supporting the integration of disadvantaged people (e.g., protected workshop). The first social cooperatives developed as free private initiatives with the aim to create paid job opportunities for handicapped people who would otherwise be difficult to employ even under the quota system and appeared at the end of the 1970s as a way of overcoming the shortcomings of public policies (Borzaga, 1996; Borzaga & Loss, 2002). After some years of free development, these organizations were recognized by Law 381/91 ("General Rules on social co-operatives"). Since then social enterprises are a distinct, important and rapidly growing sector of the Italian economy and have formed a core element of the delivery of social services by arrangement with municipalities. Law 381/91 recognizes social co-operatives on the basis that the primary beneficiary is the community, or groups of disadvantaged people. Indeed, they are required to fulfill their activities for the general benefit of the community and for the social integration of citizens. It distinguishes between two types of social co-operatives (article 1):

- those finalized to the management of social, health and educational services (called A-type): these operate as commercially oriented businesses, with workers and volunteers being members of the co-operative. About 70% of social co-operatives are A-Type co-coperatives;
- those with the aim to give job opportunities to disadvantaged people (called B-type): these are agencies for integrating disadvantaged people into the labour market and are similar in terms of objectives to what in the rest of the world are known as social firms. Their core function is to provide working environments for marginalized people to become integrated into a wider community, and their ultimate goal is to provide people working in them the extra skills and confidence needed for theme to work permanently. Wage rates in B-Type social co-operatives are usually good, with more than 40% of disadvantaged workers receiving wage rates that are only just below average wages, which is significantly more than the employees might otherwise expect to earn. Main activities in which B-Type social enterprises are involved include cleaning, landscape gardening, parks maintenance, packing and assembly work and laundry. Other favored activities include bar service, call centers and book-binding (Mattioni & Tranquilli, 1998). All people supported by this king of social enterprise are referred by their local authority's social service department, so that their personal history is known by the co-operative. Social co-operatives and social service department jointly agree objectives for each referred person, and the

allocation of the individual to the social enterprise represent a match of needs for the two organizations, taking into account the productive and inter-personal needs and capabilities of the individual and the co-operative.

Disadvantaged people are recognized by this law as having one of the following categories: people with physical or mental disabilities; drug addictions; alcoholics; minors with problem families, and prisoners on probation. We may define as "disadvantaged" in the labour market a worker that, given the normal requirements of employers, has some characteristics that place him/her at a disadvantage in some sort of disability – that is, "any restriction on or lack of ability to perform an activity in the manner or within the range considered normal, which is due to physical or psychological infirmity or impairment" (Borzaga & Santuari, 2000; World Health Organization, 1980). Not only disability, but also reduced capacity to perform a given activity may also depend on a number of environmental and socio-cultural factors, such as drug addiction, ex-prisoners, individuals with no work experience or poor education. Most Type B social enterprises have been initially established to provide temporary employment for disabled people and subsequently ensure they are hired by standard companies. However, often these services employ them permanently. More than a half of people employed by work integration co-operatives often go onto permanent employment, mostly outside their co-operative (study conducted by the *Agenzia del Lavoro* in the Trento area). An important article of the 381/91 law establishes that at least 30% of the total labour force engaged in B-type social co-operatives must be disadvantaged labour force, including people with physical or learning disabilities, people with sensory difficulties, people released from psychiatric hospitals or otherwise treated for mental illness, drug and alcohol addicts, people who have been given an alternative to custodial sentences. People with other social needs are also included, such as the homeless, long-term unemployed, unmarried mothers and refugees. For these disadvantaged workers the co-operatives is exempt from payment of welfare contributions (Borzaga & Santuari, 2000). Since social enterprises operate in the space between the public and private sectors, the so-called third sector, it is recognized in Italy as having specific social objectives that make them very different from profit-orientated, dividend-distributing companies, and so they are treated differently both legally and fiscally. Also, Type B enterprises concentrate on the employment of disadvantaged people and have lower levels of economic and productive activity and organizational capability.

Nowadays, social cooperatives are represented in the main cooperative associations and are organized into local consortia which perform all the functions for which cooperative itself lack the resources, such as training, management consultancy, marketing, research and development, promotion, assistance and consultation. One of their most important functions is to act as strategic advisor and agent in supporting social co-operatives taking on contracts from municipalities. Provincial consortia exist across most of Italy, with the first consortium of social co-operatives established in 1983. As to growth of social enterprises since 1991, several surveys indicate considerable expansion during the last decades, with more than 4.000 registered social enterprises with almost 100.000 members, of which 75.000 paid employees. The number of people employed in social co-operatives in Italy constitutes about 80% of people working in similar organizations across the European Union (CIRIEC, 1999), indicating the leading and unique position that Italy holds in Europe in this field. Another remarkable information is that the strongest development has occurred in the north of Italy, where social capital was high and the enterprise culture was widespread (Borzaga & Santuari, 2002). Italian social enterprise's development is indeed intimately linked to the country's history, but also to the way its welfare system has been shaped and operated, the traditional function of non-profit organizations, and the social and economic development, which is different among northern, central and southern regions. In general, southern Italy still adopts a much more socially conservative and traditional approach, in which the family is expected to support its own members and the role of municipalities and social co-operatives in delivering care and other social services is accordingly much less in the South of the country than in the North. Thus, the lesser development of social enterprises in the South is due to smaller demand for social services, largely supplied by families, and the lesser attention paid to problems by the public authorities (Borzaga & Santuari, 2002). Moreover, the socio-economic differences between North and South are historically characterized by a labor market that is territorially segmented, with decentralized levels of negotiation of public policies, especially those regarding employment and economic development.

2.4 Determinants of work integration in people with severe mental illness

Given the importance of work for people with severe mental illness and given the evidence suggesting that people with severe mental illness find it difficult to get and

sustain employment, attention of researchers has turned to factors that help bolster the successful employment of this population. A growing body of research has focused in last decades on predicting employability and on vocational service outcomes, such as job tenure (Grove & Membrey, 2005; Secker, Membrey et al., 2003; Fossey & Harvey, 2010). The next section is dedicated to a review of previous studies conducted in the effort of predicting vocational outcomes. The focus is on individual, environmental and organizational variables that may account for the ability of individuals with severe mental illness to successfully obtain and retain employment.

2.4.1 Individual variables

Several studies have been conducted in the attempt to explain significant aspects related to vocational outcomes in people that suffer of severe mental illness. In particular, different individual variables has been reported in the literature in this population, such as socio-demographics (e.g., work history), clinical and cognitive (e.g., psychiatric symptoms, executive functions), psychosocial (e.g., self-esteem) and work related variables (e.g., work motivation) (Shafer, 1995; Corbière et al., 2006; Becker et al., 1998; Corbière et al., 2009; Drake & Bond, 2008; Corbière et al., 2005; Catty et al., 2008; Hallis et al., 2007; Corbière & Lasage, 2004; Honey, 2003).

Socio-demographics. Numerous studies have been conducted in the effort to examine the extent to which demographic variables, such as age, gender and race, relate to vocational outcomes. Studies that have examined the relationship between age and employment outcome have had fairly consistent findings. For instance, Thorup and colleagues (2007) found that men had higher unemployment rates in a community sample of patients with first-episode schizophrenia and similarly, while Cook and colleagues (2008) found that younger patients, females and Latino people had better employment outcomes. In general, younger people seems to be significantly more likely to be employed, even though this evidence may correlate with the development of social skills and work abilities, or with the development of the mental illness. Aside from this consideration, younger age has been found to be associated with better employment outcomes, in term of both getting and keeping a job. Mueser and colleagues (2001) found that younger age predicted longer job duration, as well as Bybee and colleagues (1995) found out that younger age was positively related to enrollment. In another study, younger age was predictive of

employment success for homeless persons with mental illness (Cook et al., 2001). Despite these findings, in the study conducted by Campbell in 2007 age were not predictive of competitive employment outcomes, as well as gender and ethnicity.

As regard gender, findings about its effect on employment tend to be more equivocal. Cook and colleagues (2001) found males more likely to be employed at 12 month follow-up in a work intervention program for homeless persons with mental illness. However, in a study of participants in three psychosocial programs, Rogers and colleagues (1997) found that women evidenced high work skills, although gender was not a significant predictor of subsequent employment. In another study conducted by Moriarty and colleagues in 2001, males affected by schizophrenia have been reported to have poorer functional outcome. However, studies have generally found a small, insignificant, effect of gender (Rogers et al,, 1997; Tsang et al., 2000; Wewiorski & Fabian, 2004).

Findings regarding the importance of race in terms of predicting work status are equivocal as well. Several authors have suggest that probably it is not the race or ethnicity per se that predicts vocational outcomes, but mostly the reactions and attitudes from others that it evokes, as well as the relationship of these factors to limiting career and employment opportunities (Lent et al., 1996) that account.

As for the educational level, several studies found a positive relationship between advanced education and successful employment (Catty et al., 2008, Nordt, Lauber et al., 2007; Marwaha, Johnson et al., 2007, Cook, Blyer et al., 2008). In another study conducted in Hong Kong by Tsang and colleagues (2000), a positive association between unemployment and higher educational level was found. On contrast, Campbell (2007) in his study did not find any positive or negative relationship between the educational variable and vocational outcome. Goldberg and colleagues as well in their study conducted in 2001 concluded that educational level was not related to job retention in a sample of 313 patients with schizophrenia.

Work history is the variable that among all the demographic ones has been found to be most of the times a modest, but significant, predictor of competitive employment outcomes in several studies (Campbell, 2007; Catty et al., 2008; Cook, Blyer et al., 2008; Nordt, Lauber et al., 2007; Marwaha, Johnson et al., 2007). Already in the early 1980, a person's prior employment history were found to be the best demographic predictor of future work performance (Anthony & Jansen, 1984) and still prior employment history is the strongest predictor of vocational outcomes in more recent studies (Honey, 2003; Secker et al., 2003). In general, it might be well said that research worldwide has tended

to find work history to be among the strongest predictors of employment outcome for persons with mental illness (Anthony, Cohen & Farkas, 1990; Anthony & Jansen, 1984; Arns & Linney, 1993; Carpenter & Strauss, 1991; Mueser et al., 2001; Strauss & Carpenter, 1974). However, Rogers and colleagues (1997) in their study did not find prior employment history to be significant. Moreover, recent studies also have noted that it may not be simply prior employment that is important, but the pattern of prior employment that determines outcomes (Baron, 2000). For example, there is evidence that stability of prior work (Goldberg et al., 2001) and duration of prior employment (Goldberg et al., 2001, Mowbray et al., 1995) predict future work outcome.

Despite the discordance of results that often are found in the literature, keep focusing on this kind of variable may be useful in several of ways. For example, as suggested by Wewiorski & Fabian (2004) it could help sort out whether illness factors alone, or whether other factors in combination with illness factors, are related to employment outcome. Also, these information may suggest the type and intensity of intervention most appropriate and/or effective for various subgroups of the population of individuals with mental illness.

Clinical and cognitive variables. Several studies have been conducted over time to investigate whether and how psychiatric diagnoses and symptoms account in predicting the ability of individuals with mental illness to obtain and retain employment. Taken together, the results are both equivocal and suggestive, and have been refined over time (MacDonald-Wilson et al., 2001).

Early studies reported little relationship between future work performance and psychiatric diagnosis or assessments of symptoms (Ciardiello et al., 1988; Moller et al., 1982, Schwartz et al, 1975, Strauss & Carpenter, 1972, 1974, cited in Rogers & MacDonald-Wilson, 2011). These studies indicated that there was no set or pattern of symptoms that were consistently related to work performance. However, studies conducted in the 1990s have uncovered a relationship, even if a modest one, between psychiatric symptoms, work performance, and vocational outcomes, especially for those individuals receiving vocational rehabilitation services (Brekke et al., 1997; Taylor & Liberzon, 1999; Hodel et al., 1998; Bryson et al., 1998; Lysaker et al., 1995; Gold et al., 1999). Rogers and colleagues as well concluded in their study that there was a small, but significant, relationship between measures of symptoms and vocational outcomes among persons with mental illness in vocational programs (Rogers et al., 1997; Anthony et al., 1995)

with negative symptoms (e.g., withdrawal) being a better predictor of vocational functioning than positive symptoms (e.g., hallucinations). In a recent systematic reviews by Wewiorski and Fabian (2004) is found that individuals with schizophrenia seems to be significantly less likely to attain or retain employment when compared to other diagnosis. For instance, individuals with an affective disorder were found to be more likely to be employed. In an another comprehensive review of predictors of work outcome, Tsang and colleagues (2000) found that, of available clinical predictors, mixed results were apparent for diagnosis, substance abuse, cognitive functioning, and previous functioning when predicting work outcome, and that social skills, work history and premorbid functioning were the most consistent predictors of work outcome for people with mental illness. In general, it might be concluded that people that suffer of schizophrenia do demonstrate poorer vocational outcomes (Ciardiello, 1981; Coreyell & Tsuang, 1985; Massel et al., 1990; Tsuang & Coryell, 1993; Cook, Blyer, Leff et al., 2008; Nordt, Lauber, Rossler, Muller, 2007) and poorer patterns of job retention (Anthony, Rogers, Cohen & Davies, 1995; Fabian, 1992). However, in the study conducted by Campbell in 2007, this association was not found. Despite this, recent research on diagnosis suggests that it is the symptoms of the illness, rather than the diagnostic label, that is the most important predictor of outcome, with many studies reporting that negative symptoms and skills deficits are the most significant determinants of outcome.

Other clinical predictors of competitive employment that have been studied in time is the number of prior hospitalizations (Catty et al., 2008; Cook, Blyer et al., 2008) and extended period of institutionalization (Honkonen, Stengard et al., 2007). Neuropsychological predictors of vocational outcomes have also been extensively studied. Most studies have found that cognitive impairments predict poorer vocational outcomes (Dickerson, Stallings et al., 2007; Bell, Greig et al., 2007; Brekke, Hoe et al., 2007; Holthausen, Kahn et al., 2007; McGurk, Twamley et al., 2007; Zito, Greig et al. 2007). As for cognitive deficits, it seems that attention, memory and functions executive are better predictors (McGurk & Meltzer, 2000). However, other authors indicate that cognitive deficits do not predict the access to employment, but seem to correlate with job retention (Silverstein, Fogg & Harrow, 1991). Moreover, the results of intelligent tests have been found to be few predictive value (Anthony & Jansen, 1984).

Psychosocial variables and work-related variables. Several studies highlight a moderate influence of psychosocial variables, such as occupational self-efficacy beliefs, on vocational outcomes (Grove & Membrey, 2005; Bejerholm, Uklund, 2007; Siu, 2007; Waghorn, Chant, King, 2007; Cunningham, Wolbert & Brockmeier, 2000; Mombray, Bybee et al., 1995). In particular, self-efficacy seems to play a significant role in predicting vocational outcomes of people with limited employment histories, suggesting that these individuals are not necessarily less capable of working, though they lack work experience. In a study conducted by Michon and colleagues (2005), positive employment outcomes were related to better work performance as measured at the beginning of a vocational program. In addition, participants' work-related self-efficacy and social functioning were associated with better outcomes. In another study, Daniels (2007) reported that higher levels of self-esteem, internal locus of control and fewer functional limitations were related to better vocational outcomes, while Huff and colleagues (2008) found that interest in the work, sense of competence and confidence, physical and mental well-being were the most significant variables in predicting vocational status.

Other psycho-social variables that have an influence on vocational outcomes are the support of peers, including friends, support groups, and other community groups as helpful to sustain employment (Killeen & O'Day, 2004), as well as social skills. In particular, social skills were the most consistent and strongest predictors and the factor most frequently identified among all others.

Work motivation is another work-related variable that has been found to be important in predicting vocational outcomes, in particular in helping individuals return to work, or to remain employed following the onset of a severe mental illness (Dunn, Wewiorski & Rogers, 2010). It is generally agreed that motivation to work has a significant influence on whether people with severe mental illness gain competitive employment (Catty, Lissouba et al., 2008). For people with a severe mental illness, being motivated to work means that they have a personal quality that pushes them to take advantage of work opportunities that arise. By contrast, a lack of motivation associated with many people with mental illnesses has been found to be a major barrier against employment (Honey, 2003; Braitman, Counts et al., 1995) and one of the most frequent reasons for job separation (Honey, 2003; Lagomarcino, 1990; Lagomarcino & Rusch, 1990). According to this, Cook and colleagues (2008) concluded in their study that people with greater work motivation were more likely to work. Again, motivation is found in the literature to be a factor is related to general life satisfaction (Hensel, Stenfert & Rose, 2007).

Finally, work engagement, defined as a positive and fulfilling state at work characterized by vigor, dedication and absorption (Schaufeli, Salanova, et al., 2002) has been found, in several studies conducted on the general population, to be positively related to work outcomes, such as the attachment to the organization (Schaufeli & Bakker, 2004), satisfaction with work (Saks, 2006), performance (Sonnentag, 2003) and lower propensity to leave (Schaufeli & Bakker, 2004). Furthermore, engaged workers are highly energetic, self-efficacious individuals who exercise influence over events that affect their lives (Schaufeli, Taris, Le Blanc, Peeters, Bakker & De Jonge, 2001).

2.4.2 Environmental variables

Several studies have focused also on work environmental variables that can have a significant impact on vocational outcomes, both in a positive or in a negative way.

Workplace support. Among all the environmental variables found in the literature as having an influence on vocational outcomes, social support from the workplace is the one most investigated. In particular, MacDonald Wilson and colleagues in 2002 reported continued support from employment specialist or rehabilitation staff as important in increasing job tenure in a sample of people with mental health issues (MacDonald Wilson, Rogers, Massaro, Lyass & Crean, 2002). In the same year, Tse and Yeats (2002) conducted a qualitative study on 67 people with mental illness and concluded that support within workplace and outside work is important in helping people to return to work. In another study, Auerbach and Richardson (2005) found that primary motivators for sustaining employment, as studied in a sample of six individuals employed in competitive employment for over 18 months, were values related to work, satisfaction and feeling better working. In particular, seeking for supports enabled success in jobs. Kirsh in 2000 used a grounded theory approach to explore meaning of work and important elements from individual's point of view, and concluded that the workplace has a significant impact on job satisfaction, stress and tenure, and that the relationships between the person with mental illness with the supervisor and co-worker affect the quality of work life and job sustainability. Furthermore, participants in Kirsh's study appreciated respectful, fair and supportive communication with supervisors. In particular, demanding supervisors with critical and unsupportive attitudes were seen by participants as a source of stress, while those who provide feedback, communicate openly and are fair, supportive and

encouraging were seen as great facilitators of employment success. Close to these findings, a qualitative study by Huff and colleagues (2008) found supervisor's and co-worker's support as being significant in predicting individuals' staying or leaving job. Other studies (Killeen & O'Day, 2004; Tse & Yeats, 2002; Woodside et al., 2006) have shown the importance of the assistance from work colleague to generate a sense of being welcomed, respected, and supported at work in people with mental illness. In general, individuals' point of view consistently emphasize diverse supports as helpful for sustaining jobs, dealing with work issues and facilitating job seeking (Gewurtz & Kirsh, 2007; Huff et al, 2008; Kennedy-Jones et al., 2005; Killen & O'Day, 2004; Kirsh, 2000; Secker & Membrey, 2003; Shankar, 2005; Tse & Yeats, 2002). These include support within the workplace, but also beyond it from family or friends.

Work accommodations. Other authors (MacDonald Wilson, Rogers et al., 2002; Bond & Meyer, 1999; Fabian, Waterworth & Ripke, 1993) highlighted that people with a disability may require special accommodations in the workplace. In particular, Corbière and Ptasinski showed that the implementation of work accommodations related to job flexibility and co-worker/supervisor support significantly helped people with a mental disability maintain competitive employment (Corbière & Ptasinski, 2004; Corbière, Lecomte, Goldner, Lesage & Yassi, 2007). Other studies have highlighted how the organization's willingness to accommodate individuals' needs, particularly their need for flexibility in terms of time and duties, have a considerable impact on job satisfaction, the ability to cope with illness and the ability to maintain employment (Kirsh, 2000; 1996; Van Dongen, 1996). Furthermore, a recent study by Solovieva and colleagues (2011) suggests that "the implementation of job accommodations for individuals with disabilities is a vital tool for increasing workplace productivity" (p. 40). Better job matching, attention to workplace adjustments, and training are thought also to be important (Kirsh et al., 2005; Kravetz, Dellario et al., 2003). Secker and Membrey (2003) in their study concluded that training and support for people to learn new jobs, an accepting workplace culture and a constructive approach to staff management are other variables found to be significantly related, in a positive way, to vocational outcomes, while other authors has found adjusting work hours, schedules, and task to be crucial to job retention, as were natural workplace supports in training and support to learn, relationships with colleagues, workplace culture and staff management (Secker & Membrey, 2003).

Other variables. In a study conducted with the aim to identify the personal determinants of job tenure among individuals with mental disorders registered in prevocational programs, Corbière and colleagues (2006) observed that, among other significant variables related to clinical (i.e., paranoid symptoms) and cognitive aspects (i.e., cognitive functions), as well as work-related characteristic (i.e., length of absence from the workplace, type of job), the length of absence from the workplace and public support payments received negatively predicted job tenure (Corbière, Lesage et al., 2006). Concerns about losing income replacement benefits when trialing or returning to work are also prevalent for people with psychiatric disabilities (Henry & Lucca, 2004; MacDonald-Wilson et al., 2003). Other authors (Marwaha & Johnsons, 2005; Shankar, 2005) highlighted the important role of appointments for medication, health care, or employment support during regular working hours as good strategies to help people with mental illness. Disclosure of mental illness is another factor that has been found to be important to create possibilities for accommodations at the workplace (Huff, Rapp, Campbell, 2008). In another study by Jones and Bond (2007) no relationship between disclosure to supervisor and job tenure was found, but a positive association between disclosure to co-workers and job tenure. On contrast, other studies report negative consequences due to disclosure and consequently stigmatization.

2.4.3 Organizational variables

Findings from studies on the impact of organizational and services variables on work-related outcomes are discussed here. In general, it has been demonstrated that the conditions that enhance employment for most employees, such as support from the organization, peer cohesion, worker involvement and clarity of expectation are also likely to be positive environments for people with mental disorders (Akabas, 1994).

Organizational culture & Person-environment fit. Person-environment fit is the extent to which individuals fit into the organizational culture, which is defined as the shared values, belief, and expectation among members of an organization (Moran & Volkwein, 1992; Spataro, 2005; Kirsh & Gewurtz, 2011). Organizational culture can offer much insight into the way different members are perceived and treated and how differences among members are tolerated. For example, Kirsh and Gewurtz report that in

organizations grounded within a culture of integration, differences among members "are valued for the contribution they can make to overall performance and the new insights that are gained through collaboration among individuals with different ideas and backgrounds" (2011; p. 395). Organization culture has been shown to affect workers' commitment to and identification with the group and organization, as well as their sense of involvement with their work assignments (Etzioni, 1961; Wiener & Vardi, 1990). Other studies have found significant relationships between the fit of employees with the workplace and important work outcomes. For example, in a study conducted by Kirsh in 2000 the person-environment fit was an important predictor of job satisfaction and job tenure.

Job characteristics. Studies have suggested that, like other people, individuals with mental illness are less likely to stay in a job if it is an entry level, repetitive job (Lagomarcinio, 1990). Consistent with these findings, Xie and colleagues in 1997 found that job tenure was significantly related to holding a job with greater variety. Again, the organization's willingness to accommodate individuals' needs, particularly their need for flexibility in terms of time and duties, is thought to have considerable impact on job satisfaction, the ability to cope with illness and the ability to maintain employment (Kirsh, 1996; 2000; Scheid & Anderson, 1995).

Vocational programs' characteristics. Studies on services that promote work integration for individuals with mental disorders have shown a number of characteristics associated with positive outcomes (Kirsh et al., 2005). Bond and colleagues in 2010 examined a set of ideal characteristics that a vocational program should have to promote better outcomes in people with mental disorders. According to this study, a mental health intervention should be well defined, reflect client goals, be consistent with societal goals, demonstrate effectiveness, have minim side effects, have positive long-term outcomes, have reasonable costs, be relatively easy to implement, and be adaptable to diverse communities and disability subgroups. In other words, to be effective, vocational services should be available to all people with mental disorders with no exclusion applying, develop career planning in accordance to individual's desires, have a supportive staff, focus on employment in the open market with competitive pay and provide ongoing support in the job (Broom, D'Souza, Strazdins, Butterworh, Parlow & Rodgers, 2006). In particular, the attention to the person's choice and preferences has been shown by several

authors to improve vocational outcomes (Bozzer et al., 1999; Drake et al., 2003; McFarlane et al., 2000; Paulson et al., 2002). Individuals who obtain employment in preferred areas report being satisfied with their jobs remain in their jobs longer than those who work in nonpreferred areas (Becker et al., 1996). Another study conducted in 2003 by McCollam and colleagues suggest that the common protective factors for maintaining well-being at work include a supportive and open culture in the workplace, working practices that foster positive peer relationships, supportive and accessible supervisors, features of flexibility and adaptation of the workplace, awareness of mental health, well-being, policies and procedures, and supporting people to self direct their return to work after absences.

Pay. Pay is another key variable affecting outcome (Crowther et al., 2003), and it appears that paid work has a relationship with participation in the labor force as well as clinical and quality of life variables.

Integrated services. Several studies (see Waghorn & Lloyd, 2005 for a review) have found that integrating clinical and employment services results in improved employment outcomes for people with mental illness. In this direction, for example, having periodic meetings between clinicians and vocational coach could be a good strategy to help employers in the development of individual's vocational or employment plans. Research shows, indeed, that an approach in which employment supports are integrated into the mental health system, in contrast to those involving parallel employment supports systems that is not well linked, is more effective (Drake, Becker, Xie & Anthony, 1995). This kind of integration can take the form of strong linkages and partnerships between mental health services and vocational programs, allowing for ease of both communication between programs and of access for individuals (Drake et al., 2003). Furthermore, moving people rapidly into job placement, rather than taking part in training before getting a job, can encourage people to stay with employment services (McLaren, 2003). Introducing work-related services earlier in the course of illness seems indeed to be associated with more successful vocational outcomes (Reker & Eikelman, 1997; Kirsh et al., 2005).

Vocational/employment specialist. Researchers have also suggested that the inclusion of a vocational specialist to the service delivery team is an effective strategy that leads to

positive vocational outcomes (Blankerts and Robinson, 1996; McFarlane et al., 2000; O'Brian et al., 2003). A vocational specialist is a staff member who has an exclusive focus on helping people enter the labour market and its effectiveness applies across different models including supported employment programs (Becker et al., 2001).

Balance between challenge and predictability. There is a sizable literature on the importance of balancing the demands of work with control or decision authority (Karasek & Theore, 1990). While recently employed, people with mental health issue might wanting to protect themselves from the stress of new and unknown work challenges (Kirsh, 2000), and it seems of vital importance for this population to find a job that offers a satisfying balance between challenge and predictability, by focusing on individual's capacities and skills, involvement in the workplace, reasonable and well-integrated job demands, and clear and predictable work expectations and conditions (Krupa, 2007).

CHAPTER 3: METHODOLOGY

3.1 The questionnaire

This research was conducted in order to increase our knowledge on the work integration process of people with severe mental illness in Italian social enterprises. For this purpose, the survey questionnaire was used as the main data-gathering instrument. In particular, with the aim to establish the profile of disadvantage workers with severe mental illness working in social enterprises, a battery of questionnaires was developed and administrated to participants at baseline. Ratings included details on socio-demographic variables, current mental state, clinical variables, work history, work activities, social support, individual and work related psycho-social variables, as well as workplace features, desires and future career plans. At the same time, we collected data on the organizational and structural features of social enterprises in which participants were enrolled, by interviewing each *Responsible Sociale* on the numbers of people enrolled, the years of activity of the firm, as well as details on the strategies used to facilitate the work integration process of disadvantaged workers with severe mental illness, such as training, meeting with mental health care services and individualized career plans. After 12 months, participants were followed up to determine whether there were changes in their perceptions, feelings, intentions and performance. Also, the longitudinal study design allowed us to analyze variables that may have an impact on vocational outcomes. Data were analyzed mainly using PASW Statistic version 18.

3.1.1 Battery of questionnaire at Baseline

All questionnaires and test have been selected to describe individuals on the basis of socio-demographic data, psycho-social variables, clinical variables, environmental and organizational features, as well as their work motivation, career plans and job satisfaction. The battery of questionnaire was divided into two main section: a profile and the survey proper. The profile contains socio-demographic characteristics of the respondents, such as age, gender, civil status, the number of months they have served the company as well as their assigned job position. The survey proper explored the perceptions of employees on

work personality (e.g., work engagement, occupational self-efficacy), work intentions (e.g., working plans, need for change), work adjustments (e.g., workplace accommodations) and work environment (e.g., organizational constraint scale; social support from supervisor and co-workers). Table 1 summarize the questionnaires included in the study at baseline, as well as number of items, possible range of response and alpha coefficient.

Table 1 – List of questionnaires at Baseline and alpha coefficient.

Concept	Construct / Scale	Items	Range	Alpha
Background and Characteristics	Socio-demographical data: age, gender, civil status, education level, diagnosis, live with someone, has children.	-	-	NA
	Data related to job position: number of month they have served the company, which is your assigned job position, how many hours do you work per week, stipend, previous work experiences.	-	-	NA
Clinical Variables	Brief Symptom Inventory (BSI - Derogatis & Melisaratos, 1983)	53	1-5	.96
Psycho-social variables linked to the person	Self-Esteem Rating Scale (short form) (SERS-SF: Nugent & Thomas, 1993; Lecomte, Corbière, & Laisne, 2006)	20	1-7	.75
	Occupational Self-Efficacy (OSE: Schyns & Von Collani, 2002)	8	1-6	.82
Psycho-social variables linked to the work	Endicott Work Productivity Scale (EWPS: Endicott, 1997)	25	0-4	.90
	Need for Change Scale (NCS: Anthony, Cohen, Farkas, 1990)	1	1-5	NA
	Work Engagement (WE: Schaufeli et al., 2002)	9	0-6	.94
Psycho-social variables related to the work environment	Work Accommodations Inventory (WAI: Corbière & Ptasinski, 2004)	57	Presence/ Absence	NA
	Organizational Constraint Scale (OCS: Spector & Jex, 1998)	11	1-5	.87
	Karasek Job Content Questionnaire / social support dimensions (KJCQ/ssd: Karasek, 1985; Karasek et al., 1998)	11	1-5	.71
	Multidimensional Scale of Perceived Social Support (MSPSS: Zimet, Dahlem, Zimet, & Farley, 1988; Chanty-Mitchell & Zimet, 2000)	12	1-7	.92
Variables linked to job tenure	Motivation to Keep a Job scale, adaptation of the Motivation to Find a Job scale (Corbière, Laisnè, Lecomte, 2000)	7	1-7	.91
	Working Plans (WP: ad hoc items)	6	1-5	NA

The questionnaire profile section also contains a code that identify the participants in the respect of his/her privacy. This code enabled us to link data at baseline with data at follow up. The Likert survey was the selected questionnaire type as this enabled the

participants to answer the survey easily. In addition, this research instrument allowed us to carry out the quantitative approach effectively with the use of statistics for data interpretation. In order to test the validity of the questionnaires used for the study, the battery of questionnaire was tested prior to the baseline phase. These respondents as well as their answers were not part of the actual study process and were only used for testing purposes. After the questions have been answered, the researcher asked the respondents for any suggestions or any necessary corrections to ensure further improvement and validity of the battery. The researcher revised the survey questionnaires based on the suggestion of the respondents. The researcher then changed few vague or difficult terminologies into simpler ones in order to ensure comprehension. No other modifications were required. After gathering all the completed questionnaires from the participants, total responses for each item of each questionnaire were obtained and tabulated.

The battery of questionnaire was administrated in small groups (5 to 7 participants) under the constant supervision of a qualified professional clinical psychologist.

3.1.2 Battery of questionnaire at follow-up

At the follow-up phase, socio-demographic characteristics of the respondents was collected once again, as well as the identification code and some of the psycho-social variables (e.g., occupational self efficacy), clinical variables (e.g., severity of symptoms) and environmental variables (e.g., organizational constraints) previously tested at baseline. A clinical variable was then added to the battery of questionnaire in order to explore the general status of well-being of participants. We removed from the previous battery of questionnaires the evaluation of general self-esteem to add a scale in which self-esteem is evaluated specifically on the role of worker. We then added the Stigma scale and some ad-hoc items to evaluate the global satisfaction of respondent’s work position, a global evaluation of their work experience in the social enterprise and a general measure of their overall satisfaction. Table 2 summarize the questionnaires included in the study at follow-up, as well as number of items, possible range of response and alpha coefficient.

Table 2 – List of questionnaires at Follow-up phase and alpha coefficient.

Concept	Construct / Scale	Items	Range	Alpha
Background and Characteristics	Socio-demographical data: age, gender, civil status, education level, diagnosis, live with someone, has children.	-	-	NA
	Data related to job position: which is your assigned job position, how many hours do you work per week, stipend.	-	-	NA
Clinical Variables	Brief Symptom Inventory (BSI - Derogatis & Melisaratos, 1983)	53	1-5	.97
	The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS: Tennant et al., 2007)	14	1-5	.93
Psycho-social variables linked to the person	Self-Esteem as a Worker (Corbière et al., 2009)	10	1-4	.75
	Occupational Self-Efficacy (OSE: Schyns & Von Collani, 2002)	8	1-6	.88
	The Stigma Scale (SS: King et al., 2007)	28	0-4	.85
Psycho-social variables linked to the work	Endicott Work Productivity Scale (EWPS: Endicott, 1997)	25	0-4	.93
Psycho-social variables related to the work environment	Organizational Constraint Scale (OCS: Spector & Jex, 1998)	11	1-5	.94
Variables linked to job tenure	Motivation to Keep a Job scale, adaptation of the Motivation to Find a Job scale (Corbière, Laisnè, Lecomte, 2000)	7	1-7	.91
	Working Plans (WP: ad hoc items)	6	1-5	NA
Evaluation of the work experience in the Social Enterprise	Global satisfaction (working life and social life) – ad hoc items	10	1-5	.84
	Effectiveness of Social Enterprises on-the-job training approach – ad hoc items	10	1-5	.91
	Evaluation of working experience in the SEn – ad hoc item	1	1-10	NA

3.1.3 Questionnaire on Social Enterprises' features

In order to collect data on organizational and structural features of Social Enterprises, we asked to each *Responsabile Sociale* to answer questions on the number of years of activity of the Social Enterprise; the sector of activity in which disadvantaged workers with psychiatric disorders are enrolled; the number of people working in the Social Enterprise, of which suffering from a severe mental illness; information on the work integration process (e.g., how do people with severe mental illness arrive in the Social Enterprise; is there any individual project and career plan for each disadvantaged worker; is there any specific professional figure for the work integration process; does the

social enterprise have relationships with mental health centers; training on social integration; feedback and economic incentives). We also collected data on the main goal of the social enterprise nowadays (e.g., permanent work integration in the social enterprise; open labour market).

After gathering all the completed questionnaires from the respondents, total responses for each item of each questionnaire were obtained and tabulated. Table 3 summarize the data collection process.

Table 3 – Summary of the data collection process.

Research phase	**Timing**	**Data collection**	**Sample size**	**Tools**
Baseline	June 2009 – June 2010	Social Enterprise	N=36	Questionnaire on social enteprises' features
		Workers with severe mental illness	N=310	Battery of Questionnaire (baseline)
Follow up	June 2010 – June 2011	Social Enterprise	N=23	NA
		Workers with severe mental illness	N=139	Battery of Questionnaire (follow-up)

3.2 Participants

3.2.1 Participants recruitment, inclusion criteria and data collection

During Phase 1 (baseline of the research), a total of 310 individuals working in Italian social enterprises consented between June 2009 and June 2010 to take part in the study. Participation was on a voluntary basis at two levels:

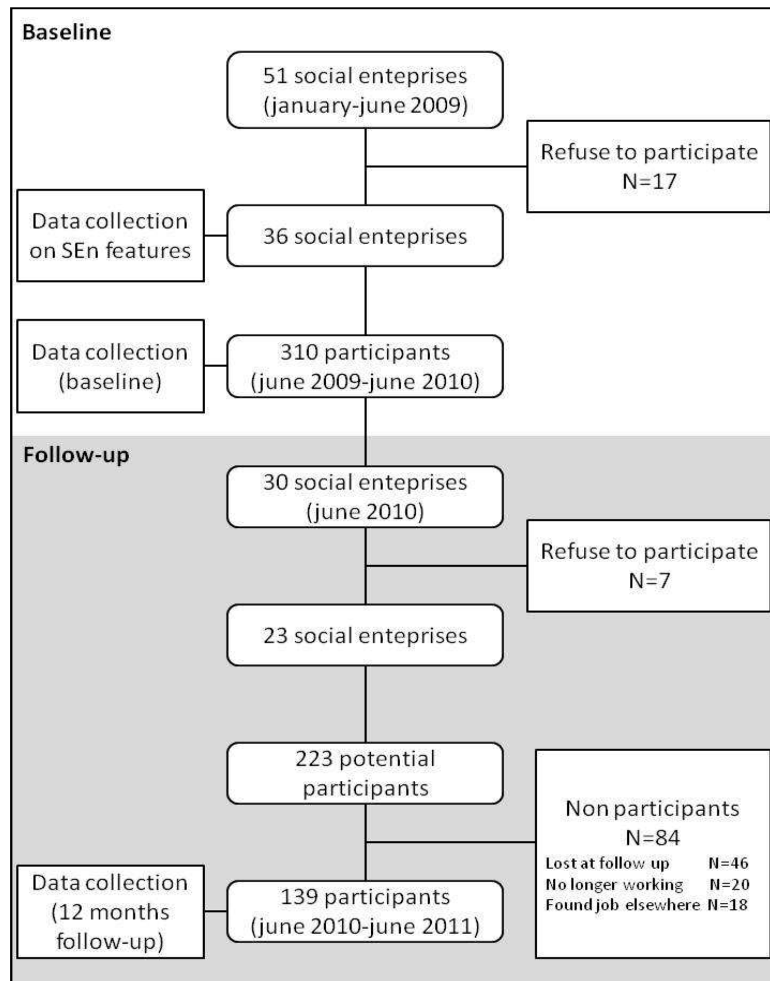
- social enterprises were firstly contacted, through telephone or personal meetings, and informed about the purposes of the research project. Of the 51 social enterprises contacted in the Regions of Trentino Alto-Adige, Veneto, Lombardia, Piemonte and Emilia Romagna, 36 (response rate of 70.58%) accepted the invitation to participate in the study;
- participant were then recruited by the "*Responsabile Sociale*", which is the person inside the social enterprise who usually follow the work integration of disadvantaged people who briefly presented the study to clients who fit the research criteria.

The recruitment was based on the following selection criteria: (1) being identified by the employer as having a psychiatric diagnosis (2) being 18 years or older and (3) being

employed in a social enterprise, with specific working tasks and well defined working hours. Participants were all willing and cognitively competent to give informed consent. Participants were excluded if they had mental retardation, physical disabilities, neurological illness and those who were enrolled in A-Type social co-operatives or in working situation that were not sufficiently structured in terms of time commitment, continuity of supply, and production constraints. The administration took place in small groups (5-7 participants at a time) during working hours, separately for each social enterprise, at a time agreed in advance with management and workers representatives. A psychologist with clinical competences was always available to participants in the need of further information and clarifications during each session of data collection. The battery of questionnaires required an average of an hour to be completely filled out. Each participant received compensation for their time. After 12 months, 30 of 36 social enterprises were contacted again for the follow up phase. Of these, 23 (response rate of 76.7%) accepted to confirm their involvement in the research project and allowed us to collect data once again. 223 (71.9% of the total sample) were the potential participants at follow-up. Of these, 121 (54.3%) were still available to fulfill the battery of questionnaire, 51 (22.9%) were lost to follow up, 12 (5.8%) were not working the day of data collection, but were still employed in the social enterprise, 20 (8.9%) were no longer working in the social enterprise, due to hospitalizations or retirements; and 18 (8%) found a job in the open labour market. Figure 1 summarize the study design.

The Ethics Committee of the University of Trento reviewed and approved the study. Individual written informed consent was obtained after description and explanation of the study. In addition, participant anonymity was preserved.

Figure 1 - Study design.



3.2.2 Description of the Participants

Socio-demographics data. At baseline, the sample comprised 91 women and 205 men, whose average age was 41.68 years (SD=8.79). Most of the sample were single (N=253; 85.5%). As for educational level, 172 (57.1%) had completed some middle school or less, 117 (38.9%) had obtained a high-school diploma, 12 (4%) had received a university-level education. In terms of mental illness, 186 participants reported diagnosis was as follow: 53 (28.5%) from mood disorders, 11 (5.9%) reported anxiety disorders, 30 (16.1%) reported having personality disorders and 92 (49.5%) reported psychotic disorders in the schizophrenia spectrum. Most of participants (N=208, 71.2%) lives with someone and do not have children (N=193, 78.8%). The Phase 2 subsample (N=139) was not different from the initial sample regarding socio-demographics, psychiatric diagnosis and education. Demographic variables are depicted in Table 4.

Table 4 - Participants' socio-demographic characteristics for the study samples.

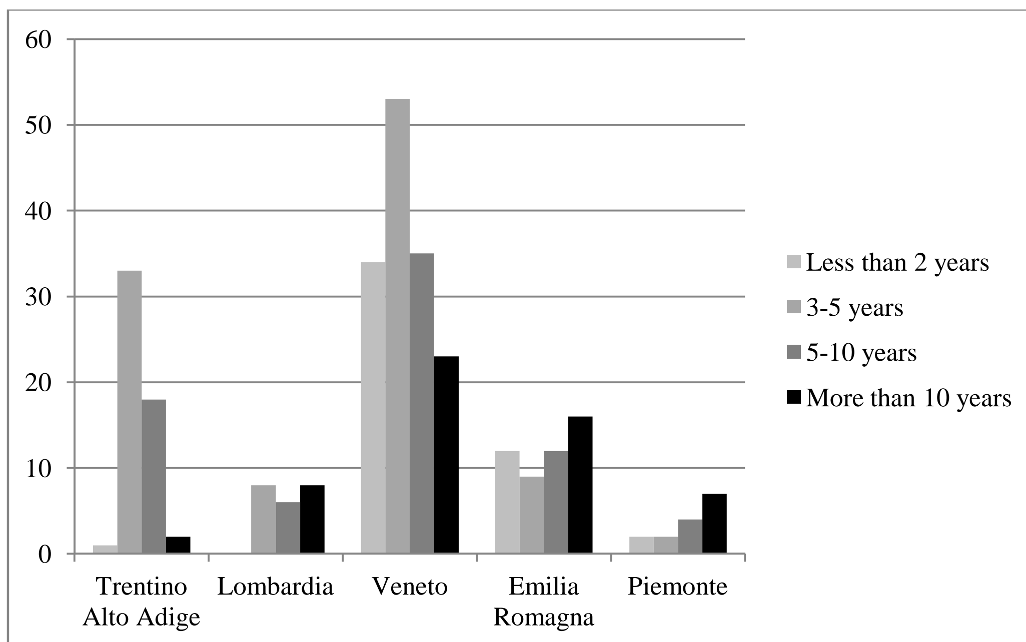
Demographic variable	Baseline N(%) or Mean [SD]	12 months follow up N(%) or Mean [SD]	*T* test or χ^2 value and *P* value
Interview data	*N* = 310	N = 139	-
Gender			
Male	205 (69.3)	86 (71.1)	χ^2 = 2.31, *P* = .13
Female	91 (30.7)	35 (28.9)	
Age			
Range	20-64	20-64	*T*= .49, *P* = .63
Average age	41.68 [8.79]	41.33 [9.52]	
Marital status			
Single	253 (85.5%)	103 (91.2%)	χ^2 = .69, *P* = .79
Married	43 (14.5%)	10 (8.8%)	
Education			
Middle school or less	172 (57.1%)	73 (60.8%)	
High school completed	117 (38.9%)	41 (34.2%)	χ^2 = 2.15, *P* = .71
University-level education	12 (4%)	5 (6%)	
Diagnosis			
Schizophrenia disorder	92 (49.5%)	37 (50%)	
Mood disorder	53 (28.5%)	22 (29.7%)	χ^2 = 3.21, *P* = .36
Personality disorder	30 (16.1%)	13 (17.6%)	
Anxiety disorder	11 (5.9%)	2 (2.7%)	
Lives with someone	208 (71.2%)	75 (67%)	χ^2 = 3.36, *P* = .07
Lives alone	84 (28.8%)	37 (33%)	
Does not have children	193 (78.8%)	84 (84%)	χ^2 = .41, *P* = .84
Has children	52 (21.2%)	16 (16%)	

Note. SD standard deviation. According to variables, the *N* can be affected by missing data. All data are self-reported.

Job tenure and employment status. As regarding job tenure, participants were working in the social enterprise for an average of 81.59 months, with 36.8% of individuals being employed for 3-5 years and close to 20% for more than 10 years. These data are extremely important in highlighting the effectiveness of the social enterprise model in helping disadvantaged people to maintain their work in time, compared to other vocational services, such as supported employment programs, in which job tenure rates is usually low (Tsang et al., 2002). In particular, in the literature are reported low means of job retention among people with mental disorders, with job tenure rarely exceeding 1 year on the regular job market (Verdoux, Goumilloux, Monello & Cougnard, 2010; Corbière, Lesage et al., 2006; Provencher, Gregg et al., 2002; Gervey & Bedell, 1994; Catty et al., 2008; Cook, 1992; Bond & Kukla, 2011). Samples at baseline and follow-up significantly differ regarding job tenure, with participants at follow-up being employed for less years compared to participants at baseline (P=0.23). This result can find a reasonable explanation in the low response rate of social enterprises located in the Trentino area at follow-up phase, and the consequent reduced number of participants (55 participants at baseline, 5 participants at follow-up, as showed in Table 5). Furthermore, taking a look at

Figure 2, it is evident that a consistent number of participants (N=54) in the Trentino area at baseline were working for 3 years or more. Thus, it seems reasonable to state that the follow-up scores at the job tenure variable has been affected by the lost of almost 91% participants in the Trentino area.

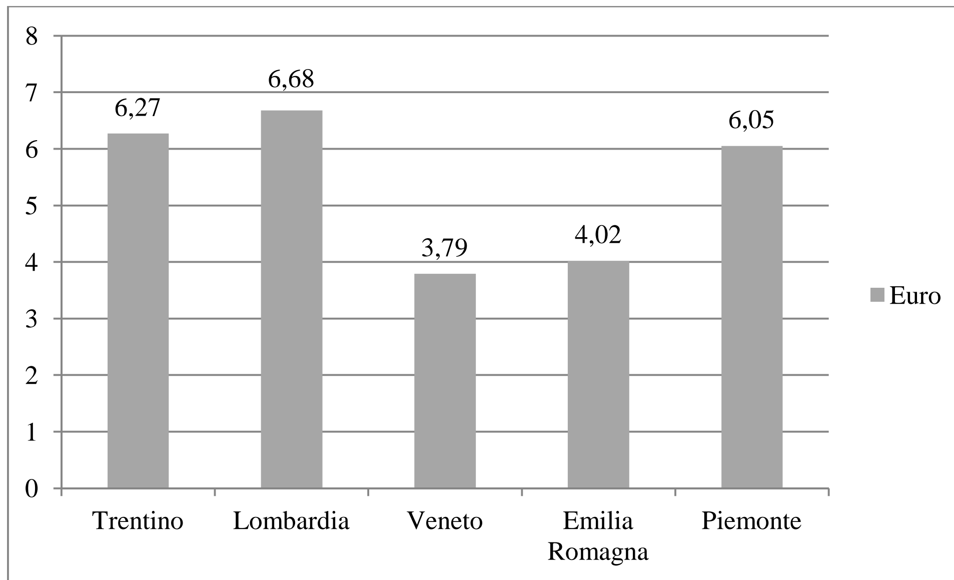
Figure 2 – Job tenure and territorial division at baseline.



Main activities in which participants are involved include cleaning, landscape gardening, parks maintenance (25%), packing and assembly work, laundry (50.3%), bar service (4.9%) and other type of work such as secretary (11%). On average, participants are paid 4.60 Euro per hour and work 25 hours per week. These data seems relevant once again in providing evidences of the effectiveness of the social enterprise model. Compared to other rehabilitation programs, such as supported employment, participants in our study work an higher amount of hours per week. Most individuals in evidence-based supported employment obtain indeed part-time jobs, in which starting a job at ten hours a week is not unusual. Many individuals choose to work part-time because of fear of losing benefits (e.g., health insurance, government assistance checks). Others who have not worked before, have not worked in a long time, or have had negative experiences when working in the past may also choose to begin working on a part-time basis. It is although expected that people in the supported employment program will enter a progression of working time strategy, leading to working in excess of 18 hours plus per week (Supported Employment Programme Operational Guidelines and Forms, 2003).

On salary variable, samples at baseline and at follow-up significantly differ (P=.004), with participants at follow-up being paid on average less. Once again, this result can find a reasonable explanation in the reduced participant force in the Trentino area, which provided an high amount of salary at baseline (6.27 Euro per hour on average), as showed in Figure 3.

Figure 3 – Salary and territorial division at baseline



Almost the total of the sample (94.5%) reported to have had previous work experience. Table 5 summarize participant's employment status characteristics at baseline and at follow-up phase.

Table 5 - Participants' employment status characteristics for the study samples.

Employment status variable	Baseline N(%) or Mean [SD]	12 months follow up N(%) or Mean [SD]	*T* test or χ^2 value and *P* value
Interview data	*N* = 310	N = 139	-
Length of job			
months (average)	81.59 [59.12]	77.78 [65.12]	*T* = -.35; *P* = .73
1-2 years	49 (17.2)	32 (37.6)	
between 3 and 5 years	105 (36.8)	31 (26.7)	χ^2 = 9.49; *P* = .023
between 5 and 10 years	75 (26.3)	32 (27.6)	
longer than 10 years	56 (19.6)	21 (18.1)	
Type of job			
Laborer (cleaning, landscape gardening, parks maintenance)	66 (25)	30 (26)	
Industry sector (assembly work, laundry)	156 (50.3)	69 (60)	χ^2 = 1.08; *P* = .78
Generic clerk (secretary, salesman, archivist)	29 (11)	8 (7)	
Bar service	13 (4.9)	8 (7)	

Work per week			
range	4 - 45	3 - 50	
hours (average)	25.51 [10.67]	25.51 [11.63]	*T* = -1.32; *P* = .19
Salary (Euro)			
Range per hour	1 – 26.30	1 – 12	
Average per hour	4.60 [2.79]	3.92 [2.33]	*T* = -2.90; *P* = .004
Previous work experience			
Yes	276 (94.5)	114 (94.2)	χ^2= .069; *P* = .79
No	16 (5.5)	7 (5.8)	

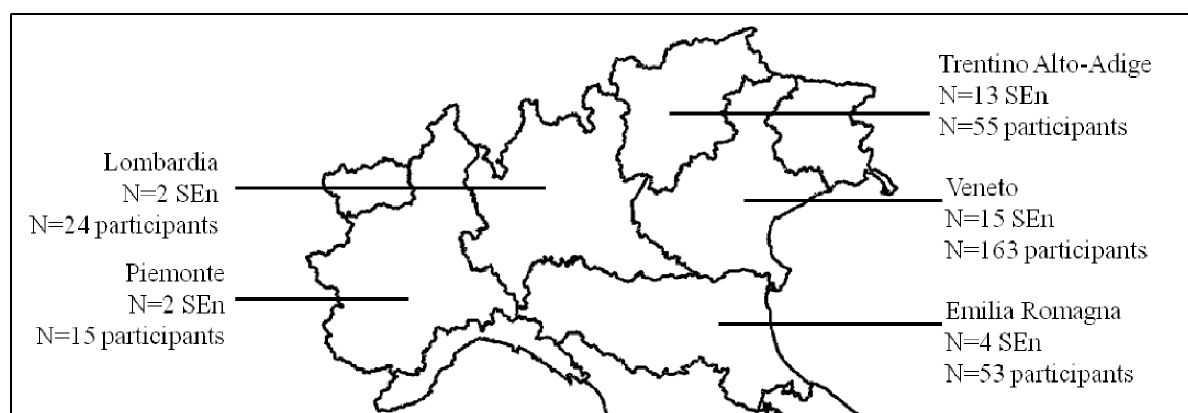
SD standard deviation. According to variables, the *N* can be affected by missing data. All data are self-reported.

3.3 The environment: Social Enterprises

3.3.1 Description of Social Enterprises

Our study focuses on Italian social enterprises that are specifically aimed at integrating disadvantaged workers into work, called B-Type social co-operatives. The social and work integration of people experiencing serious difficulties finding work is achieved by these social enterprises through productive activity and tailored support, and through training to develop the qualifications of the workers. At baseline, we collected data on 36 B-Type social co-operatives located in Northern Italy, in particular in the Regions of Trentino Alto-Adige (N=13, contributing to the 17.7% of the sample recruitment), Veneto (N=15, providing 52.6% of participants), Emilia Romagna (N=4, contributing for the 17.1% of the sample), Lombardia (N=2, providing 7.7% of participants) and Piemonte (N=2, contributing for the 4.8% of the sample).

Figure 4 - Territorial division of the study sample at baseline.



At the follow-up phase, 23 of the 30 social enterprises contacted accepted to confirm their involvement in the research project and allowed us to collect data once again. Still, it was the 14 organizations located in the Region of Veneto that recruited the higher percentage of participants (N=78, 64.5%). In terms of the age structure, social enterprises of our sample at baseline were working for an average of 17 years of activity (SD=8.53), with a minimum of 3 years to a maximum of 33. In particular, 8 social enterprises existed for fewer than 10 years and only 1 was established more than 30 years ago. Nearly 73 percent of social enterprises were working for more than 10 years and less than 30 years. As for the number of workers employed in the organization, on average 71 individuals (SD=86.38), of which 15 with severe mental illness (SD=16.77), are enrolled in the social enterprise. Almost 82% of social enterprises involved in the study at follow-up were working for more than 10 years, while it was close to 68 the average number of employees enrolled in the organizations. The type of activities in which disadvantaged workers were involved at baseline is mainly the cleaning, landscape parks maintenance (66.6%). Other fields they are active in, is the industrial sector (27.3%), bar service and secretary's office that together represent 6% of activities. At follow-up, only social co-operatives working in the field of cleaning and industry were involved. The main aim of B-Type social enterprise is specifically the work integration of disadvantaged workers, meaning that this kind of organizations were born to facilitate the access to work for people who find it difficult and to help them maintain their work in time. Almost 15% of the social enterprises we recruited, offered to people with severe mental illness a permanent job inside the organization. Other social co-operatives we interviewed allowed in most cases a more stable access to the open labour market (33%), while more than 50% had the specific aim to facilitate the transition to the open labour market only for people with the required profiles, while for other workers who are not ready to transit to other kind of organizations the future remained inside the co-operative. Table 6 provides the features of social enterprises mentioned above.

Table 6. Structural and organizational characteristics of Social Enterprises (SEn).

Features of Social Enterprises	Baseline N(%) or Mean [SD]	12 months follow up N(%) or Mean [SD]
Interview data		
Trentino Alto Adige	55 (17.7)	5 (4.1)
Veneto	163 (52.6)	78 (64.5)
Emilia Romagna	53 (17.1)	34 (28.1)
Lombardia	24 (7.7)	4 (3.3)
Piemonte	15 (4.8)	-

Number of Social Enterprises		
Trentino Alto Adige	*N*=36	*N*=23
Veneto	13 (36.1)	4 (17.4)
Emilia Romagna	15 (41.7)	14 (60.9)
Lombardia	4 (11.12)	4 (17.4)
Piemonte	2 (5.6)	1 (4.3)
	2 (5.6)	-
Years of activity		
Range		
Average	3-33	7-33
Less than 10 years	17.24 [8.53]	19.82 [7.23]
Between 10 and 20 years	8 (24.2)	3 (13.6)
Between 20 and 30 years	11 (33.3)	7 (31.8)
Over 30 years	13 (39.4)	11 (50)
	1 (3)	1 (4.5)
Type of job done by disadvantaged workers		
Cleaning, landscape gardening parks maintenance		
Industry sector (assembly work, laundry)	22 (66.6)	14 (63.7)
Secretary's office, educator, archivist, salesman)	9 (27.3)	8 (36.4)
Bar service	1 (3)	-
	1 (3)	-
Main goal of the SEn for disadvantaged workers		
Work integration in the SEn		
Work integration in the labour market	5 (15.2)	2 (9.1)
Work integration in the SEn or in the labour market based on individual characteristics	11 (33.3)	7 (31.8)
	17 (51.5)	13 (59.1)
Number of individuals working in the SEn		
Total		
Range		
Average	6-405	25-348
With psychiatric disability	71.29 [86.38]	67.75 [68.45]
Range		
Average	1-67	2-39
	15.38 [16.77]	16.56 [13.21]

SD standard deviation. According to variables, the *N* can be affected by missing data.

We then collected data on the strategies that social enterprises adopt to facilitate the work integration process of disadvantaged workers. In most of the cases (close to 88%), mentally ill workers are signalized to the social enterprise by mental health services, and this kind of relationship between different organization usually remains in time. Indeed only 1 social co-operative of our sample reported the total absence of contacts with mental health providers. In most of the cases (close to 64%) there is a specific professional person inside the organization (e.g., tutor, or *responsabile sociale*) who is specifically involved in the work integration process of mentally ill workers. Sometimes is someone outside the enterprise (e.g., psychologist, therapist) that follows the integration process (12%) while only 3 organizations (9%) reported the absence of this specific professional figure. Almost 94% of interviewed social enterprises reported to develop individual projects and career plans for each disadvantaged worker enrolled in

the organization and close to 71% do implement training and educational experiences inside the organization on the theme of social integration and work integration. Mainly, the training is dedicate to disadvantage workers and their families and it is done from a collaboration between people inside and outside the social enterprises (see Table 7).

Table 7. Work integration strategies for mentally ill workers implemented by Social Enterprises.

Work integration process for disadvantaged workers implemented by SEn	Baseline N(%) or Mean [SD]
How do disadvantaged workers arrive in the SEn?	
Mental Health services' advice	29 (87.9)
Other social firms' advice	4 (12.1)
Who is involved in the work integration of disadvantaged workers in the SEn?	
There is not a specific person for the work integration process	3 (9.1)
Someone inside the SEn (tutor, *responsabile sociale*)	21 (63.6)
Someone outside the SEn (psychologist, psychiatrist)	4 (12.1)
Both inside and outside the SEn	5 (15.2)
Is there any individual project and career plan for disadvantaged workers?	
Yes, implemented by the SEn	10 (30.3)
Yes, implemented by the SEn in partnership with other services	20 (60.6)
Yes, implemented by other services	1 (3)
No	2 (6.1)
Does the SEn have contact with mental health services?	
Yes, in a stable and periodic way	25 (78.2)
Yes, on demand (when there is the necessity)	6 (18.8)
No, never	1 (3.1)
Does the SEn implement training and educational experiences on the theme of social integration and work integration?	
Yes	
For disadvantaged workers	24 (72.7)
For every employees	3 (12.5)
For familiars and for the whole community	20 (83.3)
Done by people inside the SEn	1 (4.2)
Done by people outside the SEn	5 (20.8)
Done by people outside and inside the SEn	12 (50)
No	7 (29.2)
Does the SEn provide economic incentives linked to productivity standards for disadvantaged workers?	
Yes, as for other employees	11 (34.4)
Yes, targeted on disadvantaged workers	10 (31.3)
No	11 (34.4)

SD standard deviation. According to variables, the *N* can be affected by missing data

3.4 Ethical considerations

As the research project required the participation of human respondents, specifically mentally ill human resource, certain ethical issues were addressed. Individuals suffering from mental illnesses are particularly vulnerable as research subjects, and the consideration of these ethical issues was necessary for the purpose of

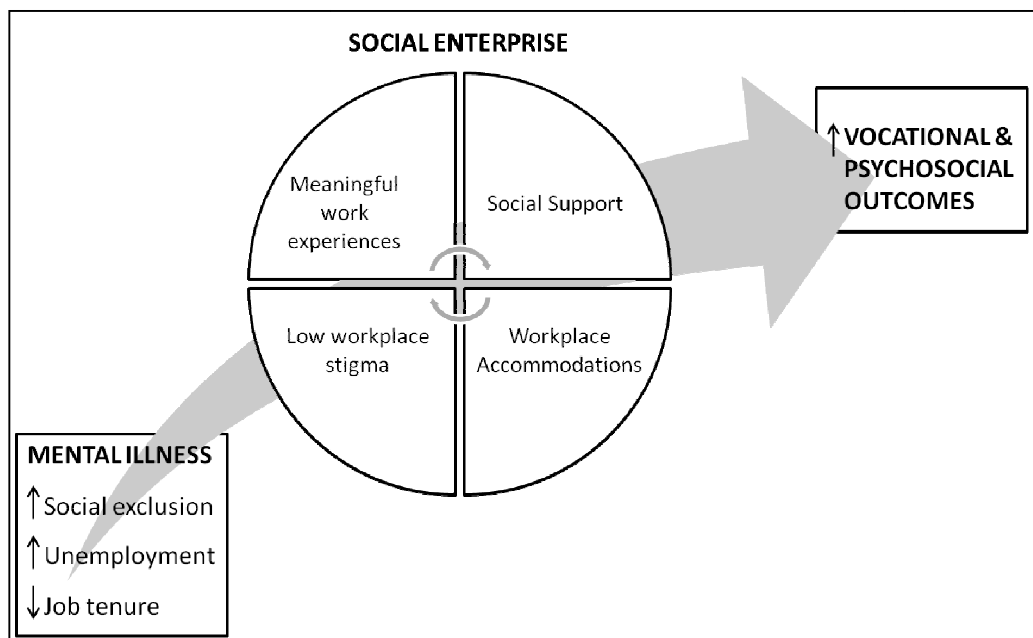
ensuring the privacy as well as the safety of the participants. In general, Italian law encourage respect for individual rights and social responsibility. These include protecting the anonymity and privacy of the participants and being cognizant of cultural issues such as socioeconomic status, gender, race, and disability, among others. Privacy, anonymity and confidentiality are the subjects of Law 196/2003 (Decreto Legislativo 30 giugno 2003, n. 196 "Codice in material di protezione dei dati personali", Gazzetta Ufficiale n. 174, Supplemento Ordinario n. 123, 29 luglio 2003). Patients who are deemed to be potentially or particularly vulnerable (e.g. in relation to their capacity to understand the research) have to give a fully informed consent to participate to a research. No one can be forced to participate to a research program and the researcher has to ensure safeguards on data access and data use. Thus, among the significant ethical issues that were considered in the research process include consent and confidentiality. In order to secure the consent of the selected participants, the researcher relayed all important details of the study, including its aim and purpose. By explaining these important details, the respondents were able to understand the importance of their role in the completion of the research. The respondents were also advised that they could withdraw from the study even during the process. With this, the participants were not forced to participate in the research. The confidentiality of the participants was also ensured by not disclosing their names or personal information in the research. Beyond these over-arching frameworks, the research project was reviewed by the Ethics Committee Board of the University of Trento who expressed its positive opinion regarding the ethical implication of the study.

3.5 Development of the studies

As highlighted in the literature review, work is a significant factor of mental health and contributes remarkably to the recovery of people with mental illness. This population still faces several barriers and difficulties in the job acquisition and retention, and mentally ill persons are among the most socially and economically marginalized members of the community. The social enterprises are a valid and effective alternative to existing vocational programs in helping disadvantaged workers, such as people with mental disorders, in their work integration process. Social cooperatives are organized in a network to create a local dynamic and facilitate resource and knowledge transfer while sharing new experiences. In particular, they have a supportive work environment that

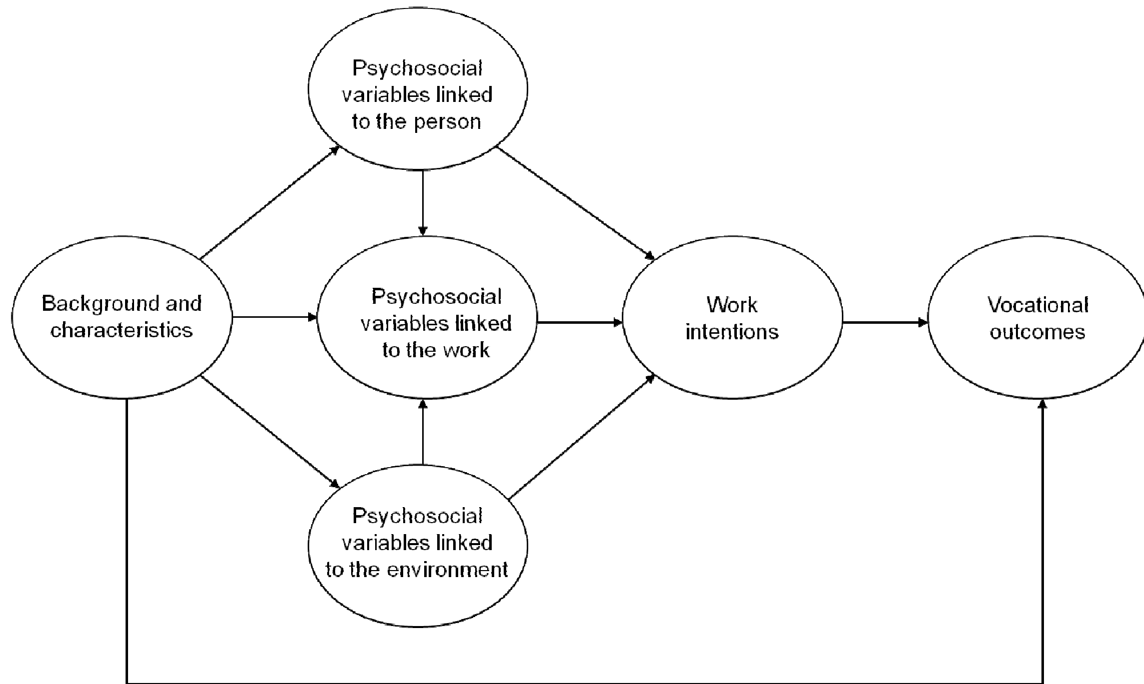
dedicates between 25-50% of positions to employees with a disability, pays all workers the award rate of productivity based rates, and provides all employees with the same employment opportunities, rights, and obligation. Furthermore, they offer employees workplace accommodation, an environment that is supportive in nature and characterized by minor stigma and discrimination. Thus, it is reasonable to state that social enterprises provides meaningful work experience to disadvantaged workers, which help them increase their vocational and psychosocial outcomes. Figure 5 point-out this theoretical background.

Figure 4 - Effectiveness of social enterprise model: theoretical background.



Previous studies conducted on the population of mentally ill workers have highlighted several individual and environmental variables that can significantly predict vocational outcomes for this population. On the basis of these consideration, we developed a model by integrating the existing results and concepts promoting vocational outcomes in people with mental illness, including background and characteristics (e.g., socio-demographics; psychiatric symptoms); psychosocial variables linked to the person (e.g., occupational self-efficacy), to the work (e.g., work engagement) and to the environment (e.g., workplace accommodation); work intentions (e.g., working plans, motivation to keep a job) and outcomes (e.g., job satisfaction). See Figure 5 for a graphic representation of the model.

Figure 5 – Integrated model of vocational outcomes in people with severe mental illness.



According to this approach, Study 1 is designed with the main aim of establishing the profiles of employees that suffer of a severe mental illness working in Italian social enterprises, as well as to investigate potential differences across people with different psychiatric diagnosis (e.g., schizophrenia, mood disorders) on psycho-social variables linked to the person (e.g., self-esteem) and linked to the work (e.g., work productivity). Study 2 focus on the work intention dimension of the model, in particular it deeply investigate the motivation to keep a job variable. Motivation has been identified as being an important factor in helping participants return to work, or to remain employed following the onset of a severe mental illness, and it is generally agreed that motivation to work has a significant influence on whether people with severe mental illness gain competitive employment. Thus, the study proposes the validation of two scales, useful for the evaluation of work motivation in two different context: the Motivation to Find a Job scale in a sample of mentally ill workers enrolled in supported employment programs located in Canada, and the Motivation to Keep a Job scale among people with severe mental illness employed in Italian social enterprises. Furthermore, the study aim to predict vocational successes (i.e. obtaining competitive employment) by considering motivational aspects and personal characteristics of the study samples.

Understanding the impact of individual and environmental variables on job satisfaction is the purpose of Study 3. In particular, in this study we investigate the relationship between individual characteristics (e.g., occupational self-efficacy), features of the workplace environment (e.g., provision of workplace accommodations in social enterprises) and job satisfaction in people with severe mental illness. In addition, it is our intent to explore the spectrum of workplace accommodations available for employees with mental disabilities working in social enterprises, and the impact of those accommodations on job satisfaction, taking into account the individual characteristics of these employees.

Study 4 aims at examine the validity of work engagement in people with severe mental illness. We first validate the most often used scientific instrument to measure this construct (i.e., the Utrecht Work Engagement Scale developed by Schaufeli and colleagues in 2002). We then develop a nomological network delineating work engagement's relationship with its antecedents and its consequences in mentally ill workers.

In sum, studies reported in the next chapter aim at focus on the most important factors related to the work integration of people with severe mental illness, and specify how those variables are integrated into social enterprises. To extend our knowledge on the articulation of all these elements in the context of social enterprise will hopefully allow us to better understand the work integration of people with a mental disability and facilitate this knowledge transfer to the regular labour market.

CHAPTER 4: RESULTS

4.1 Study 1: Psychiatric diagnosis and employment status: profiles of mentally ill workers in social enterprises[13].

Abstract

Employment rates for people with mental illness is unacceptably low. Still nowadays, having a psychiatric diagnosis can seriously limit the access to work and career advancement. Social enterprise represent a good alternative to the regular job-market for people with severe mental illness. In particular, their flexible environment seems to be effective in creating job opportunities for people who find it hardest to get them and in facilitating the job tenure in this population. The main purpose of this study was to establish the profiles of employees that suffer of a severe mental illness working in Italian social enterprises, as well as to investigate potential differences across people with different psychiatric diagnosis (e.g., schizophrenia, mood disorders) on psycho-social variables linked to the person (e.g., self-esteem) and linked to the work (e.g., work productivity). In general, participants reported a positive evaluation of their perceptions as workers, and showed that having a psychiatric disease rather that another do not affect vocational outcomes such as general self-esteem, occupational self-efficacy, work productivity, work engagement and motivation to keep a job. This study were in support of literature suggesting that the association between psychiatric diagnosis and vocational outcomes is weak.

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[13]This article is in preparation for publication as: P. Villotti, P. Venuti, F. Fraccaroli. *Psychiatric diagnosis and employment status: profiles of mentally ill workers in social enterprises*.

Introduction

Unemployment is repeatedly cited as a reason for reduced quality of life among people who suffer from a severe mental illness, and it is an important part of the social exclusion faced by this population (Marwaha & Johnson, 2004; Broadman et al., 2003). Despite the evidence of their desire and capacity of work (OMS, 2000; Broadman, Grove, Perkins & Shephred, 2003), people with mental health issues have an employment rate of little more than 10%. They still experience difficulties and continue to face enormous barriers in securing their right to equal access to work. If in the past decades the employment rate in the general population and in those with physical disabilities has generally increased, there has been very little change in the portion of people with psychiatric disability participating in the workforce (Social Exclusion Unit, 2003; Marwaha & Johnson, 2004). This lead to the evidence that an enormous number of workers who have or have had a mental health problem are not in work and are denied the opportunity to return to work, for several reasons, primarily the stigma of mental illness. The advent of psychotropic medication, the deinstitutionalization process and the increase of attention to civil rights issues was not enough to change the way in which mental illness is perceived as an indulgence, a sign of weakness (Byrne, 2000). In particular, a diagnosis of schizophrenia or other mental illnesses can function as a stereotype and can lead to biases in interpreting behavior. For instance, people generally believe that individuals with schizophrenia are violent (Boisvert & Faust, 1999), while scientific studies have showed that the association between mental disorder and violence is slight (Link et al., 1992; Monahan, 1992) and that the risk of violence by someone with mental health problems are no greater that those for the general population as a whole (Swanson et al., 1990 cited in Link et al., 1999). Thus, in spite of anti-discrimination laws, stigma and prejudice for the diagnosis of mental illness still exists, even among professionals (Boisvert & Faust, 1999).

Psychiatric diagnosis can be defined as the identification and labeling of a mental disease, which is a clinically significant behavioral or psychological syndrome or patterns that is associated with present distress or disability, based on its sign and symptoms. Psychologists and clinicians worldwide usually refer to the criteria listed in international manuals, such as the Diagnostic and Statistical Manual of Mental Disorders (DSM-TR, APA 2000), to formulate a diagnosis. One of the main purpose of diagnosis is to facilitate and enable communication among the professionals that work in the field of mental

health care, as well as to guide treatment planning. The diagnosis also generally is necessary in order for insurers to pay for medical services and pharmacological treatments. Still, the act of labeling a mental disorder can have unintended effects for the person who seeks for a job, and the stigma of mental illness can negatively and powerfully infect all social relations, with consequent severe difficulties in the social and work integration processes. Furthermore, often people with mental illness endorse stigmatizing attitudes about psychiatric disability, with negative consequences on individual's self-perception and self-efficacy.

It is evident that a psychiatric diagnosis, such as schizophrenia and depression, can produce experiences of poor self-esteem, reduced feelings of self-efficacy, low levels of work productivity and a sense of disconnectedness from others (Cassano & Fava, 2002). Social enterprises are competitive business with both economic and social goals (Williams, Fossey & Harvey, 2010) that may be well placed to respond to the need of job opportunities and job tenure for people with a psychiatric diagnosis (e.g., people with severe mental illness), by offering ongoing support, workplace accommodations, tolerance, and an organizational context characterized by minor discrimination and stigmatization (Warner & Mandiberg, 2006; Williams, Fossey & Harvey, 2010; Svanberg, Gumley & Wilson, 2010). Furthermore, in social enterprises there is a particular attention on employees' well-being (Krupa, 1998) by focusing on quality of life, which has been recently found to be a significant predictor of longer job tenure in people with mental disabilities (Lanctot, Corbière & Durand, unpublished).

At a work population level, little is known about people with a psychiatric diagnosis and employment status in social enterprises. To our knowledge these characteristics have not previously been reported. Therefore, the current study was designed with the main purpose of establish the profiles of employees that suffer of a severe mental illness working in Italian social enterprises, as well as to investigate potential differences across people with different psychiatric diagnosis (e.g., schizophrenia, mood disorders) on psycho-social variables (e.g., self-esteem) and vocational variables (e.g., self-efficacy, work productivity).

Method

Data collection and participants

The data used for this study came from a broader longitudinal research project concerning the work integration of people with severe mental illness employed in Italian social enterprises. The recruitment was based on the following selection criteria: (1) being identified by the employer as having a psychiatric diagnosis (2) being 18 years or older and (3) being employed in a social enterprise, with specific working tasks and well defined working hours. Participants were excluded if they had mental retardation, physical disabilities, neurological illness and those who were enrolled in A-Type social co-operatives or in working situation that were not sufficiently structured in terms of time commitment, continuity of supply, and production constraints. One hundred and eighty-six individuals with a severe mental disorders, from a convenience sample of 32 social enterprises offering work integration services to disadvantaged people located in five regions of northern Italy (Trentino Alto Adige, Veneto, Emilia Romagna, Lombardia, and Piemonte) agreed to participate in the research and completed a battery of questionnaire. Of these, 59.7% (N=111) were men. The average age of all participants was 41 years (SD=9.12, age range: 20-64 years). Forty-nine percent (N=89) of the participants held a middle school certificate or less, 21.4% (N=39) had a secondary-level education, 23.6% (N=43) had completed high school, and 6% (N=11) had attained a university-level qualification. In terms of marital status, 161 (89.9%) were single, separated, widowed or divorced, while 18 (10.1%) were married or living with a common-law partner. Close to the total sample reported to not have children (N=120, 79.5%). Illnesses were self-reported and were grouped into three categories: mood disorders, schizophrenia, and personality disorders. In particular, 28.5% (N=53) reported a diagnosis of mood disorder (e.g., depression), 22% (N=41) reported a personality disorder and 49.5% (N=92) reported schizophrenia. As regarding job tenure, participants were working in the social enterprise for an average of 84.86 months. These data are extremely important in highlighting the effectiveness of the social enterprise model in helping disadvantaged people to maintain their work in time, compared to other vocational services. On average, participants work 25 hours per week and are paid 4.32 Euro per hour. Almost the total of the sample (95.1%) reported to have had previous work experience. After complete description of the study to the participants, written informed consent was obtained.

Participants received compensation for their time. Twelve months later, social enterprises were contacted again for the follow up phase. Of these, 20 (response rate of 62.5%) accepted to confirm their involvement in the research project and allowed us to collect data once again. One hundred and thirty-eight (74.2% of the total sample) were the potential participants at follow-up. Of these, 74 (53.6%) were still available to fulfill the battery of questionnaire, 30 (21.7%) were lost to follow up, 7 (5.1%) were not working the day of data collection, but were still employed in the social enterprise, 12 (8.7%) were no longer working in the social enterprise, due to hospitalizations or retirements; and 15 (10.9%) found a job in the open labour market. The follow-up subsample (N=74) was not significantly different from the initial sample regarding socio-demographics, psychiatric diagnosis and education, as shown in Table 1. However, participants at follow-up were on average significantly paid less compared to the baseline sample (T = - 2.60, P = .011).

Table 1. Participants' socio-demographic characteristics for the study samples.

Demographic variable	Baseline N(%) or Mean [SD]	12 months follow up N(%) or Mean [SD]	*T* test or χ^2 value and *P* value
Interview data	N=186	N=74	
Gender			
Female	67 (37.6)	28 (37.8)	χ^2 = 2.31, *P* = .13
Male	111 (62.4)	46 (62.2)	
Age			*T* = .78 , *P* = .44
Range	20-64	20-64	
Average age	41.32 [9.12]	41.82 [10.22)	
Marital status			
Single	161 (89.9)	69 (93.2)	χ^2 = 1.04, *P* = .31
Married	18 (10.1)	5 (6.8)	
Education			χ^2 = 3.38, *P* = .50
Middle school	89 (48.9)	41 (55.4)	
Secondary-level	39 (21.4)	11 (14.9)	
High school	43 (23.6)	17 (23)	
University level	11 (6.1)	5 (6.7)	
Diagnosis			
Mood disorder	53 (28.5)	22 (29.7)	
Personality disorder	41 (22)	15 (20.3)	χ^2 = 2.54, *P* = .28
Schizophrenia	92 (49.5)	37 (50)	
Lives alone	46 (25.7)	24 (32.9)	χ^2 = 2.77, *P* = .10
Lives with someone	133 (71.5)	49 (67.1)	
Has children	31 (20.5)	7 (11.1)	χ^2 = 3.13, *P* = .08
Does not have children	120 (79.5)	56 (88.9)	
Length of job (months)	84.86 [58.34]	78.06 [59.21]	*T* = -.847, *P* = .399
Work hours per week	24.71 [11.03]	24.71 [11.03]	-
Salary per hour	4.32 [3.05]	3.15 [2.02]	T =- 2.60, P = .011
Has previous work experience	173 (95.1)	71 (95.9)	
Does not have previous work experience	9 (4.9)	3 (4.1)	χ^2 =.397, *P* = .529

Note. *SD* standard deviation. According to variables, the *N* can be affected by missing data. All data are self-reported.

Measures

The full study involved completion of a battery of questionnaires (one of which was demographic in nature) and was being pilot-tested.

Clinical variables

Severity of symptoms. The Brief Symptom Inventory (BSI; Derogatis & Melisaratos, 1983) was used to identify self-reported clinically relevant psychological symptoms. It consist of 53 items covering nine symptom dimensions: Somatization (dimension that reflects psychological distress arising from perception of bodily dysfunction, e.g. faintness or dizziness), Obsession-Compulsion (focus on thoughts and actions that are experienced as unremitting and irresistible by the patient, e.g. having to check and double check actions), Interpersonal sensitivity (feelings of personal inadequacy and inferiority, e.g. feeling that people are unfriendly), Depression (e.g. symptoms of dysphoric affect and mood, withdrawal of interest in life activities), Anxiety (e.g. restlessness, nervousness and tension), Hostility (thoughts, feelings and actions that cover feelings of annoyance and irritability, e.g. urgency to break things), Phobic anxiety (phobic fears oriented to travel, open spaces, crowds, public spaces), Paranoid ideation (a mode of thinking, projection, hostility, suspiciousness, centrality, fear of loss of autonomy) and Psychoticism (signs of a schizoid, alienated style of life); and three global indices of distress: Global Severity Index, which is the measure used in this study, Positive Symptom Distress Index (it reveals the number of symptoms the respondent reports experiencing), and Positive Symptom Total (index that provides information about the average level of distress the respondent experiences). Each item of the BSI is rated on a 5-point scale of distress from 0 (not at all) to 4 (extremely). Test administration ordinarily takes less than 10 minutes. Coefficient alpha in this study was .97.

Well-being. At follow-up, we used the Warwick-Edinburgh Mental Well-being Scale (WEMWBS, Tennant, Hiller, Fishwick, et al., 2007) to have a measure of mental well-being of participants, focusing entirely on positive aspects of mental health. The scale consist of 14 items covering both hedonic and eudemonic aspects of mental health including positive affect (feelings of optimism, cheerfulness, relaxation), satisfying interpersonal relationships and positive functioning (energy, clear thinking, self-acceptance, personal development, competence and autonomy). Participants were

required to tick the box that best describes their experience of each statement over the past two weeks using a 5-point Likert scale (none of the time, rarely, some of the time, often, all of the time). The Likert scale represent a score for each item from 1 to 5 respectively, giving a minimum score of 14 and maximum score of 70. The overall score for the WEMWBS is calculated by totaling the scores for each item, with equal weight. A higher WEMWBS score therefore indicates a higher level of mental well-being. Coefficient alpha in this study was .94.

Psychosocial variables linked to the person

Self-Esteem. The Self-Esteem Rating Scale Short Form (SERS-SF, abbreviated version of the Self-Esteem Rating Scale by Nugent & Thomas, 1993) was used in the study to have a global measure of self-esteem. It consist of 20 self-rated items on a 7-point Likert scale, used as two separate (positive and negative) subscales. Coefficient alpha in this study was .77.

Self-Esteem as a worker. At follow-up, we decided to investigate self-esteem in regards to work of persons with severe mental illness, with the aim to capture work-related changes in this population during their work integration process. We used an adaptation of the Rosenberg Self-Esteem as a Worker Scale (Rosenberg, 1965) done by Marc Corbière (2009). It consist of 10 items rated on a 4-point Liker scale from 1 (strongly disagree) to 4 (strongly agree). This scale contains an equal number of positively and negatively worded items. Coefficient alpha in this study was .72.

Occupational self-efficacy. The Occupational Self-Efficacy short form introduced by Schyns and von Collani (2002) was used in this study to have a measure of the level of self-efficacy in the sample. It consist of 8 items that can be rated on a six-level response scale ranging from 1 (not at all true) to 6 (completely true). High values reflect high occupational self-efficacy. Coefficient alpha in this study was .82.

Stigma. We asked participants at follow-up phase to respond on the 28 items of the self-reposted Stigma Scale (King et al., 2007), ranging from 0 (strongly disagree) to 4 (strongly agree). It consists of three subscales: discrimination, disclosure and positive aspects. Coefficient alpha in this study was .90.

Evaluation of working experience in the social enterprise (ad hoc item). At follow-up, we asked participant to rate the general satisfaction related to their working experience in the

social enterprises from 0 (completely negative experience) to 10 (totally positive experience).

Psycho-social variables linked to the work and the environment

Productivity. To assess the degree to which medical condition, such as severe mental illness, affects the work functioning of an individual we used the Endicott Productivity Scale (EWPS; Endicott & Nee, 1997). The scale consist of one domain (work productivity) scored on 25 items on a 5-point on a Likert scale (from 0, that means never, to 4 meaning almost always), plus additional items on expected working hours, hours worked, and reason for working less (if applicable), with possible responses including "I was physically ill" and "I was too upset, depressed, or nervous". The scale covers four productivity areas: attendance (absenteeism and time on task), quality of work, performance capacity, and personal factors (social, mental, physical, and emotional). The survey computes a reverse-total score from 0 (worst possible score) to 100 (best possible score), which is a measure that discriminate among subjects who have varying degrees of difficulty in accomplishing their work due to an illness and that reflects even small changes in behavior related to work productivity. Coefficient alpha in this study was .89.
Job satisfaction. We used a single item from the Psychiatric Rehabilitation Readiness Determination Instrument (Anthony, Cohen & Farkas, 1990) to assess the level of job satisfaction or dissatisfaction, along with the need for change in the current employment status of the study participants. Responses range from 1 (very dissatisfied, with urgent need for change) to 5 (very satisfied, with definite desire that there be no change).
Work engagement. We used the Utrecht Work Engagement Scale (UWES-9) that includes three subscales: vigor, dedication, and absorption. All items are scored on a 7-point asymmetrical rating scale ranging from 0 (never) to 6 (daily). Coefficient alpha in this study was .94.
Motivation to keep the job. We used an adaptation of the Motivation to Find a Job scale designed by Corbière, Laisnè & Lecomte in 2000 to the context of job tenure in social enterprises. The questionnaire consists of 7 items measuring motivation to maintain a job which are measured on a seven-point Likert scale from 1 "completely disagree" to 7 "completely agree". The items of the Motivation to Keep a Job scale are intended to measure motivation relative to maintain a job from various perspectives: intention, being

motivated, self-efficacy in overcoming obstacles by making the necessary efforts, and the importance of work. Coefficient alpha in this study was .89.

Organizational Constraints. The Organization Constraints Scale (OCS) was used in this study to have a measure of constraints on performance at work. It is an 11-item scale covering each of the constraints areas discussed in Peters and O'Connor (1980). These common situational constraints in organizations may include faulty equipment, incomplete or poor information, or perhaps interruptions by others. Each area is assessed with a single item, and a total of constraint score is computed as the sum. For each item, the respondent is asked to indicate how often it is difficult or impossible to do his or her job because of it. Response choices range from 1 (less that once per month or never) to 5 (several times per day). High scores represents high levels of constraints. Coefficient alpha in this study was .88.

Results

Profiles of people with severe mental illness employed in social enterprises

As for clinical and psycho-social variables linked to the person, summary rating scores were calculated for each scale and are presented in Table 2 and Figure 1, in which scores have been scaled on a 0-100 global index to graphically represent results in a comparative and global framework. Descriptive analyses show that participants' perception of the gravity of their psychiatric symptoms is very low. The average score at the Global Severity Index, which is the most sensitive indicator of the respondents' distress level measured by the Brief Symptoms Checklist is .49 (SD=.18). This result is in line with the high score obtained at follow-up on the Edinburgh Mental Well-being Scale (M=45.32, SD=12.46), meaning that participants generally are feeling good, useful, relaxed, confident, close to other people, loved and interested in new things. The sphere of self-esteem shows how people with severe mental illness employed in social enterprise feel confident in their ability to deal with people, feel loved by other and perceive to be a competent person (positive self-esteem average score M=4.32, SD=1.46). Even when the focus is on the role of worker (follow-up phase), average score is high (M=2.54, SD=.64): participants reported that they feel to have several good qualities as workers, to be able to do things as well as most other colleagues, to be proud and satisfied of their employment

status. On contrast, people reported low scores at items such as "feeling that others do things better than me", "feeling ashamed about myself", and at items that measure feelings of inferiority and angriness (negative self-esteem average score M=2.86, SD=1.41). Respondents reported also high level of occupational self-efficacy (M=3.93, SD=1.27), meaning that they feel confident in having the resources to overcome potential difficulties and obstacles at work and in being well prepared to achieve vocational purposes. Scores on the Stigma Scale showed that participants' feelings of stigmatization (M=1.81, SD=.81) and discrimination (M=1.55, SD=.92) inside the social enterprise are low. As for the disclosure subscale, people reported to not feeling bad about having had a mental disorder and not to be worried about telling people that they receive psychological treatments. They do not feel the need to hide their mental, they do not feel ashamed about that and they would disclosure their psychiatric diagnosis if they were applying for a job (M=1.84, SD=.86). Medium-high scores were obtained at the positive aspects of stigma subscale, meaning that participants reported that having had mental health problems has made them a more understanding people and a stronger person (M=2.39, SD=.79). Overall, the general satisfaction at follow-up of their working experience in the social enterprise is high (M=7.80, SD=2.03).

As for psycho-social variables linked to the work and the environment, summary rating scores were calculated for each scale and are presented in Table 3 and Figure 2, in which scores have been scaled on a 0-100 global indices to graphically represent results in a comparative and global framework. Descriptive analyses show that participants feel able to ensure high levels of work performance in spite of their mental illness (M=78.30, SD=16.45). On average, they are satisfied of their job and they do not want to change it (M=3.97, SD=.99). Scores are high also at the work engagement scale (M=4.32, SD=1.47), meaning that participants have high levels of energy and identify strongly with their work.

Table 2. Means, standard deviations and correlation among psycho-social variables linked to the person.

Variable	N	Mean	SD	SD	1	2	3	4	5	6	7	8	9	10
1.Severity of symptoms	186	.49	.18	.18	1									
2.Well-being	74	45.32	12.46	12.46	.001	1								
3.Self-esteem (+)	172	4.32	1.46	1.46	-.167*	.085	1							
4.Self-esteem (-)	172	2.86	1.41	1.41	.582**	-.254*	-.154*	1						
5.Self-esteem as a worker	74	2.54	.64	.64	.024	.222	.231	-.169	1					
6.Occupational self-efficacy	181	3.93	1.27	1.27	-.082	.175	.490**	-.094	.295*	1				
7.Stigma	74	1.81	.81	.81	-.059	-.239*	-.074	.062	-.348**	.067	1			
8.Discrimination	74	1.55	.92	.92	-.140	-.131	-.018	-.055	-.346**	.049	.902**	1		
9.Disclosure	73	1.84	.86	.86	.002	.188	.143	-.097	-.290*	-.001	.932**	.748**	1	
10.Positive aspects of stigma	73	2.39	.79	.79	.003	.330**	.207	-.087	.293*	.106	.495**	.291*	.472**	1
11.Evaluation of working experience	71	7.80	2.03	2.03	-.046	.317**	-.012	-.182	.003	.093	-.110	-.147	-.068	.192

Note. The possible range of scores for Severity of symptoms is 0-4; for Well-being is 1-5; for Self-esteem (positive and negative) is 1-7; for Self-esteem as a worker is 1-4; for Occupational self-efficacy is 1-6; for Stigma and related subscales is 0-4; for Evaluation of working experience is 1-10. SD=standard deviation.
* p<.05 **p<.001

Table 3. Mean ratings and standard deviation of participants on study variables.

Variable	N	Mean	SD	1	2	3	4	5	6	7
1.Work productivity	183	78.30	16.45	1						
2.Job satisfaction	167	3.97	.99	.130	1					
3.Work engagement	174	4.32	1.47	.271**	.457**	1				
4.Vigor	174	4.08	1.47	.302**	.310**	.921**	1			
5.Dedication	174	4.41	1.64	.228**	.547**	.905**	.729**	1		
6.Absorption	174	4.48	1.52	.212**	.397**	.924**	.798**	.754**	1	
7.Motivation to keep the job	183	6.03	1.23	.309**	.356**	.368**	.341**	.335**	.336**	1
8. Organizational constraints	185	17.54	7.70	-.142	-.062	-.060	-.055	-.087	-.019	-.172*

Note. The possible range of scores for Work Productivity is 0-4; for Job satisfaction is 1-5; for Work engagement and subscales is 0-6; for Motivation to keep the job is 1-7; for Organizational constraints is 1-5. SD=standard deviation. * p<.05 **p<.001

They report to work hard (vigor, M=4.08, SD=1.47), are involved (dedication, M=4.41, SD=1.64), and feel happily engrossed (absorption, M=4.48, SD=1.52) in their work. Respondents are also highly motivated to maintain their job (M=6.03, SD=1.23), they are confident in overcoming potential obstacles by making the necessary effort to keep their job. Finally, participants report to are able to successfully accomplish work tasks most of the time, since there are no (or very few) constraints that can affect performance in their work environment (M=17.54, SD=7.70): they rarely report delays, lose of time, nervousness, lack of information or materials and equipments.

Figure 1. Analysis of central tendency reported on a 0-100 scale (50=medium value).

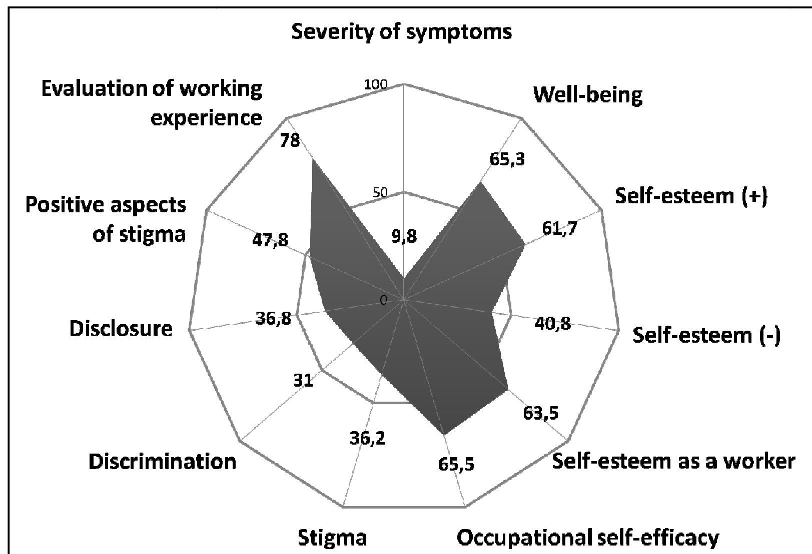
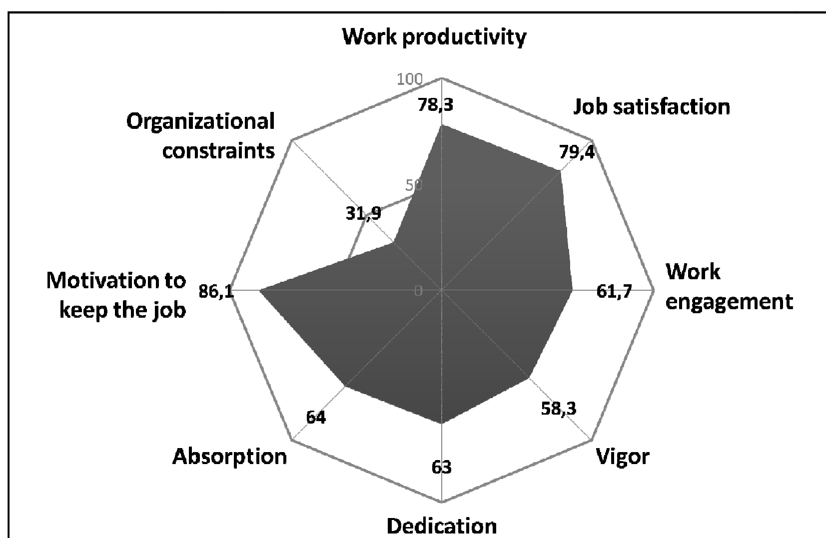


Figure 2. Analysis of central tendency reported on a 0-100 scale (50=medium value).



Psychiatric diagnosis and differences on demographics, psycho-social and vocational variables

Univariate analyses of variance (ANOVAs) were conducted on each of the study variables, with the results of these presented below.

Demographic and employment status characteristics. Participants did not significantly differ across psychiatric diagnosis on demographic variables such as "age", "gender", "education", "marital status" and "lives with someone". On contrast, ratings at "children" were significantly different across disability, with people suffering from schizophrenia having not children much more compared to individuals with mood disorder. Again, people with schizophrenia significantly were found to have less amount of previous work experience compared to the other two groups of disabilities. Results are reported in Table 4.

Table 4. Participants' scores on demographic and employment status characteristics by psychiatric diagnosis.

Variables	Mood disorders *N*(%) *or M* [*SD*]	Personality disorders *N*(%) *or M [SD]*	Schizophrenia *N*(%)*or M [SD]*	*T* test or ANOVA
Interview data	N = 53	N = 41	N = 92	
Age	42.77 [8.70]	41.19 [8.96]	40.49 [9.43]	F(2, 159)=.936, P=.394
Gender				
Female	23 (45.1)	10 (27)	34 (37.8)	T=2.98, P=.225
Male	28 (54.9)	27 (73)	56 (62.2)	
Education				
Middle school	24 (46.2)	24 (60)	41 (51.9)	
Secondary-level	14 (26.9)	7 (17.5)	18 (22.8)	T=8.35, P=.400
High school	13 (25)	7 (17.5)	23 (29.1)	
University level	1 (1.9)	2 (5)	8 (10.1)	
Marital status				
Single	41 (80.4)	34 (94.4)	86 (95.6)	T=3.87, P=.423
Married	10 (19.6)	4 (19.6)	4 (4.4)	
Children				
Yes	18 (41.9)	5 (14.7)	8 (19.8)	T=16.98, P=.000
No	25 (58.1)	29 (85.3)	66 (89.2)	
Lives with someone	32 (64)	30 (75)	71 (79.8)	
Does not live with someone	18 (36)	10 (25)	18 (20.2)	T=4.19, P=.123
Job tenure	89.43 [69.80]	64.03 [55.23]	87.33 [5.67]	F(2, 171)=.915, P=.402
Salary per hour	5.28 [2.48]	4.20 [2.51]	3.90 [3.38]	F(2, 145)=2.78, P=.066
Hours worked per week	23.18 [11.07]	22.80 [8.90]	10.98 [23.96]	F(2, 172)=2.11, P=.125
Previous work experience	52 (100)	39 (97.5)	82 (91.1)	
Does not have previous work experience	0	1 (2.5)	8 (8.9)	T=6.19, P=.045

Note. SD standard deviation. ANOVA analysis of variance. According to variables, the *N* can be affected by missing data. All data are self-reported.

Severity of symptoms. Respondent ratings regarding the Brief Symptom Inventory (see Table 4) did not significantly differ across psychiatric diagnosis.

Table 4. Participants' ratings on severity of symptoms by psychiatric diagnosis.

BSI - Brief Symptom Inventory	Mood disorders *M* (*SD*)	Personality disorders *M* (*SD*)	Schizo-phrenia *M* (*SD*)	ANOVA
Interview data	N = 53	N = 41	N = 92	
Possible range	0-4	0-4	0-4	
Global Severity Index score	.50 (.20)	.52 (.21)	.48 (.16)	F(2, 183)=.741, P=.478
1. Somatization	1.86 (.73)	1.93 (.90)	1.79 (.76)	F(2, 180)=.461, P=.632
2. Obsession-compulsion	2.06 (.96)	2.12 (1.05)	2.03 (.80)	F(2, 181)=.141, P=.868
3. Interpersonal sensitivity	2.19 (1.02)	2.16 (1.00)	2.08 (.94)	F(2, 180)=.218, P=.804
4. Depression	2.41 (1.09)	2.33 (1.06)	2.08 (.79)	F(2, 181)=2.26, P=.107
5. Anxiety	2.09 (.83)	2.24 (1.09)	2.10 (.93)	F(2, 183)=.391, P=.677
6. Hostility	1.79 (.85)	1.80 (.87)	1.76 (.77)	F(2, 180)=.038, P=.962
7. Phobic anxiety	1.99 (1.06)	1.96 (1.05)	1.82 (.86)	F(2, 181)=.643, P=.527
8. Paranoid ideation	2.28 (1.11)	2.08 (.99)	2.07 (.84)	F(2, 181)=.809, P=.447
9. Psychoticism	2.02 (.95)	2.13 (.96)	1.98 (.89)	F(2, 183)=.403, P=.669

Note. *SD* standard deviation. ANOVA analysis of variance. According to variables, the *N* can be affected by missing data. All data are self-reported.

Well-being. On average, well-being ratings (see Table 4) were not significantly different across psychiatric diagnosis. However, respondent scores at item 11 "I've been able to make up my own mind about things) were significantly different across diagnosis, F(2, 67)=2.798, p<.05. Post hoc analysis using Tukey's honestly significant difference (HSD) method indicated that participants with a diagnosis of mood disorder were rated as feeling able to make up their own mind about thing better than people with a personality disorder.

Self-esteem. For the Self-Esteem Rating Scale short form (Table 6), participant ratings in general did not differ across diagnosis categories, however regarding the confidence in beginning new relationships we found significant differences, F(2,161)=3.20, p<.05. In particular, Tukey's HSD post hoc comparisons indicated that respondents with mood disorders were significantly less confident in comparison than people with a diagnosis of schizophrenia.

Self-esteem as a worker. Ratings at the Self-esteem As A Worker scale (Table 7) were not significantly different across diagnosis on the total score. However, significant differences were found on item 1, F(2, 71)=4.01, p<.05 and item 6, F(2,68)=3.12, p=.05. Post hoc comparisons using the HSD method indicated that participants with mood disorders had significantly higher confidence in being persons with worth, at least on an equal basis with other workers, than individuals with a personality disorder. In addition, individuals with personality disorders on the whole are less satisfied with theirselves compare to people with a diagnosis of mood disorder.

Stigma. Participants' rating on the Stigma scale (Table 8) did not significantly differ on the total score and on scores at the subscales (discrimination, disclosure, positive aspects). The only significant difference across psychiatric diagnosis was found on scores at the "I have been discriminated against by the police because of my mental problems" item, F(2, 67)=6.20, P=.003. In particular, Post hoc comparisons using the HSD method showed that people with schizophrenia reported lower scores on this item compared to the other two category of disorders.

Occupational self-efficacy. Respondent ratings regarding the Occupational Self-efficacy Scale short form (see Table 9) did not significantly differ across psychiatric diagnosis.

Evaluation of working experience in the social enterprise (ad hoc item). Respondent ratings regarding the ad hoc item (see Table 10) did not significantly differ across psychiatric diagnosis.

Work productivity. Respondent ratings regarding the Endicott Work Productivity scale (see Table 11) did not significantly differ across psychiatric diagnosis. We cannot able to reproduce it here since questionnaire rights are reserved, but examples of items are: "During the past week, how frequently did you just do no work at times when you would be expected to be working?"; "During the past week, how frequently did you waste time looking for misplaced supplies, materials, papers, phone number, etc?"; "During the past week, how frequently did you find you have forgotten to call someone?"; "During the past week, how frequently did you find you have forgotten to respond to a request?"; "During the past week, how frequently did you have a co-worker redo something you had completed?"; "During the past week, how frequently did you work more slowly or take longer to complete task than expected?"; "During the past week, how frequently did you have trouble organizing work or setting priorities?"; "During the past week, how frequently did you fail to finish assigned tasks?".

Job satisfaction. Respondent ratings regarding the Need for Change Scale (see Table 12) did not significantly differ across psychiatric diagnosis.

Work engagement. Participants' scores at the Utrecht Work Engagement Scale (9 items) (see Table 13) did not significantly differ across psychiatric diagnosis.

Motivation to keep a job. Participants' scores at the Motivation to Keep a Job scale (see Table 14) did not significantly differ across psychiatric diagnosis.

Organizational constraints. Participants' scores at the Organizational Constraint Scale (see Table 15) did not significantly differ across psychiatric diagnosis.

Table 5. Participants' ratings on the Warwick-Edinburgh Mental Well-Being Scale by psychiatric diagnosis.

WEMWBS – The Warwick-Edinburgh Mental Well-Being Scale	Mood disorders *M* (*SD*)	Personality disorders *M* (*SD*)	Schizophrenia *M* (*SD*)	ANOVA
Interview data	N = 53	N = 41	N = 92	
Possible range	1-5	1-5	1-5	
Possible total score	14-70	14-70	14-70	
Average total score	47.18 (17.44)	42.73 (9.46)	45.53 (12.77)	F(2, 71)=.539, P=.585
1. I've been feeling optimistic about the feature.	3.43 (1.33)	2.87 (1.25)	3.11 (.99)	F(2, 70)=1.097, P=.339
2. I've been feeling useful.	3.86 (1.15)	3.33 (1.05)	3.50 (.94)	F(2, 69)=1.300, P=.279
3. I've been feeling relaxed.	3.43 (1.21)	3.14 (.77)	3.03 (1.08)	F(2, 68)=.936, P=.397
4. I've been feeling interested in other people.	3.81 (1.21)	3.53 (1.19)	3.43 (1.12)	F(2, 70)=.715, P=.493
5. I've had energy to spare.	2.90 (1.22)	3.00 (.93)	3.03 (1.24)	F(2, 70)=.074, P=.929
6. I've been dealing with problems well.	3.48 (1.33)	3.13 (1.13)	3.17 (.91)	F(2, 69)=.643, P=.529
7. I've been thinking clearly.	3.52 (1.33)	3.07 (.799)	3.27 (1.15)	F(2, 70)=.727, P=.487
8. I've been feeling good about myself.	3.67 (1.39)	3.00 (1.00)	3.54 (1.22)	F(2, 70)=1.425, P=.248
9. I've been feeling close to other people.	3.86 (1.11)	3.33 (.90)	3.49 (1.12)	F(2, 70)=1.218, P=.302
10. I've been feeling confident.	3.60 (1.31)	2.62 (.96)	3.19 (1.15)	F(2, 67)=2.798, P=.068
11. I've been able to make up my own mind about things.	3.76 (1.26)	2.80 (.94)	3.38 (1.09)	F(2, 67)=2.798, P=.044
12. I've been feeling loved.	3.24 (1.26)	2.80 (1.27)	3.30 (1.22)	F(2, 70)=.890, P=.415
13. I've been interested in new things.	3.43 (1.40)	3.60 (1.12)	3.16 (1.17)	F(2, 70)=.774, P=.465
14. I've been feeling cheerful.	3.45 (1.34)	3.07 (.88)	3.35 (1.18)	F(2, 71)=.501, P=.608

Note. SD standard deviation. ANOVA analysis of variance. According to variables, the *N* can be affected by missing data. All data are self-reported.

Table 6. Participants' ratings on self-esteem by psychiatric diagnosis.

SERS/sf – Self Esteem Rating Scale short form	Mood disorders *M* (*SD*)	Personality disorders *M* (*SD*)	Schizophrenia *M* (*SD*)	ANOVA
Interview data	N = 53	N = 41	N = 92	
Possible range	1-7	1-7	1-7	
Average self-esteem (+)	3.94 (1.60)	4.41 (1.51)	4.50 (1.31)	F(2, 169)=2.38, P=.096
Average self-esteem (-)	2.71 (1.41)	3.03 (1.51)	2.87 (1.36)	F(2, 169)=.570, P=.567
1. I feel that others do things much better than I do (-).	2.81 (1.69)	3.41 (1.94)	3.56 (1.83)	F(2, 165)=2.63, P=.075
2. I feel confident in my ability to deal with people (+).	4.51 (1.88)	4.71 (2.04)	5.01 (1.88)	F(2, 167)=1.11, P=.332
3. I feel that I am likely to fail at things I do (-).	2.74 (1.64)	3.67 (2.19)	3.25 (1.94)	F(2, 166)=2.49, P=.086
4. I feel that people really like to talk with me (+).	4.19 (2.05)	4.44 (1.88)	4.69 (1.65)	F(2, 167)=1.17, P=.314
5. I feel that I am a very competent person (+).	3.85 (2.03)	4.49 (1.86)	4.47 (1.82)	F(2, 166)=1.85, P=.161
6. When I am with other people, I feel that they are glad I am with them (+).	4.57 (2.17)	4.51 (1.89)	4.80 (1.75)	F(2, 164)=.386, P=.681
7. I feel that I make a good impression on others (+).	4.54 (2.04)	4.62 (1.80)	4.64 (1.76)	F(2, 163)=.042, P=.959
8. I feel confident that I can begin new relationships if I want to (+).	4.11 (2.32)	4.87 (1.96)	5.01 (1.71)	F(2, 161)=3.20, P=.043
9. I feel ashamed about myself (-).	2.98 (2.07)	2.54 (1.78)	2.57 (1.93)	F(2, 159)=.750, P=.474
10. I feel inferior to other people (-).	3.32 (2.30)	2.85 (2.02)	2.57 (1.80)	F(2, 161)=2.01, P=.137
11. I feel that my friends find me interesting (+).	3.93 (1.94)	4.16 (2.17)	3.99 (2.02)	F(2, 161)=.141, P=.869
12. I feel that I have a good sense of humor (+).	4.31 (2.15)	4.51 (2.04)	4.66 (2.00)	F(2, 161)=.424, P=.655
13. I get angry at myself over the way I am (-).	3.59 (2.19)	3.59 (2.27)	3.19 (1.99)	F(2, 161)=.754, P=.472
14. My friends value me a lot (+).	4.02 (1.96)	4.00 (1.96)	4.11 (1.90)	F(2, 162)=.056, P=.946
15. I am afraid I will appear stupid to others (-).	3.41 (1.99)	3.13 (2.11)	3.01 (2.12)	F(2, 163)=.545, P=.581
16. I wish I could just disappear when I am around other people (-).	2.65 (2.12)	2.26 (1.85)	2.41 (1.84)	F(2, 160)=.466, P=.628
17. I feel that if I could be more like other people, then I would feel better about myself (-).	3.00 (2.23)	3.41 (2.28)	3.15 (2.24)	F(2, 158)=.335, P=.716
18. I feel that I get pushed around more than others (-).	2.91 (2.02)	2.59 (2.01)	2.97 (2.22)	F(2, 161)=.448, P=.640
19. I feel that people have a good time when they are with me (+).	4.43 (1.99)	4.42 (1.97)	4.35 (2.06)	F(2, 162)=.035, P=.965
20. I wish that I were someone else (-).	2.41 (2.13)	3.13 (2.43)	2.88 (2.25)	F(2, 163)=1.13, P=.324

Note. *SD* standard deviation. ANOVA analysis of variance. According to variables, the *N* can be affected by missing data. All data are self-reported.

Table 7. Participants' ratings on self-esteem as a worker by psychiatric diagnosis.

Self Esteem As A Worker	Mood disorders *M* (*SD*)	Personality disorders *M* (*SD*)	Schizophrenia *M* (*SD*)	ANOVA
Interview data	N = 53	N = 41	N = 92	
Possible range	1-4	1-4	1-4	
Average	2.69 (.68)	2.49 (.68)	2.48 (.61)	F(2, 71)=.757, P=.473
1. As a worker, I feel that I am a person with worth, at least on an equal basis with other workers.	3.59 (.59)	2.80 (1.01)	3.32 (.88)	F(2, 71)=4.01, P=.022
2. As a worker, I feel that I have a number of good qualities.	3.57 (.68)	2.93 (.96)	3.32 (.78)	F(2, 70)=2.83, P=.066
3. As a worker, all in all, I am inclined to feel I am a failure.	1.62 (1.12)	1.67 (.90)	1.49 (.85)	F(2, 68)=.243, P=.785
4. As a worker, I am able to do things as well as most other workers.	3.33 (.80)	2.73 (1.16)	3.23 (.91)	F(2, 68)=2.01, P=.143
5. As a worker, I certainly feel useless at times.	1.71 (1.06)	2.13 (.92)	1.89 (1.11)	F(2, 68)=.691, P=.504
6. As a worker, on the whole, I am satisfied with myself.	3.55 (.74)	2.79 (1.12)	3.23 (.88)	F(2, 68)=3.12, P=.050
7. As a worker, I wish I could have more respect for myself.	2.95 (1.12)	3.07 (1.00)	2.60 (1.12)	F(2, 67)=1.22, P=.302
8. As a worker, I take a positive attitude towards myself.	3.33 (.73)	2.86 (1.03)	3.23 (.88)	F(2, 67)=1.35, P=.267
9. As a worker, at times I think I am no good at all.	2.05 (1.20)	2.36 (1.01)	1.83 (1.07)	F(2, 67)=1.18, P=.313
10. As a worker, I feel I do not have much to be proud of.	2.10 (1.14)	2.43 (1.02)	1.74 (.95)	F(2, 67)=2.43, P=.096

Note. *SD* standard deviation. ANOVA analysis of variance. According to variables, the *N* can be affected by missing data. All data are self-reported.

Table 8. Participants' ratings on stigma scale by psychiatric diagnosis.

The Stigma Scale	Mood disorders *M* (*SD*)	Personality disorders *M* (*SD*)	Schizophrenia *M* (*SD*)	ANOVA
Interview data	N = 53	N = 41	N = 92	
Possible range	1-7	1-7	1-7	
Average total score	1.79 (.69)	2.08 (1.18)	1.72 (.69)	F(2, 71)=1.11, P=.336
Discrimination	1.57 (.78)	1.92 (1.25)	1.39 (.83)	F(2, 71)=1.82, P=.171
1. I have been discriminated against in education because of mental health problems	1.86 (1.56)	2.27 (1.53)	1.70 (1.53)	F(2, 70)=.719, P=.296
2. Sometimes I feel that I am being talked down to because of my mental health problems.	2.45 (1.32)	2.00 (1.69)	1.76 (1.67)	F(2, 69)=1.24, P=.332
3. I have been discriminated against by the police because of my mental health problems.	1.40 (1.60)	1.69 (1.49)	.46 (.96)	F(2, 67)=6.20, P=.003
4. I have been discriminated against by employers because of my mental health problems.	1.24 (1.67)	1.86 (1.66)	.95 (1.35)	F(2, 69)=1.85, P=.164
5. Very often I feel alone because of my mental health problems.	1.67 (1.62)	2.21 (1.67)	1.59 (1.40)	F(2, 69)=.872, P=.423

6. I would have had better chance in life if I had not had mental health problems.	2.29 (1.74)	2.64 (1.39)	2.89 (1.51)	F(2, 69)=1.02, P=.366
7. People's reactions to my mental health problems make me keep myself to myself.	1.80 (1.47)	2.21 (1.53)	2.03 (1.42)	F(2, 68)=.346, P=.709
8. I am angry with the way people have reacted to my mental health problems.	1.40 (1.47)	1.93 (1.44)	1.28 (1.28)	F(2, 67)=1.16, P=.320
9. I have not had any trouble from people because of my mental health problems.	2.05 (1.61)	2.23 (1.54)	1.33 (1.41)	F(2, 66)=2.45, P=.094
10. I have been discriminated against by health professionals because of my mental health problems.	1.67 (1.71)	1.69 (1.55)	1.00 (1.33)	F(2, 68)=1.82, P=.170
11. People have avoided me because of my mental health problems.	1.43 (1.66)	2.29 (1.49)	1.41 (1.50)	F(2, 69)=1.80, P=.174
12. People have insulted me because of my mental health problems.	1.30 (1.56)	2.07 (1.49)	1.17 (1.52)	F(2, 67)=1.82, P=.171
13. Having had mental health problems make me feel life is unfair.	1.45 (1.50)	2.14 (1.46)	1.42 (1.52)	F(2, 67)=.1.27, P=.288
Disclosure	1.78 (.73)	2.10 (1.17)	1.76 (.79)	F(2, 70)=.869, P=424
1. I do not feel bad about having had mental health problems.	2.19 (1.63)	2.33 (1.40)	1.76 (1.59)	F(2, 70)=.943, P=.394
2. I worry about telling people I receive psychological treatment.	1.52 (1.63)	2.14 (1.61)	1.70 (1.49)	F(2, 69)=.684, P=.508
3. I am scared of how other people will react if they find out about my mental health problems.	1.50 (1.50)	2.43 (1.45)	1.81 (1.55)	F(2, 67)=1.57, P=.216
4. I do not mind people in my neighborhood knowing I have had mental health problems.	2.00 (1.61)	2.29 (1.38)	2.14 (1.64)	F(2, 68)=.138, P=.871
5. I would say I have had a mental health problem of I was applying for a job.	2.10 (1.55)	2.21 (1.25)	1.49 (1.63)	F(2, 69)=1.66, P=.197
6. I worry about telling people that I take medicines/tablets for mental health problems.	.85 (1.27)	2.00 (1.62)	1.71 (1.60)	F(2, 66)=2.94, P=.060
7. I do not feel embarrassed because of my mental health problems.	2.29 (1.62)	2.00 (1.36)	1.97 (1.59)	F(2, 66)=.286, P=.752
8. I avoid telling people about my mental health problems.	1.89 (1.35)	2.50 (1.53)	2.20 (1.53)	F(2, 65)=.700, P=.500
9. I feel the need to hide my mental health problems from my friends.	1.80 (1.47)	2.21 (1.67)	1.39 (1.55)	F(2, 67)=1.52, P=.227
10. I find it hard telling people I have mental health problems.	2.15 (1.42)	2.21 (1.63)	2.06 (1.47)	F(2, 67)=.065, P=.937
Positive aspects	2.55 (.66)	2.45 (.86)	2.27 (.84)	F(2, 70)=.909, P=408
1. Having had mental health problems has made me a more understanding people.	3.05 (1.36)	2.73 (1.28)	2.43 (1.56)	F(2, 70)=1.23, P=.300
2. Some people with mental health problems are dangerous (R)	2.71 (1.42)	2.36 (1.50)	2.59 (1.52)	F(2, 69)=.245, P=.784
3. People have been understanding of my mental health problems.	2.67 (1.32)	2.57 (1.34)	2.30 (1.37)	F(2, 69)=.562, P=.573
4. My mental health problems have made me a more accepting of other people.	2.24 (1.73)	2.86 (1.51)	2.06 (1.55)	F(2, 67)=1.26, P=.291
5. Having had a mental health problem has made me a stronger person.	2.52 (1.75)	2.14 (1.46)	2.27 (1.64)	F(2, 69)=.260, P=.772

Note. *SD* standard deviation. ANOVA analysis of variance. According to variables, the *N* can be affected by missing data. All data are self-reported.

Table 9. Participants' ratings on occupational self-efficacy by psychiatric diagnosis.

OSE – Occupational Self Efficacy short form	Mood disorders *M* (*SD*)	Personality disorders *M* (*SD*)	Schizo-phrenia *M* (*SD*)	ANOVA
Interview data	N = 53	N = 41	N = 92	
Possible range	1-6	1-6	1-6	
Average	3.93 (1.34)	3.80 (1.51)	3.98 (1.12)	F(2, 178)=.265, P=.767
1. Thanks to my resourcefulness, I know how to handle unforeseen situations in my job.	4.04 (1.75)	3.86 (1.83)	3.68 (1.59)	F(2, 174)=.757, P=.471
2. If I am in trouble at my work, I can usually think of something to do.	3.72 (1.90)	4.05 (1.73)	3.77 (1.70)	F(2, 176)=.456, P=.635
3. I can remain calm when facing difficulties in my job because I can rely on my abilities.	4.00 (1.84)	4.03 (1.80)	4.27 (1.51)	F(2, 174)=.541, P=.583
4. When I am confronted with a problem in my job, I can usually find several solutions.	4.02 (1.79)	3.85 (1.82)	4.03 (1.68)	F(2, 177)=.164, P=.849
5. No matter what comes my way in my job, I'm usually able to handle it.	3.82 (1.80)	3.58 (1.91)	3.60 (1.64)	F(2, 172)=.305, P=.737
6. My past experiences in my job have prepared me well for my occupational future.	3.94 (1.86)	3.85 (1.90)	4.07 (1.75)	F(2, 173)=2.19, P=.804
7. I meet the goals that I set for myself in my job.	4.29 (1.78)	4.11 (1.78)	4.43 (1.34)	F(2, 173)=.572, P=.565
8. I feel prepared to meet most of the demands in my job.	4.35 (1.72)	4.13 (1.84)	4.49 (1.29)	F(2, 176)=.765, P=.467

Note. SD standard deviation. ANOVA analysis of variance. According to variables, the *N* can be affected by missing data. All data are self-reported.

Table 10. Participants' ratings on the ad hoc item for the evaluation of working experience in social enterprise.

Evaluation of working experience in SEn	Mood disorders *M* (*SD*)	Personality disorders *M* (*SD*)	Schizophrenia *M* (*SD*)	ANOVA
Interview data	N = 53	N = 41	N = 92	
Possible range of total score	0-10	0-10	0-10	
Average	8.10 [1.76]	6.69 [2.69]	8.03 [1.83]	F(2, 68)=2.48, P=.091

Note. SD standard deviation. ANOVA analysis of variance. According to variables, the *N* can be affected by missing data. All data are self-reported.

Table 11. Participants' ratings on work productivity by psychiatric diagnosis.

EPWS – Endicott Work Productivity Scale	Mood disorders *M* (*SD*)	Personality disorders *M* (*SD*)	Schizophrenia *M* (*SD*)	ANOVA
Interview data	N = 53	N = 41	N = 92	
Possible range of total score	0-100	0-100	0-100	
Average	75.04 (21.58)	80.80 (12.90)	79.03 (14.21)	F(2, 180)=1.60, P=.205

Note. SD standard deviation. ANOVA analysis of variance. According to variables, the *N* can be affected by missing data. All data are self-reported.

Table 12. Participants' ratings on job satisfaction by psychiatric diagnosis.

NCS – Need for Change Scale	Mood disorders *N (%)*	Personality disorders *N (%)*	Schizo-phrenia *N (%)*	χ^2 value and P value
Interview data	N = 53	N = 41	N = 92	
1. I am very dissatisfied of my job, and I feel the urgency to change it.	3 (6.5)	1 (2.7)	2 (2.4)	χ^2=13.67, P=0.91
2. I am dissatisfied of my job, and I want to change it.	2 (4.3)	2 (5.4)	3 (3.6)	
3. I am not sure about what I feel for my job, and I am not sure if I want to change it.	3 (6.5)	4 (10.8)	20 (23.8)	
4. I am satisfied of my job and I don't want to change it.	19 (41.3)	14 (37.8)	40 (47.6)	
5. I am very satisfied of my job and I am sure I don't want to change it.	19 (41.3)	16 (43.2)	19 (22.6)	

Note. SD standard deviation. ANOVA analysis of variance. According to variables, the *N* can be affected by missing data. All data are self-reported.

Table 13. Participants' ratings on work engagement by psychiatric diagnosis.

UWES-9 – Utrecht Work Engagement Scale, 9 items	Mood disorders *M* (*SD*)	Personality disorders *M* (*SD*)	Schizophrenia *M* (*SD*)	ANOVA
Interview data	N = 53	N = 41	N = 92	
Possible range	0-6	0-6	0-6	
Average total scale	4.32 (1.57)	4.46 (1.38)	4.26 (1.47)	F(2, 171)=.239, P=.787
Vigor	4.02 (1.81)	4.25 (1.42)	4.03 (1.68)	F(2, 171)=.276, P=.759
Dedication	4.42 (1.69)	4.55 (1.64)	4.33 (1.63)	F(2, 171)=.261, P=.770
Absorption	4.52 (1.58)	4.56 (1.43)	4.41 (1.55)	F(2, 171)=.150, P=.861
1. At my work, I feel bursting with energy (VI-1)	4.20 (1.86)	4.22 (1.58)	4.19 (1.71)	F(2, 170)=.005, P=.995
2. At my job, I feel strong and vigorous (VI-2)	4.10 (1.99)	4.15 (1.64)	3.88 (1.88)	F(2, 169)=.378, P=.686
3. I am enthusiastic about my job (DE-1)	4.55 (1.71)	4.68 (1.72)	4.29 (1.76)	F(2, 168)=.775, P=.472
4. My job inspires me (DE-2)	4.34 (1.92)	4.50 (1.68)	4.17 (1.98)	F(2, 169)=.423, P=.656
5. When I get up in the morning, I feel like going to work (VI-3)	4.17 (2.05)	4.38 (1.66)	4.22 (1.97)	F(2, 165)=.135, P=.874
6. I feel happy when I am working intensely (AB-1)	4.57 (1.79)	4.40 (1.46)	4.52 (1.69)	F(2, 168)=.123, P=.884
7. I am proud of the work that I do (DE-3)	4.82 (1.70)	4.50 (2.00)	4.63 (1.65)	F(2, 169)=.375, P=.688
8. I am immersed in my job (AB-2)	4.82 (1.52)	4.65 (1.66)	4.46 (1.76)	F(2, 167)=.721, P=.488
9. I get carried away when I am working (AB-3)	4.63 (1.91)	4.63 (1.74)	4.47 (1.81)	F(2, 169)=.164, P=.849

Note. SD standard deviation. ANOVA analysis of variance. According to variables, the *N* can be affected by missing data. All data are self-reported.

Table 14. Participants' ratings on motivation to keep a job by psychiatric diagnosis.

Motivation to keep a job	Mood disorders *M* (*SD*)	Personality disorders *M* (*SD*)	Schizophrenia *M* (*SD*)	ANOVA
Interview data	N = 53	N = 41	N = 92	
Possible range	1-7	1-7	1-7	
Average	6.19 (1.26)	6.19 (1.23)	5.87 (1.20)	F(2, 180)=1.65, P=.212
1. Right now, maintaining my job is one of my main objectives.	6.23 (1.57)	6.35 (1.27)	6.01 (1.59)	F(2, 180)=1.82, P=.790
2. I am determined to continue working regardless of potential obstacles.	6.40 (1.20)	6.26 (1.41)	6.14 (1.24)	F(2, 179)=.662, P=.517
3. I really feel motivated to keep my job.	6.28 (1.28)	6.41 (1.21)	5.92 (1.42)	F(2, 179)=2.30, P=.103
4. Presently, I firmly intend to continue working.	6.31 (1.44)	6.50 (1.13)	5.91 (1.69)	F(2, 175)=2.49, P=.086
5. I am willing to put in the necessary efforts in order to maintain my job.	6.29 (1.35)	6.33 (1.14)	5.85 (1.50)	F(2, 178)=2.41, P=.093
6. I currently feel able to remain at work.	6.10 (1.62)	6.10 (1.29)	5.56 (1.73)	F(2, 177)=2.57, P=.080
7. I would be very disappointed if I were not able to keep my job.	6.42 (1.38)	6.03 (1.93)	5.96 (1.72)	F(2, 178)=1.33, P=.266

Note. *SD* standard deviation. ANOVA analysis of variance. According to variables, the *N* can be affected by missing data. All data are self-reported.

Table 15. Participants' ratings on organizational constraints by psychiatric diagnosis.

OCS – Organizational Constraint Scale	Mood disorders *M* (*SD*)	Personality disorders *M* (*SD*)	Schizophrenia *M* (*SD*)	ANOVA
Interview data	N = 53	N = 41	N = 92	
Possible range	11-55	11-55	11-55	
Total score	18.60 (8.40)	17.68 (8.57)	16.84 (6.83)	F(2, 182)=.880, P=.416
1. Poor equipment or supplies.	1.74 (1.11)	1.82 (1.14)	1.50 (.89)	F(2, 179)=1.71, P=.184
2. Organizational rules and procedures.	1.69 (.91)	1.87 (1.34)	1.59 (1.00)	F(2, 177)=.97, P=.381
3. Other employees.	2.00 (1.23)	1.74 (1.02)	1.66 (1.07)	F(2, 173)=1.51, P=.225
4. Your supervisor.	1.58 (1.05)	1.76 (1.40)	1.49 (.97)	F(2, 173)=.829, P=.438
5. Lack of equipment or supplies.	1.86 (1.27)	1.61 (.97)	1.60 (.91)	F(2, 176)=1.24, P=.316
6. Inadequate training.	1.50 (1.02)	1.58 (.92)	1.45 (.80)	F(2, 173)=.260, P=.772
7. Interruptions by other people.	2.16 (1.46)	1.74 (1.09)	1.76 (1.09)	F(2, 174)=2.01, P=.137
8. Lack of necessary information about what to do or how to do it.	1.90 (1.23)	1.55 (.90)	1.70 (1.01)	F(2, 176)=1.27, P=.282
9. Conflicting job demands.	1.82 (1.13)	1.71 (1.09)	1.56 (.86)	F(2, 172)=1.14, P=.324
10. Inadequate help from others.	1.82 (1.27)	1.72 (1.12)	1.46 (.83)	F(2, 175)=2.16, P=.118
11. Incorrect instructions.	1.55 (.89)	1.62 (1.04)	1.49 (.86)	F(2, 175)=.273, P=.761

Note. *SD* standard deviation. ANOVA analysis of variance. According to variables, the *N* can be affected by missing data. All data are self-reported.

Discussion and conclusions

The main purpose of this study was to establish the profiles of employees that suffer of a severe mental illness working in Italian social enterprises, in order to deeply investigate and better understand the work integration process for this population of disadvantaged workers. Still nowadays, having a psychiatric diagnosis can seriously limit the access to work and career advancement: while symptoms can usually be mitigated by pharmacological treatments, the inherent stigma and discrimination associated with mental illness persist (Stuart, 2006). Thus, mentally ill individuals are commonly labeled as unemployable and not able to work productively. Social enterprise represent a good alternative to the regular job-market for people with severe mental illness. In particular, their flexible environment seems to be effective in creating job opportunities for people who find it hardest to get them and in facilitating the job tenure in this population (Svanberg, Gumley & Wilson, 2010).

With this in mind, the focus of this study were the individuals, their perceptions of themselves as workers and their evaluation of the working experience in social enterprise. As expected, participants reported generally a positive evaluation of their perceptions as workers. Participants in the study reported high values on individual resources such as self-esteem and occupational self-efficacy, as well as low levels of gravity of symptoms perceived and high values of well-being. Thus, people working in social enterprises believe in their ability to successfully accomplish work tasks, and despite their mental illness they feel good at work. Positive scores were found also on the work engagement variable, meaning that participants are enthusiastic and dedicated to their job. They indeed see their work as a source of gratification, something to be proud of. In addition, workers with mental illness judged positively their job performance, with high scores at the work productivity variable. For instance, they reported that they do not lose their time by searching for materials or equipments, and that the time spent in working activity is in line with the supervisor's expectations. They feel able to focus on working tasks and they feel highly motivated to maintain their job and willing to put the necessary efforts to overcome potential obstacles to keep their job, identifying it as a main priority of their life. When asked to describe their work environment, they reported very few interruptions by others, and they do not find it difficult to accomplish their working activities because of organizational constraints, such as lack of information and equipments or incorrect

instructions. Furthermore, very low ratings were reported on the stigma scale, highlighting one more time how the social enterprise model is characterized by minor discrimination and stigmatization for this population. Thus, it was no surprise to find these workers being highly satisfied of their job and working experience in the social enterprise. Looking at the correlation between variables, the elements that negatively characterize the work environment (e.g., organizational constraints) appear to relate to lower ratings on the motivation to keep a job scale, meaning that people who are inhibited in or prevented from accomplish a task due to situational characteristics beyond their control (e.g., lack of equipments) are less motivated to keep their job. People are more motivated to work when they are satisfied with their job, when they feel vigorous and absorbed by their work, with consequently high levels of work performance perceived. Also, individuals that are self-confident and feel accepted by other the more they feel able to do their work and are happy to do so. Data highlighted also a positive relation between gravity of symptoms perceived and negative form of self-esteem, while stigma seems to rely on lower level of individual's well-being and lower levels of self-esteem as a worker. When we tested analysis of variance across different psychiatric diagnosis, in general we did not find significant differences on vocational outcomes. In sum, it seem that having a disease rather that another do not affect vocational outcomes such as general self-esteem, occupational self-efficacy, work productivity, work engagement and motivation to keep a job. However, individuals with schizophrenia were found to have minor previous working experience compared to other disabilities. This is probably due to the fact that the typical onset age of psychotic disorders such as schizophrenia is from 10 to 30 years, which usually coincide with formal education and work training. People with other psychiatric diagnosis rather than schizophrenia were found to be more likely to have children and to have a higher amount of stipend. Furthermore, people with mood disorder have been found to feel less confident in beginning new relationships and individuals with personality disorders were found to be less satisfied of their role of worker compared to the other disabilities. Overall, this study were in support of literature suggesting that the association between psychiatric diagnosis and vocational outcomes is weak (Ciardiello et al., 1988; Moller et al., 1982; Schwartz et al., 1975; Strauss and Carpenter, 1972, 1974 cited in Rogers and MacDonald-Wilson, 2011).

Findings of this study are somewhat limited by the fact that data come from self-reports of illness and vocational outcomes. For sure we were interested in deeply understand the working experience in social enterprise by the point of view of individuals

that suffer from serious mental illness, but it would have been relevant to have included the perspective of other important informants, such as the supervisor or co-workers, on the environmental characteristics (e.g., social support and workplace accommodations). In addition, mental disability is a process, and casual sequences are difficult to infer even with longitudinal studies. Also, the study population was selected through convenience sampling. Neither the social enterprises nor the participants were randomly selected, but rather they self-selected, meaning that the study sample is not representative of the Italian reality.

Despite its limits, this study represents a first contribution in the understanding of the social enterprise model in offering vocational opportunities to people with severe mental illness and being effective in it. Indeed, what emerges in this study is a positive picture of the working experience of disadvantage workers in the context of social enterprise, with a job tenure rate of 82 months, higher than the one on the regular job market, which rarely exceed one year (Verdoux, Goumillous, Monello & Cougnard, 2010; Provencher, Gregg, Mead, Mueser, 2002; Catty, Lossouba et al., 2008; Bond & Kukla, 2011; Lanctot et al., unpublished). To conclude, the positive results of this study highlight how there is no single answer or program that can radically increase employment opportunities for mentally ill individuals, but the right combination of individual resources, job resources and a work environment characterized by minor stigma and discrimination can make an enormous difference in promoting the well-being of disadvantaged workers. Hopefully, learning more on the social enterprise model will make it possible the transfer the know-how to the open labour market organizations.

Study 2. Evaluating the motivation to obtain and maintain employment in people with severe mental illness[14].

Abstract

The purpose of this study is to determine the validity of the Motivation to Find a Job scale and the Motivation to Keep a Job scale in individuals with severe mental illness. Two studies were carried out to test the main hypotheses. Study 1: validation of the Motivation to Find a Job scale with Canadian people with severe mental illness registered on supported employment programs (N=366). Study 2: validation of the Motivation to Keep a Job scale with Italian people with severe mental illness employed in social enterprises (N=268). Exploratory Factor Analysis suggested a one-dimension model for the Motivation to Find a Job scale, explaining 55.1% of variance, with an internal consistency of .85. Confirmatory Factor Analyses conducted on the Canadian sample (Motivation to Find a Job scale) and on the Italian sample (Motivation to Keep a Job) showed good fit indices. Concurrent validity of the scale was supported: the relationship of motivation with job-related attitudes and severity of symptoms were all in the direction hypothesized. The psychometric properties of both tools suggest that the application of the Motivation to Find a Job scale and the Motivation to Keep a Job scale is relevant in work disability research. Those tools, in fact, may facilitate the estimation of people's willingness to find a job and to remain at work after the onset of a severe mental illness, and they can be used as significant means with which to predict vocational success.

[14] This article is in under review for publication as: P. Villotti, M. Corbière, S. Zaniboni, F. Fraccaroli. *Evaluating the motivation to obtain and maintain employment in people with severe mental illness.*

Introduction

Despite the proliferation of programs developed in the past three decades to help people with severe mental illness gain employment, those persons still experience a very high unemployment rate (Corbière, Mercier & Lesage, 2004; Hall, Graf, et al., 2003; Liu, Hollis et al., 2007). Many experts have also noted that persons with severe mental illness have at least as much difficulty in maintaining jobs as finding them (Bond & Donel, 1991; Cook, 1992; Macdonald-Wilson, Revell et al., 1991; Becker, Drake et al., 1998). Job tenure for people with severe mental illness is often brief, lasting an average of 3 to 7 months (Gervey, Parish & Bond, 1995; Shankar, 2005; Becker, Drake et al., 1998; Roessler, 2002; Corbière, Lanctot et al., 2009; McGurk & Mueser, 2006; Xie, Dain et al., 1997; Fabian, 1992; Corbière, Lesage et al., 2006). In recent years, the challenge of supporting people in obtaining and maintaining jobs has led to the development of a range of employment support models and a proliferation of programs to help people with psychiatric disabilities gain and maintain employment (Shankqr, 2005). Research has shown some of the program characteristics that can lead to success. Supported employment programs have been particularly effective in helping people obtain jobs quickly (Bond, 2004; Bond, Becker et al., 2001; Bond, Drake et al., 1997; Crowther. Marshall et al., 2001; Ridgway & Rapp, 1998; Twamley, Jeste & Lehman, 2003; Salyers, McGuire et al., 2008; Corbière & Lecomte, 2009). Despite the relative success of supported employment in helping people obtain jobs, studies show that nearly half of participants leave their supported employment positions within six months (Gervey, Parish & Bond, 1995; Shankar, 2005) and that job tenure for people who benefit from supported employment services is typically brief, often lasting less than five months (Corbière & Lecomte, 2009; McGurk, Mueser & Pascaris, 2005).

The factors that seem to contribute to vocational successes and the recovery of people with severe mental illness are often related to a positive fit among the worker, the task, and the workplace (Leufstadius, Eklund & Erlandsson, 2009; Kirsh, 2000; Woodside, Schell & Allison-Hedges, 2006). Several authors (Corbière & Lecomte, 2009; McDermid, 2005; Svanberg, Gumley & Wilson, 2010; Zaniboni, Fraccaroli et al., 2011) suggest that social enterprises may be well placed to respond to the need of people with severe mental illness to gain and maintain employment. A social enterprise is a business venture created specifically to provide employment and career opportunities for people

who are unemployed, disabled, or otherwise disadvantaged. It is a business that has a significant number of employees who are disabled or have other disadvantages, and who are paid a market-rage wage or salary appropriate to the work. Social enterprises provide a flexible environment and promote feelings of belonging, success, competence and individuality (Svanberg, Gumley & Wilson, 2010). Those features seem to make social enterprises distinct from other vocational rehabilitation schemes, and to help people with mental illness maintain successful employment for a longer period of time.

Notwithstanding the above-mentioned difficulties that people with severe mental illness may encounter during their work integration process, one of the main factors identified in the literature as being important in helping participants return to work, or to remain employed following the onset of a severe mental illness, is having the motivation to work (Dunn, Wewiorski & Rogers, 2010). It is generally agreed that motivation to work has a significant influence on whether people with severe mental illness gain competitive employment (Catty, Lissouba et al., 2008). For people with a severe mental illness, being motivated to work means that they have a personal quality that pushes them to take advantage of work opportunities that arise. By contrast, a lack of motivation associated with many people with mental illnesses has been found to be a major barrier against employment (Honey, 2003; Braitman, Counts et al., 1995) and one of the most frequent reasons for job separation (Honey, 2003; Lagomarcino, 1990; Lagomarcino & Rusch, 1990). The challenge of supporting people in obtaining and keeping jobs could easily begin by exploring the motivation of individuals with mental illnesses to work. Indeed, understanding the factors related to vocational success, such as motivation, may help people with mental disorders achieve employment and maintain it over time. To our knowledge, no specific instrument has been developed to capture the motivation to find and to keep a job in persons with severe mental illness, considering personal characteristics (e.g., severity of symptoms).

The overall objective of this study is to determine the validity of the Motivation to Find a Job and the Motivation to Keep a Job scales in individuals with severe mental illness. The three specific objectives are: (1) to validate the Motivation to Find a Job scale for people with severe mental disorders registered on supported employment programs, (2) to validate the Motivation to Keep a Job Scale for people with severe mental disorders employed in social enterprises, and (3) to predict vocational successes (i.e. obtaining competitive employment) in people with severe mental illness by considering motivational aspects and personal characteristics.

Method

To achieve the main objectives of this paper, two studies were required. *Study 1:* validation of the Motivation to Find a Job scale with people with severe mental illness enrolled on supported employment programs located in Canada (Corbière, Bond et al., 2004-2007). *Study 2*: validation of the Motivation to Keep a Job scale with people with severe mental illness employed in social enterprises located in Italy (Zaniboni, Fraccaroli et al., 2011).

Study 1

Data were collected from a Canadian study concerning the work integration of people with severe mental disorders registered on supported employment programs located in the Greater Vancouver area in Canada. The original study consisted of two phases. Phase 1: all participants answered a battery of questionnaires at their entry into supported employment programs. Phase 2: participants were interviewed by telephone on their work outcomes nine months after their Phase 1. The research project was reviewed and approved by the ethic boards of the University of British Columbia as well as Health Authorities and Hospitals in British Columbia (Corbière, Bond et al., 2004-2007). Participants received compensation for their time and were recruited through their employment specialist, who briefly presented the study to individuals who matched the research criteria. A total of 366 participants accepted and signed a consent form to participate in the study. Eligibility criteria for participants were as follows: looking for a job, having a psychiatric diagnosis, being 18 years or older, having basic written and spoken English. For the purpose of this article, we will focus only on the data that stem from The Motivation to Find a Job (MTFJ) scale and the follow-up phase of the original study. The MTFJ scale was designed by Corbière, Laisnè & Lecomte in 2000 with the aim of exploring the conditions that tend to increase or reduce the motivation to find a job in people with mental illness. The questionnaire consists of 7 items measuring motivation to obtain a job which are measured on a seven-point Likert scale from 1 “completely disagree” to 7 “completely agree”. The items of the MTFJ scale are intended to measure motivation relative to obtaining a job from various perspectives: intention, being motivated, self-efficacy in overcoming obstacles by making the necessary efforts, and the importance of work (items are reported in Table 2). Two separate factor analyses were

conducted on two distinct randomly-selected subsamples from the original Canadian sample (N = 366). An Exploratory Factor Analysis was carried out on the first subsample (N = 189) to explore potential emerging dimensions of the MTFJ scale. Principal Factor Analysis (PCA) with Varimax rotation was used. Confirmatory Factor Analysis (CFA) was then carried out on the second subsample (N = 168) to verify the factor structure obtained from the results of the exploratory factor analysis. A logistic regression was performed in order to explore the predictive validity of the MTFJ scale.

Study 2

Several social enterprises offering work integration services to disadvantaged people located in northern Italy took part in this study. Participants were recruited through the “*Responsabile Sociale*”. This was the figure at the social enterprise who followed the work integration of disadvantaged people, and who briefly presented the study to workers who matched the research criteria. For privacy and confidentiality reasons, the authors of this paper did not have access to the participants’ specific diagnoses. Eligibility criteria for participants were the following: having a psychiatric diagnosis, being 18 years or older, being employed in a social enterprise. In order to explore the conditions that tend to increase or reduce the motivation to keep a job in people with mental illness, the Motivation to Find a Job scale was adapted to the context of maintaining employment. The Motivation to Keep a Job scale was translated into Italian (Zaniboni, Corbière et al., 2008). In order to validate the Motivation To Keep A Job (MTKJ) scale, data collected at baseline from this study were used (N = 268). Participants received compensation for their time. The research project was reviewed and approved by the ethics committee of the University of Trento. After a complete description of the study had been given to the participants, their written informed consent was obtained. The MTKJ scale translated into Italian consists of 7 items measuring the motivation to keep the job once obtained. The items are measured on a seven-point Likert scale from 1 “completely disagree” to 7 “completely agree”. The items of the MTKJ scale aim to measure the same conceptual elements as included in the MTFJ scale (items are reported in Table 2). A Confirmatory Factory Analysis (CFA) was conducted on the Italian sample (N = 268) to validate the adaptation of the MTFJ to the context of keeping a job. Correlation analysis was conducted in order to verify the convergent and discriminant validities of the Motivation to Keep a Job scale.

Results

Study 1

The sample comprised 181 women and 185 men, whose average age was 40.1 years (SD 10.6). Most of the sample were single (N = 233; 63.7%). As for educational level, 57 (15.6%) had completed some high school or less, 148 (40.4%) had obtained a high-school diploma, 63 (17.2%) had obtained a collegial degree, and 90 (26.2%) had received a university-level education. In terms of mental illness, 205 (56%) suffered from mood disorders, 102 (27.9%) reported psychotic disorders in the schizophrenia spectrum, 35 (9.6%) reported anxiety disorders, and 24 (6.6%) reported having other types of psychopathology. Participants' characteristics are reported in Table 1.

Table 1. Participants' socio-demographic characteristics for the study samples.

	Study 1 – Canadian sample	Study 2 – Italian sample
Interview data	N=366	N=268
Gender		
Female	181 (49.5%)	91 (33.9%)
Male	185 (50.5%)	177 (66.1%)
Marital status		
Single	233 (63.7%)	213 (79.5%)
Married	133 (36.3%)	55 (20.5%)
Average age	40.1 years old (SD=10.6)	41.23 years old (SD=8.58)
Education		
Middle school or less	148 (40.4%)	161 (60.1%)
High school completed	63 (17.2%)	97 (36.2%)
University-level education	90 (26.2%)	10 (3.7%)
Severity of symptoms perceived	1.03 (DS=.74) (.97)	0.48 (DS=0.19) (.97)

Note. Severity of symptoms perceived was tested with the 53-item Brief Symptom Inventory (BSI) developed by Derogatis in 1983. Items are rated on a five-point Likert scale ranging from 0 (not at all) to 4 (extremely). Coefficient alpha in both studies was .97.

The exploratory factor analysis suggested a one-dimension scale explaining 55.1% of the variance (Table 2). The scale had an internal consistency alpha coefficient of .85. The CFA was conducted on the MTFJ scale to verify the one-factor model with 7 items (Table 2). The model showed good fit indices (Table 3).

To predict vocational successes – i.e. obtaining competitive employment – a logistic regression analysis was carried out. In particular, only participants who completed the follow-up phases (Phase 2) were used. Furthermore, we excluded from the analyses those participants who had obtained transitional employment rather than competitive employment (N = 21). Consequently, the final sample size was 281 participants. In order to explore the relationship between individual characteristics and the work outcome, a model was tested including gender, age, motivation to find a job, and

severity of symptoms. Logistic regression generated a model in which the motivation to find a job was the only significant predictor of obtaining competitive employment. In particular, participants with high scores obtained on the MTFJ scale were 1.3 times more likely to obtain a competitive job (OR = 1.346, 95% CI, 1.02 to 1.78) (Table 4).

Table 2. Exploratory Factor Analysis (EFA; N = 189) and Confirmatory Factor Analysis (CFA; N=168) of Motivation to Find a Job; and Confirmatory Factor Analysis (CFA; N=268) of Motivation to Keep a Job (Italian version in italics).

Motivation to Find a Job	EFA	CFA lambda-x(theta-delta)
1. Right now, getting a job is one of my main objectives	.86	.78 (.39)
2. I am determined to get a job regardless of potential obstacles	.83	.78 (.38)
3. I really feel motivated to find a job	.80	.82 (.33)
4. Presently, I firmly intend to obtain a job	.79	.59 (.66)
5. I am willing to put in the necessary efforts in order to get a job	.68	.65 (.58)
6. I currently feel able to enter in the workplace	.68	.71 (.50)
7. I would be very disappointed if I were not able to get a job in weeks to come	.50	.45 (.80)
Motivation to Keep a Job		**Revised CFA lambda-x(theta-delta)**
8. Right now, maintaining my job is one of my main objectives; Al momento, mantenere il mio lavoro è uno dei miei principali obiettivi	9.	10. .81 (.34)
11. I am determined to continue working regardless of potential obstacles; Sono determinato a continuare a lavorare qualunque siano gli eventuali ostacoli	12.	13. .76 (.42)
14. I really feel motivated to keep my job; Mi sento realmente motivato a tenere il mio lavoro	15.	16. .87 (.24)
17. Presently, I firmly intend to continue working; Attualmente, sono fermamente intenzionato a continuare a lavorare	18.	19. .70 (.51)
20. I am willing to put in the necessary efforts in order to maintain my job; Sono disposto a fare gli sforzi necessari per mantenere il mio lavoro	21.	22. .85 (.27)
23. I currently feel able to remain at work; Attualmente mi sento in grado di rimanere al lavoro	24.	25. .79 (.38)
26. I would be very disappointed if I were not able to keep my job; Sarei molto deluso se non fossi in grado di tenere il mio lavoro	27.	28. .50 (.75)

Note. Standardized parameter estimates are showed for the confirmatory factor analysis; lambda-x, $p < .01$

Table 3. Goodness-of-Fit Indices.

	χ^2	*p*	df	N	χ^2/df	NNFI	CFI	RMSEA
CFA-Motivation to Find a Job	12.77	.54	14	168	.91	1.00	.1.00	.0
CFA-Motivation to Keep a Job	50.81	.00	14	268	3.63	.97	.98	.09
Revised CFA-Motivation to Keep a Job	33.39	.00	13	268	2.57	.98	.99	.07

Note. χ^2 = Chi-square Test; χ^2/df = Normed Chi-square; NNFI = Non-Normed Fit Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation.

Table 4. Patient characteristics predictor models

Predictors	*OR(95%CI)*	*P*
1. Gender	0.860 (0.524-1.412)	0.551
2. Age	0.995 (0.972-1.019)	0.697
3. Motivation to find a job	1.346 (1.016-1.783)	0.039
4. Severity of symptoms perceived	1.226 (0.857-1.754)	0.266

Note: N = 281. Obtaining competitive employment as dependent variable.

Study 2

A total of 268 participants (177 men) registered with 33 social cooperatives located in Northern Italy agreed to participate in the study. Participants ranged in age from 20 to 64 years (M = 41.23; SD 8.58). As for educational level, 145 (55.2%) had completed middle school or less, 97 (36.2%) had completed some high school, and 10 (3.7%) had received a university-level education. In terms of marital status, 213 (79.5%) were single or separated, widowed or divorced, and 33 (12.3%) were married or with a domestic partner. The majority of the participants declared that they had had previous work experience (N = 240, 89.6%) and that they had been employed for an average of 74 months (DS 60.05, from a minimum of 12 months to a maximum of 336 months of activity in the same social enterprise where they were currently employed). Description of participants' characteristics are reported in Table 1. The CFA was conducted on the MTKJ to verify the one-factor model with 7 items. The model showed satisfactory fit indices except for the RMSEA index (Table 3). The results highlighted a correlation error on items 4 and 5, suggesting that these two items are linked. The revised model showed better fit indices and particularly for the RMSEA index (Table 3). Table 2 shows the standardized parameter estimates for the revised confirmatory factor analysis model. In light of the findings of previous studies, we expected motivation to be positively related to job-related attitudes, such as job satisfaction. Table 5 shows the correlations between the variables. The results showed that job satisfaction is significantly correlated with the motivation to keep a job ($r = .294$, $P < 0.01$). Participants with high scores on the motivation to keep a job scale planned to continue working at the same social enterprise at which they were currently employed ($r = .249$, $P < 0.01$) and did not intend to stop working in the future ($r = -.246$, $P < 0.01$). In addition, we tested the assumption that motivation to keep a job is negatively related to severity of symptoms. As expected, severity of symptoms ($r = -.267$, $P < 0.05$) was negatively correlated with motivation to keep a job.

Table 5. Means, Standard Deviations, and Correlations between variables.

	M	*SD*	1	2	3	4
1. Motivation to keep a job	5.97	1.31	-			
2. Job satisfaction	3.94	1.00	.294**	-		
3. Plan to stop working	2.88	1.51	- .246**	-.505**	-	
4. Severity of the symptoms	1.95	0.74	- .267*	-.035	.089	-
5. Plan to work in the same social enterprise	3.73	1.49	.249**	.515**	-.011	-.072

Note: $N = 268$. Job satisfaction, organizational constraints, severity of the symptoms, plan to stop working and to work in the same social enterprise were on 5-point Likert scales. Motivation to keep a job (1-7) and work engagement (0-6) were on 7-point Likert scales.
* $p < .05$; ** $p < .01$

Discussion

The findings reported in *Study 1* and *Study 2* support the internal validity of the Motivation to Find a Job (MTFJ) scale, as applied to a sample of people with severe mental illness registered on supported employment programs in Canada, and of the Motivation to Keep a Job (MTKJ) scale applied to a sample of people with severe mental illness employed in Italian social enterprises. The results from *Study 1* show that motivation to find a job is a significant predictor of obtaining competitive employment. Like many other studies (Dunn, Wewiorski & Rogers, 2010; Catty, Lissobua et al., 2008; Drake & Bond, 2008), we did not find any association among age, gender, and employment outcomes; moreover, no clinical variables, such as gravity of symptoms, were predictive. The convergent and discriminant validity of the Motivation to Keep a Job scale were tested in *Study 2*. In particular, the relationships of motivation with job-related attitudes and severity of symptoms were all in the hypothesized direction, and the results showed that high scores on the MTKJ scale were negatively related to the willingness to stop working in the future.

Given the difficulties in predicting employment in the field of mental illness and the limited guidance provided by empirical evidence on the factors related to vocational outcomes (Tsang, 2010; Wewiorski & Fabian, 2004), our study further highlights the importance of the motivation to work in predicting work outcomes (e.g., obtaining employment). Both studies (1 and 2) provide a brief and easy-to-use scale which can be useful for gathering clinical implications. This advantage is of no little account, given the

need of research and applications in organizational psychology to have tools able adequately to evaluate, and with few items, the construct under examination. From a practice and clinical point of view, the new measure of motivation presented in this study can assist employees and clinicians in helping people with low motivation to benefit from specific training programs or interventions aimed at helping them enhance their awareness of being workers. Indeed, the MTFJ and MTKJ scales should not be seen as a screening tools useful to employers seeking highly-motivated people to hire, but as a starting point for strategies intended to help low-motivated people to stay in work, improving their level of engagement and vocational outcomes in terms of productivity. For example, the tools presented in this study could well be useful to clinicians who use the motivational interviewing technique to assist people to resolve motivational conflicts associated with employment. At various points in the motivational interviewing process, as recommended by Lloyd and King (2010), it is useful to have a quantitative indication of the level of motivation. Since motivational barriers may hinder people with severe mental illness from attempting to enter the labour force, we suggest that clinicians consider our tools as means with which to help such people clarify and enhance their motivation to find and to keep a job.

The present study has some limitations that should be pointed out. The limitations common to both studies are that all the measures were self-reported, and we did not examine how motivation might vary with the demographic and clinical characteristics of the participants, so that the studies did not track variables that may have influenced motivation. In addition, studies populations were selected by means of convenience sampling. Neither vocational services (e.g., supported employment programs and social enterprises) nor participants were randomly selected; rather, they self-selected. Finally, demonstrating the significance of motivation in successful vocational outcome is an important first step in examining the work integration of people with severe mental illnesses, but it is certainly not the last step. In regard to *Study 2*, an additional limitation is that the interviews were conducted in social enterprises located in Northern Italy. Therefore, generalization beyond this context is questionable, because it comprises a number of financial, insurance, and government facilitations larger than the national average. Also, at the time when this paper was written, the study design was cross-sectional, so that we were unable to assess the motivation to keep a job as a predictor of job tenure for people with severe mental illness.

Despite its limitations, this study has captured significant aspects of work integration in people with severe mental illness through the variables assessed (motivation to find and to keep a job). Moreover, the use of sophisticated statistical analyses (exploratory and confirmatory factor analyses) with two separate and international samples (Canadian and Italian) lends strong support to the validity of our findings. Another strength of the study is that it has examined the motivation to work in two different contexts: supported employment programs, and social enterprises. In particular, the former is known worldwide as an efficient strategy to help disadvantaged people gain employment, whilst the latter is a new (and not yet widely known) form of enterprise that seems significantly able to help people with severe mental illness sustain employment. The next steps in the validation process of the tools presented in this paper will be to consider the predictive validity of the Motivation to Keep a job scale longitudinally. Moreover, further investigations are necessary to determine the actual benefits of motivation on the work integration process and the potential fluctuations of the motivation across time. Variations in terms of motivation to obtain competitive employment could be further investigated to identify the external and internal reasons for these changes. Furthermore, changes vis-à-vis motivation to maintain employment could be related to psychosocial variables such as a lack of workplace accommodations, and then interventions could be implemented in the social enterprise to facilitate the work pace of people with severe mental illness (Fossey & Harvey, 2010). Other reasons for these changes may be inherent to the employee's need to integrate into the regular job market or a level of self-efficacy in performing work tasks. Consequently, changes in motivation (to obtain and maintain employment) could be investigated further to intervene better both on people with severe mental disorders and on the workplace per se. Future avenues for inquiry could be organizational (e.g. workplace accommodations) and individual (e.g., self-efficacy) aspects of the work integration of people with severe mental disorders considered from a longitudinal perspective.

Study 3. Individual and environmental factors related to job satisfaction in people with severe mental illness employed in social enterprises[15].

Abstract

The purpose of this study was to enhance understanding of the impact of individual and environmental variables on job satisfaction among people with severe mental illness employed in social enterprises. A total of 248 individuals with severe mental illness employed by social enterprises agreed to take part in the study. We used logistic regression to analyse job satisfaction. A model with job satisfaction as the dependent variable, and both individual (occupational self-efficacy and severity of symptoms perceived) and environmental (workplace) factors (provision of workplace accommodations, social support from co-workers, organizational constraints) as well as external factors (family support) as predictors, was tested on the entire sample. All findings across the study suggest a significant positive impact of both individual and environmental factors on job satisfaction. People with higher occupational self-efficacy who were provided with workplace accommodations and received greater social support were more likely to experience greater job satisfaction. These results suggest that certain features of social enterprises, such as workplace accommodations, are important in promoting job satisfaction in people with severe mental illness. Further studies are warranted to expand knowledge of the workplace features that support employees with severe mental illness in their work integration process.

[15] This article is in under review for publication as: P. Villotti, M. Corbière, S. Zaniboni, F. Fraccaroli. *Individual and environmental factors related to job satisfaction in people with severe mental illness employed in social enterprises.*

Introduction

Work has been shown to be of great significance in mental health and a very meaningful and desirable activity for people with severe mental illness (Anthony, Coher & Farkas, 1990; Tsang, Fong et al., 2010; Kirsh, Cockburn & Gewurtz, 2005). Unfortunately, unemployment rates for people with severe mental illness are still unacceptably low and significantly lower than those for the general population or persons with physical disorders (Baldwin & Marcus, 2010). Yet considerable evidence shows that despite their frequent outsider status, people with mental illness themselves often express the desire to work because they perceive work to be a major purpose in life (Drake, Becker & Bond, 2003; Kukla & Bond, 2009; Leufstadius, Eklund & Erlandsson, 2009). Furthermore, several authors suggest that given e appropriate opportunities and support, and access to the right to which they are entitled as human beings (as stated in the United Nations Universal Declaration of Human Rights, 1948), success in employment for this population can be expected (Cook & Razzano, 2000; Crowther, Marshall et al., 2001). If employed, consumers of mental health services can experience significant benefits (Fossey & Harvey, 2010; Lloyd, 2010; Rinaldi & Perkins, 2004; Drake, McHugo et al., 1999). In particular, job satisfaction has been shown to impact on an individual's mental and physical health and overall satisfaction with life (for a summary of these impacts, see Sweeney & Witmer, 1991; Balzer, Kihm et al., 1997).

A large number of factors and reasons can be cited to explain the unemployed status and difficulties in job retention experienced by people with severe mental illness (Catty et al., 2008; Bond & Drake, 2008), but according to Schultz and Rogers (2011), the biggest barrier remains their limited access to a supportive and non-discriminatory workplace. Bond and Drake (2008) pointed out that environmental factors are presumed to have greater impact on employment than patient characteristics, yet the former have been little studied to date. Several studies conducted in an effort to predict employment status from individual characteristics (e.g., clinical and demographic factors) have yielded conflicting results, and patient-related factors appear to account for less than 10% of the variance in vocational outcomes (Bond & Drake, 2008; Corbière, Zaniboni et al., 2011). To provide a more complete model of employment success, individual characteristics should be seen as factors interacting with both service characteristics and accommodation characteristics, as recently suggested by several authors (Martz & Xu, 2008; Schmidt & Smith, 2007; Solovieva, Dowler & Walls, 2011). Implementing workplace

accommodations for people with severe mental illness is a vital tool for increasing job satisfaction and consequently, job tenure. Indeed, there is a demonstrated (Resnick & Bond, 2001; Xie, Dain et al., 1997; Bond, 1994) positive relationship between job satisfaction and job tenure.

Regarding psychological factors, neither diagnosis nor symptoms seem to be significant in terms of explaining employment success (Grove & Membrey, 2005; Honey, 2000), but self-efficacy may have an impact on vocational outcomes such as job satisfaction. People with a higher level of self-efficacy in fact persist longer in the face of obstacles (e.g., organizational impairments) and set themselves more challenging goals (e.g., continue to work) (for a review of the value that occupational self-efficacy can have in organizations, see Rigotti, Schyns & Mohr, 2008).

Regarding service and accommodation characteristics, in a study conducted by Kirsh (2000), people with mental illness "value a friendly, respectful, communicative work environment with a culture of flexibility and inclusion" (p. 27). Also, the organization's willingness to accommodate individuals' needs, particularly their need for flexibility in terms of time and duties, is thought to have considerable impact on job satisfaction, the ability to cope with illness and the ability to maintain employment (Krish, 1996; 2000; Scheid & Anderson, 1995). A recent study by Solovieva et al (2010) suggests that "the implementation of job accommodations for individuals with disabilities is a vital tool for increasing workplace productivity" (p. 40). Another theme found to be important in the literature is that of the social relationships between, and the personal traits and behaviours of, supervisors and co-workers: demanding supervisors with critical and unsupportive attitudes are seen as a source of stress, while those who provide feedback, communicate openly and are fair, supportive and encouraging are seen as great facilitators of employment success (Corbière, Lanctot et al., 2009; Fossey & Harvey, 2010). At the same time, co-workers who are open to friendship and have an attitude of acceptance are also important (Comardese & Youngman, 1995; Kirsh, 2000; Scheid & Andrerson, 1995; McCrohan, Mowbray et al., 1994; Van Dongen, 1996). Supports within and beyond the workplace have been found to be important factors in helping people with mental illness find and sustain employment (see Fossey & Harvey, 2010 for a review of these supports). In particular, workplace supports such as training and support in learning, positive relationships with colleagues, an accepting workplace culture and effective staff management, as well as adjustments to work hours, schedules and tasks, were found to be

crucial to job retention (Secker & Membrey, 2003; Secker, Membrey, et al., 2003; Secker, Membrey et al., 2002; Fossey & Harvey, 2010).

Implementation of workplace accommodations, provision of ongoing support from the environment and an environment conducive to the development of high levels of self-efficacy in disadvantaged workers are all features that appear to be well represented in social enterprises. A social enterprise is a business venture created specifically to provide employment and career opportunities for people who are unemployed, disabled or otherwise disadvantaged (Corbière & Lecomte, 2009; Svanberg, Gumley & Wilson, 2010). In social enterprises, a consistent percentage of positions is dedicated to employees who have disabilities or are disadvantaged for various reasons; all workers are paid at the market rates or productivity-based rates; all employees are provided with the same employment opportunities, rights and obligations; attention is paid to mental health issues; the environment is characterized by the presence of less stigmatization and discrimination; and social support and workplace accommodations are provided to facilitate the work integration of disadvantaged people (Svanberg, Gumley & Wilson, 2010; Williams, Fossey & Harvey, 2010).

Despite the importance of the psychosocial characteristics of the workplace in helping people with severe mental illness (Kirsh, 1996; 2000), little research has yet been undertaken in social enterprises (Schneider, 2005). Job satisfaction (Resnick & Bond, 2001; Dorio, 2004) and job accommodations (Fabian, Waterworth & Ripke, 1993) are found to contribute to longer job tenure for people with severe mental illness (Dorio, 2004). Yet job satisfaction has been almost entirely absent from research investigating vocational outcomes (Resnick & Bond, 2001), and to the best of our knowledge, there are no studies examining predictors (e.g., workplace accommodations, social support, self-efficacy) of job satisfaction in workers with mental illness who are employed in social enterprises.

In this study, we investigated the relationship between individual characteristics (e.g., occupational self-efficacy), features of the workplace environment (e.g., provision of workplace accommodations in social enterprises) and job satisfaction in people with severe mental illness. We hypothesized that people with higher levels of self-efficacy and whose work environment provided more workplace accommodations and social support would report greater job satisfaction. Thus, our intent was to explore the spectrum of workplace accommodations available for employees with mental disabilities working in

social enterprises, and the impact of those accommodations on job satisfaction, taking into account the individual characteristics of these employees.

Method

Data collection and participants

The data used for this study came from a broader research project concerning the work integration of people with severe mental illness employed in Italian social enterprises. Several social enterprises offering work integration services to disadvantaged people and located in five regions of northern Italy (Trentino Alto Adige, Veneto, Emilia Romagna, Lombardia, and Piemonte) took part in the study.

Participants were recruited by the "Responsabile Sociale," the person inside the social enterprise who follows the work integration of disadvantaged people and who briefly presented the study to clients who fit the research criteria. Only participants 18 years of age or over who were employed in a social enterprise and who suffered from a severe mental illness were eligible to take part in the study. For the last inclusion criterion, the "Responsabile Sociale" singled out from among all the employees those who suffered from a severe mental illness and asked them to participate voluntarily in the study. For privacy and confidentiality reasons, the authors of this paper did not have access to the participants' specific diagnoses. Participants received compensation for their time. The research project was reviewed and approved by the Ethics Committee of the University of Trento.

A total of 248 participants (168 men) employed by 36 social enterprises in northern Italy agreed to participate in the study. They ranged in age from 20 to 64 years ($M = 41.17$; $SD = 8.51$). Regarding educational level, 136 (54.8%) had completed middle school or less, 98 (39.5%) had completed some high school and 10 (4%) had completed a university-level education. In terms of marital status, 204 (82.3%) were single, separated, widowed or divorced, while 34 (13.7%) were married or living with a common-law partner. The majority of the participants declared that they had had previous work experiences ($N = 227$, 91.5%). They worked an average of 28.30 hours a week ($SD = 11.57$).

Measures

The broader research project involved the completion of a battery of questionnaires, one of which was demographic in nature and was being pilot-tested. As this article examines job satisfaction and its relationship with workplace accommodations, social support, organizational constraints, severity of symptoms perceived and occupational self-efficacy, only those instruments assessing these variables will be discussed here.

Severity of the symptoms perceived. To assess the severity of symptoms perceived, we used the 53-item Brief Symptom Inventory (BSI; Derogatis, 1993). The BSI was designed to measure nine symptom constructs, and 49 of the items are used as indicators for these subscales. The constructs are Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism. For the purpose of our study, we used data collected using the Global Symptom Index, which provides a summary of the severity of the symptoms perceived (global score). Items are rated on a five-point Likert scale ranging from 0 (not at all) to 4 (extremely). Coefficient alpha in this study was .97.

Occupational self-efficacy. To assess the competence that a person feels about his or her ability to successfully perform the tasks involved in his or her job, we used the Occupational Self-Efficacy Scale, a new short form self-efficacy scale developed by Schyns and von Collani (2002). It consists of eight items rated on a six-point Likert scale ranging from 1 (completely false) to 6 (completely true). The instrument proved to correlate with personal characteristics, such as general self-efficacy, self-esteem, internal control beliefs, and neuroticism (Schyns & von Collani, 2002), and to organizational outcomes, such as job satisfaction and commitment (Schyns & von Collani, 2002; Schyns & Sanders, 2005). Coefficient alpha in this study was .88.

Workplace accommodations related to social support. Workplace accommodations are individualized solutions that enable people with disabilities to attain and maintain employment (Solovieva, Dowler & Walls, 2011). The purpose of an accommodation is not to give the disabled worker an upper hand in the work environment; the ultimate goal is rather to level the playing field so that employees with disabilities can "successfully perform the essential functions of the job, or […] enjoy equal benefits and privileges of employment" (Center, 2011). The Work Accommodation Inventory was developed by Corbière and Ptasinski (2004) in order to collect information on the work adjustments

provided by businesses to help people with severe mental illness in their work integration process. For the purpose of this study, 12 items related to social support from the work environment were used (see Appendix). To compute a total score for each participant, we totalled the number of items that the participant reported as being present in his or her workplace (ranging from 0, meaning no workplace accommodations, to 12, meaning that all the accommodations were provided).

Organizational constraints. Organizational constraints represent “situations or things that prevent employees from translating ability and effort into high levels of job performance” (Spector & Jex, 1998, p. 357). The Organizational Constraints Scale consists of 11 items, each of which describes a common situational constraint in organizations, such as faulty equipment, incomplete or poor information or interruptions by others. For each item, the respondent is asked to indicate how often it makes it difficult or impossible for him to do his or her job. Responses range from 1 (less than once a month or never) to 5 (several times a day). High scores represent a high level of constraints. Coefficient alpha in this study was .89.

Karasek JCQ/social support dimensions. The Job Content Questionnaire (JCQ) is a self-administered instrument designed by Karasek et al in 1998 to measure the social and psychological characteristics of jobs. It consists of three main scales pertaining to decision latitude, psychological demands and social support respectively. For the purpose of this study, only scores from the social support scale were taken into account. The social support scale consists of 11 items that measure the impact of support received from co-workers and supervisors from an efficiency and socio-emotional point of view. Responses range from 1 (not at all) to 5 (always). Coefficient alpha in this study was .71.

Social support from family. To assess perceived social support from family, we used four items from the Multidimensional Scale of Perceived Social Support, a self-report measure developed by Zimet et al in 1988. Items are rated on a seven-point Likert scale ranging from 1 (completely disagree) to 7 (completely agree). Coefficient alpha in this study was .91.

Job satisfaction. We used a single item from the Psychiatric Rehabilitation Readiness Determination Instrument (Anthony, Cohen & Farkas, 1990) to assess the level of job satisfaction or dissatisfaction, along with the need for change in the current employment status of the study participants. Responses range from 1 (very dissatisfied, with urgent need for change) to 5 (very satisfied, with definite desire that there be no change).

Results

We used logistic regression to explore job satisfaction. A model using job satisfaction as the dependent variable, and ratings of the participants' level of occupational self-efficacy, number of workplace accommodations provided, social support (from family and co-workers/supervisors) and organizational constraint as predictors, was tested on the entire sample. We hypothesized that a higher level of occupational self-efficacy, the provision of more workplace accommodations and a higher level of social support from the work environment and family would yield a significant and substantial positive impact on job satisfaction. We therefore expected the organizational constraints index to correlate negatively with job satisfaction. Since severity of symptoms has not been found in the literature to be a significant predictor of vocational outcomes, we hypothesized that it would have no impact on job satisfaction.

The means, standard deviations, intercorrelations and alpha reliabilities obtained are presented in Table 1.

Table 1- Means, Standard Deviations and Intercorrelations among Study Variables

	M	*SD*	1	2	3	4	5	6
1. Severity of symptoms perceived	.49	.18	(.97)					
2. Occupational self-efficacy	3.95	1.28	-.101	(.88)				
3. Workplace accommodations related to social support	5.79	2.79	-.116	.273**	-			
4. Organizational constraints	1.68	.70	.214**	-.049	-0.96	(.89)		
5. Karasek JCQ/social support dimensions	3.71	0.87	-.102	.213**	.291**	-.272**	(0.71)	
6. Social support from family/Multidimensional scale of perceived social support	4.68	2.10	-.112	.167**	.148*	-.259**	.315**	(.91)
7. Job satisfaction	3.96	.98	-.139*	.255**	.228**	-.182**	.221**	.045

Note: $N = 248$. Cronbach's alpha in brackets along the diagonal.
* $p < .05$; ** $p < .01$

As shown in Table 2, the relationships observed between the variables taken into account in the model were all in the hypothesized direction, except for social support from family, which seems to have no significant impact on job satisfaction. Results suggest that job satisfaction corresponds to higher ratings on the Occupational Self-Efficacy Scale (β = .461, p = .001), a larger number of workplace accommodations (β =

.138, p = .032) and a higher level of social support from co-workers (β = .427, p = .035). By contrast, the presence of a higher level of organizational constraints in the workplace correlated negatively with job satisfaction (β = -.058, p = .007). As we hypothesized and in keeping with the literature, severity of symptoms did not significantly predict vocational outcome. The predictors included in the model accounted for around 15% of the variance in job satisfaction scores ($R^2 = .152$, $F(2,242) = 7.568$, $p < .01$).

Table 2 - Individual and Environmental Characteristics Predictor Model

Predictors	*OR(95%CI)*	*P*
1. Occupational self-efficacy	1.586 (1.198-2.101)	0.001
2. Workplace accommodations	1.148 (1.012-1.303)	0.032
3. Social support from co-workers	1.533 (1.031-2.279)	0.035
4. Organizational impairments	.944 (.905-.985)	0.007
5. Severity of symptoms	.373 (.061-2.279)	0.286
6. Social support from family	.836 (.725-1.027)	0.097

Note: *N* = 248. Job satisfaction as dependent variable.

Discussion and conclusions

This study is among the first to provide empirical data about both individual and environmental predictors of job satisfaction in people with severe mental illness employed in social enterprises. Despite the evidence that job satisfaction is positively related to job tenure (Resnick & Bond, 2001) and that social enterprises can support employees with mental disorders in their efforts to maintain their jobs by providing work accommodations and social support (Williams, Fossey & Harvey, 2010), job satisfaction as a vocational outcome in the context of social enterprises had never been investigated prior to our study. The purpose of this study was, therefore, to learn more about the experience of social enterprises in promoting job satisfaction. The study confirms recent literature (Bond & Drake, 2008) that suggests the need to take into account both individual and environmental factors in order to explain vocational outcomes in this population. Indeed, the analyses performed in this study revealed that the factors which gave the participants job satisfaction appear to involve a complex mix. In particular, individuals who felt able and confident about their ability to meet the demands of their job were found to be more satisfied with their job than those who felt they could not meet these demands or were barely able to do so. In addition, the more accepted and supported people felt by their work environment, the more satisfied they were with their job and the

more adamant about not wanting to change it. By contrast, the obstacles they faced in their job activities were found to negatively impact their level of job satisfaction. External support, such as that provided by family, was not found to significantly predict job satisfaction in our study. It would appear that the outcome we investigated (job satisfaction) is more influenced by variables related to the workplace environment (e.g., workplace accommodations, occupational self-efficacy, support from co-workers) than to external variables (e.g., support from family).

The findings of this study are somewhat limited by (a) the self-report nature of the survey. It would have been preferable to have included the perspective of other important informants, such as the “Responsabile Sociale” or the supervisor, on the environmental characteristics. In addition, (b) the employers did not necessarily answer every question, which reduced the sample size for particular items. Also, (c) the study population was selected through convenience sampling. Neither the social enterprises nor the participants were randomly selected, but rather they self-selected. Another limitation is that (d) this study is cross-sectional showing significant association among factors but unable to show casual relationships. We opted to select important variables inherent to job satisfaction for people with severe mental illness employed in social enterprises, but (e) other important variables (e.g., motivation to work, work engagement, organizational aspects) were not measured here. In particular, discrimination and self-stigmatization are important variables that negatively affect the experience of work integration in people with severe mental illness, and it would have been interesting to investigate these issues in the context of social enterprises. Conceivably, part of the variance in predicting job satisfaction could be covered by these factors, which were not explored in this study.

Despite its limitations, this study represents an initial step in an effort to describe and understand the landscape of social enterprises that address, in particular, the needs of people with severe mental illness. To date, little research has been conducted to advance understanding of this social enterprise model whereas many studies have investigated the impact of other vocational services (e.g., supported employment programs), even though certain features of social enterprises (e.g., creation of supportive work environments) appear to be effective in supporting work integration and job tenure in this population. The major finding contributed by this study is the impact and significance of the workplace environment in understanding and promoting employment for people with severe mental illness. In contrast to previous research on predictors of employment, which has generally focused on individual variables (e.g., demographic and clinical), this

study promotes a model in which both individual and environmental factors are regarded as important in understanding the work integration process and outcomes for mental health consumers.

In conclusion, our results underscore the fact that both individual and environmental factors in the context of social enterprises have an impact on job satisfaction in people with severe mental illness. Further research involving other organizational aspects and assessing factors over time (e.g., longitudinal studies) are warranted. These types of studies may help researchers and various stakeholders to better understand the relationship between the person-environment fit and employment outcomes such as job tenure, which remains a major concern for people with severe mental illness. In particular, the social enterprise environment and its impact on workers with severe mental illness is an area in need of further discourse and empirical research if we are to become more effective in addressing work integration issues.

Appendix

Work Accommodation Inventory (Corbière & Ptasinski, 2004 – unpublished): items related to social support from the workplace environment.

Are the following work accommodation arrangements available at your workplace?
5. Are you able to have time off without pay?
6. Does your employment specialist visit you on the job?
7. Is there a health professional in your workplace that you can consult?
8. Do/Does your co-workers/supervisor provide you with emotional support, such as offering you time to talk?
9. Are you provided with a co-worker buddy?
10. Are you provided with a mentor?
11. Does your workplace encourage interactions between co-workers?
12. Do you receive rewards or recognition from your supervisor and/or co-workers?
13. Is your work environment naturally supportive if you need help?
14. Does your employer/supervisor develop strategies to deal with problems before they arise?
15. Are you compelled to attend social activities such as lunches and nights out?
16. Are you allowed to make phone calls during your work time to contact your doctor or to receive support?

Study 4. An analysis of work engagement among workers with mental disorders recently integrated to work[16].

Abstract

The purpose of this study is to determine the validity of the work engagement construct among mentally ill workers and to developed a nomological network delineating work engagement's relationship with its antecedents and its consequences in this specific population. Using a longitudinal design study, 310 people with mental disorders employed in Italian social enterprises filled out the Utrecht Work Engagement Scale (UWES-9) and questionnaires on severity of symptoms perceived, and social support from coworkers and supervisor. Individuals who were still eligible at the 12-months follow up phase of the study, completed a questionnaire on future working plans. To validate the UWES-9 and test its nomological network confirmatory factor analysis and path analysis were used. Results showed acceptable confirmatory factor analysis fit indices and psychometric proprieties of the UWES-9. Acceptable fit indexes were also found for the model tested. The paper highlights that the UWES-9 is a useful instrument for measuring work engagement not only in the general working population, but also in workers with mental disorders. Furthermore, the study provides an investigation of how work engagement, as well as its drivers, impacts on important work outcomes in workers with mental disorders. In particular, the important role that the vigor dimension plays in this population as a mechanism through which individuals feel better at work and feel ready to take the further step, that is to work in the open labor market is highlighted.

[16] This article is in preparation as: P. Villotti, C. Balducci, S. Zaniboni, M. Corbière, F. Fraccaroli. *An Analysis of work engagement among workers with mental disorders recently integrated to work.*

Introduction

The nature of the labour market nowadays requires organizations to be productive and competitive to survive and grow, since they are constantly confronted with the pressure of obtaining profits as fast as possible. Thus, workers are expected to be psychologically connected to their work, proactive and committed to high quality performance standards, to collaborate with others, to be energetic and dedicated, and to be absorbed by their work (Bakker, Albrecht & Leiter, 2011). Simply put, "today's organizations are in need of engaged employees" (Bakker & Shaufeli, 2008, p.150). Work engagement can be generally conceptualized as a positive affective relationship with one's work (Alarcon & Edwards, 2011) and it is the combination of the capability to work (energy, vigor) and the willingness to work (involvement, dedication) (Bakker, Albrecht & Leiter, 2011). More specifically, Schaufeli, Salanova, Gonzalez-Roma and Bakker (2002, p.74) define engagement as "a positive, fulfilling, work-related state of mind" that is characterized by 1) vigor, meaning high levels of energy while working, persistence and willingness to invest effort in one's work also in face of difficulties; 2) dedication, that is a sense of significance, enthusiasm, inspiration, pride and challenge; and 3) absorption, that means to be fully concentrated in one's work, so that time flies and one has difficulties with detaching oneself from work. In other words, engaged employees work hard, are involved, and feel happily engrossed in their work (Bakker, Schaufeli, Leiter, Taris, 2008). To measure the above mentioned areas of work engagement, the Utrecht Work Engagement Scale (UWES) was developed in 2002 by Schaufeli and colleagues. Since then the UWES has been the most often used scientific instrument to measure work engagement (Schaufeli & Bakker, 2010). It consists of 17 items and it is characterized by good psychometric proprieties, with high levels of internal consistency (Duran, Extremera & Rey, 2004; Montgomery, Peeters, Schaufeli & Den Ouden, 2003; Schaufeli & Bakker, 2004). One year later, a 9-item version of the UWES was developed by the authors (Schaufeli & Bakker, 2003), who provided evidence for its cross-national validity. As the original one, the reduced scale (UWES-9) has good psychometric proprieties, with confirmatory factor analysis showing repeatedly that the fit of the hypnotized three-factor structure (vigor, dedication, absorption) to the data was superior to that of alternative factor models (Schaufeli, Bakker & Salanova, 2006).

According to Bakker and colleagues (2008), work engagement and its dimensions may offer to organizations a competitive advantage and make a true difference for

employees. Among the general population and individuals suffering from other disabilities, people with mental disorders face severe difficulties to participate and integrate in the contemporary world of work (Committee on the Environment, Public Health and Food Safety, 2009), despite the evidence that they have the potential and desire to work (Anthony & Blanch, 1989; Broadman, Grove, Perkins and Shepherd, 2003; South Essex Service Research Group, Secker and Gelling, 2006). Some industries and jobs have only full-time opportunities, require shift of work, use overtime extensively or do not offer flexible hours to attendance. In addition, discrimination attitudes of employers and community stigma lead to a lack of work opportunity and choice for this population (Shankar, 2005; Ozawa & Yaeda, 2007; O'Day, et.al., 2006). This results in a high percentage of unemployment, which can reach almost 90% (Cook & Razzano, 2000; Gureje, Herrman, Harvey, Morgan & Jablensky, 2002; Harnois & Gabriel, 2000) and brief job tenure, that rarely exceed 1 year on the regular job market (Lanctot et al., unpublished; Xie, Dain, Becker & Drake, 1997; Becker, Drake, Bond, Xie, Dain & Harrison, 1998; Shankar, 2005). A valid alternative to the regular job market and existing vocational programs (e.g., supported employment) for people with mental disability is social enterprises (Corbière & Lecomte, 2009; Svanberg, Gumley & Wilson, 2010). In Italy these new initiatives are mainly organized into co-operatives, in particular the so-called B-type social co-operatives, which are created with the specific aim to integrate disadvantaged people (e.g., people with mental disabilities) into the labour market. Their core function is to provide working environments for marginalized people to become integrated into a wider community, and their ultimate goal is to provide people working in them the extra skills and confidence needed for them to work permanently in the open labour market (Borzaga & Loss, 2002).

Given that work engagement is positively related to health, workability, job satisfaction and job performance (Hakanen, Bakker & Schaufeli, 2006; Bakker, Albrecht & Leiter, 2011; Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009; Bakker & Demerouti, 2008; Bakker, 2011), it seems interesting and highly relevant to investigate the construct among a population of workers who faces difficulties and barriers in their work integration process, such as mentally ill workers. To our knowledge, no studies have yet been conducted in this direction. Thus, following the suggestion of Bakker (2009) on the opportunity to examine the validity of the work engagement model in different occupational group (e.g., people with mental disorders) and in different countries, the present study aim to examine the internal consistency and the factorial validity of the

UWES-9 in a sample of mentally ill workers employed in Italian social enterprises. We then developed a nomological network delineating work engagement's relationship with its antecedents and its consequences in this specific population, in order to discuss the discriminant validity of the construct as applied to workers with mental disorders.

To do so, we conducted an analysis of the literature to identify work engagement's antecedents and outcomes, as reported below.

Antecedents of work engagement

Several studies conducted in recent years on occupational groups not suffering from mental disorders have consistently shown that job and personal resources are important antecedents of work engagement (Macey & Schinder, 2008; Bakker, Schaufeli, Leiter, Taris, 2008; Bakker, 2009; Christian, Garza & Slaughter, 2011; Bakker & Demerouti, 2007; Shaufeli & Bakker, 2004).

Job resources. Social support from co-workers and supervisor is a job resource likely associated with engagement (Christian, Garza & Slaughter, 2011). Already in 1990, Kahn reported that interactions with coworkers lead to increased engagement in individuals and that social characteristics motivate by creating meaningfulness. Social support play intrinsic and extrinsic motivational role, reduce the impact of job demands on strain, stimulate personal grow and are functional in achieving work goals (Bakker & Demerouti; Schaufeli & Salanova, 2007; Bakker, Schaufeli, Leiter, Taris, 2008). Recently, Riggle, Edmondson & Hansen (2009) found that perceived organizational support had a strong positive effect on job satisfaction and a strong negative effect on intentions to leave. Furthermore, other studies (Saks, 2006; Wefald, Reichard & Serrano, 2011) empirically demonstrated social support from the organization to be a predictor of job and organizational engagement. Even for people with mental disorders social support is a fundamental variable that positively influence vocational outcome, as showed by several studies. MacDonald Wilson and colleagues in 2002 reported continued support from employment specialist or rehabilitation staff as important in increasing job tenure in a sample of people with mental health issues (MacDonald Wilson, Rogers, Massaro, Lyass & Crean, 2002), while Tse and Yeats (2002) concluded that support within workplace and outside work is important in helping people with mental illness to return to work. Participants in Kirsh's study conducted in 2000 appreciated respectful, fair and supportive communication with supervisors. Close to these findings, a qualitative study

by Huff and colleagues (2008) found supervisor's and co-worker's support as being significant in predicting individuals' staying or leaving job. Other studies (Killeen & O'Day, 2004; Tse & Yeats, 2002; Woodside et al., 2006) have shown the importance of the assistance from work colleague to generate a sense of being welcomed, respected, and supported at work in people with mental illness. In general, individuals' point of view consistently emphasize diverse supports as helpful for sustaining jobs, dealing with work issues and facilitating job seeking (Gewurtz & Kirsh, 2007; Huff et al, 2008; Kennedy-Jones et al., 2005; Killen & O'Day, 2004; Kirsh, 2000; Sechker & Membrey, 2003; Shankar, 2005; Tse & Yeats, 2002). With this in mind, we hypothesized that social support from the organization is a job resource significantly and positively related to work engagement in people with mental disorders. In particular, we expect (*H1a*) social support from coworkers and supervisor to generate a sense of belonging and being welcomed and respected, increasing the enthusiasm, inspiration and pride of employees (Dedication); also, we expect that (*H1b*) feeling supported at work will help mentally ill workers to overcome difficulties facilitating the concentration on job tasks, determining a strong identification with one's work (Absorption). On the basis of the existing literature, we do not expect organizational support to influence the abundance of energy (Vigor) at work for this population (*H1c*).

Personal resources. Personal resources such as self-efficacy, self-esteem and optimism, have been shown to help workers to control and impact upon their work environment successfully (Luthans, Norman, Avolio & Avey, 2008; Bakker, Schaufeli, Leiter, Taris, 2008). In particular, it has been convincingly shown that positive self-evaluations that refer to individuals' sense of their ability to successfully control and have an impact on their environment predict goal setting, motivation, performance job satisfaction and other desiderable outcomes (Bakker, 2011; see Judge, Van Vianen & De Pater, 2004 for a review). Specifically, engaged workers were found to be highly self-efficacious, to believe that they are able to meet the demands they face in a broad array of context, and to make a contribution to explaining variance in work engagement over time (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2007). Occupational self-efficacy, defined as the competence that a person feels concerning the ability to successfully fulfill the tasks involved in his/her job, has been found to be an important resource for individuals in organizations (Rigotti, Schyns & Mohr, 2008) and to be directly related to job satisfaction (Judge & Bono, 2001) and performance (Judge & Bono, 2001; Stajkovic & Luthans, 1998). Also in people with mental disorders, occupational self-efficacy has

been found to moderately influence vocational outcomes (Grove & Membrey, 2005; Bejerholm, Eklund, 2007; Siu, 2007; Waghorn, Chant, King, 2005). In a study conducted by Michon and colleagues (2005), positive employment outcomes were related to better work performance as measured at the beginning of a vocational program. In addition, participants' work-related self-efficacy and social functioning were associated with better outcomes. In another study, Huff and colleagues (2008) found that interest in the work, sense of competence and confidence, physical and mental well-being were the most significant variables in predicting vocational status. As a result, the literature highlights the importance of considering the relationship between occupational self-efficacy and work engagement. We hypothesized that occupational self-efficacy is a personal resource significantly and positive associated to the three dimensions of work engagement (*H2*).
Furthermore, as participants in this study were identified as having a mental disorder, we assessed the severity of symptoms perceived and we hypothesized (H3) that the gravity of the mental illness may significantly and negatively influence the level of energy, mental resilience, persistence and well-being of participants (Vigor), but not the sense of significance and enthusiasm (Dedication) and the state of positive state of mind while working (Absorption). In 2001 Schaufeli and colleagues suggested that engaged employees enjoy good mental health. So far, only few study have been conducted including work engagement and perceived health (Schaufeli & Bakker, 2004; Hakanen, Bakker & Schaufeli, 2006; Schaufeli, Taris & Rhenen, 2008), concluding that perceived health is positively related to work engagement and negatively related to workaholism and bournout.

Outcomes of work engagement in workers with mental disorders

As an outcome, we were interested in explore whether work engagement may be positively associated with the intention to work in the regular labour market. As previously mentioned, Italian B-type co-operatives are created with the main goal to integrate disadvantaged workers into the competitive labour market, or in case of high disability, to a permanent job inside the social enterprise (Borzaga & Loss, 2002). In a recent study, Zaniboni and colleagues (2011) explored the work intentions of disadvantaged people, particularly people with mental disorders, working in this kind of organizations and concluded that the majority of them wanted to continue to work. Of this, close to 30% of participants wanted to work in the regular labour market. Since the

literature on the general population have shown that engaged employees perform well and are willing to go the extra mile (Bakker, Demerouti and Verbeke, 2004), it seems relevant to investigate whether the three dimension of work engagement may play a significant role in influencing the intention to work of people with mental disorders in the open labour market. In particular, we hypothesised that higher levels of energy, ability to not be easily fatigued, and persistence in the face of difficulties as indicated by the Vigor dimension of work engagement is positively and significantly related to the intention to work in the open labour market (H4).

Measures

Participants in the study were required to fulfill a battery of questionnaires, one of which was demographic in nature. All the scales we used were translated from English to Italian using Brislin's classic back-translation model (Brislin, 1970). The instruments we used to assess work engagement and its antecedents and its consequences in people with mental disorders are discussed here.

Work engagement. Work engagement was measured by means of the UWES-9 (Shaufeli & Bakker, 2003), in which three dimensions of engagement can be distinguished, namely Vigor (VI), Dedication (DE) and Absorption (AB). All items are scored on a 7-point asymmetrical rating scale ranging from 0 (*never*) to 6 (*always*). In terms of internal consistency, reliability coefficients for the three subscales have been determined between .85 and .90 (Schaufeli & Bakker, 2003).

To measure the social support from coworkers and supervisor in our sample of mentally ill workers we used the scores from the social support scale of the Job Content Questionnaire (JCQ) designed by Karasek et al. in 1998 (Karasek, Brisson, Kawakami, Houtman, Bongers & Amick, 1998). The social support scale consists of 11 items that measure the impact of support received from co-workers and supervisors from an efficiency and socio-emotional point of view. Responses range from 1 (*not at all*) to 5 (*always*). Coefficient alpha in this study was .71.

As a measure of personal resources, we used the Occupational Self-Efficacy short form introduced by Schyns and von Collani (2002) which has been recommended for occupational health studies and in vocational contexts as a possible evaluation criterion of training programs (Rigotti et al., 2008). It consist of 8 items that can be rated on a six-

level response scale ranging from 1 (*not at all true*) to 6 (*completely true*). High values reflect high occupational self-efficacy. The instrument proved to correlate with personal characteristics, such as general self-efficacy, self-esteem, internal control beliefs, and neuroticism (Schyns & Van Collani, 2002), and to organizational outcomes, such as job satisfaction and commitment (Schyns & Van Collani, 2002; Schyns & Sanders, 2005). Coefficient alpha in this study was .82.

To assess the severity of symptoms perceived, we used the 53-item Brief Symptom Inventory (BSI; Derogatis, 1983). The BSI was designed to measure nine symptom constructs, and 49 of the items are used as indicators for these subscales. The constructs are Somatization, Obsessive-Compulsive, Interpersonal Sensitivity, Depression, Anxiety, Hostility, Phobic Anxiety, Paranoid Ideation, and Psychoticism. For the purpose of our study, we used data collected using the Global Symptom Index, which provides a summary of the severity of the symptoms perceived (global score). Each item of the BSI is rated on a five-point scale of distress from 0 (*not at all*) to 4 (*extremely*). Coefficient alpha in this study was .97.

As a measure of working plans, we used at the 12-month follow up phase a measure ad hoc created that consisted of two items, scored on a 5-point scale ranging from 1 (*completely disagree*) to 5 (*completely agree*), developed to identify the willingness of individuals to work in the private or public sector of the regular labour market.

Results

Psychometric Analysis

The data (N=310) were first examined using visual scans of data plots, means, standard deviations, skew, kurtosis, and scale minimums and maximums. Table 1 reports the UWES-9 items and associated descriptive statistics obtained from the dataset. Interestingly, the mean values of the items suggested that all the dimensions of work engagement were experienced relatively frequently by participants. Confirmatory factor analysis (CFA) on the UWES-9 was performed using LISREL 8.71. Since all of the items of the UWES-9 presented a significant skew, the robust maximum likelihood method was used for parameters' estimation.

Table 1. Descriptive statistics of the UWES-9 items on the sample.

	M (*SD*)	Min-Max	Skew (*SE*)	Kurtosis (*SE*)
1. At my work, I feel bursting with energy (VI-1)	4.28 (1.79)	0-6	-.98 (.14)	.06 (.29)
2. At my job, I feel strong and vigorous (VI-2)	4.15 (1.84)	0-6	-.92 (.14)	-.15 (.29)
3. I am enthusiastic about my job (DE-1)	4.54 (1.73)	0-6	-1.09 (.14)	.20 (.29)
4. My job inspires me (DE-2)	4.35 (1.86)	0-6	-.99 (.14)	-.14 (.29)
5. When I get up in the morning, I feel like going to work (VI-3)	4.35 (1.88)	0-6	-1.05 (.14)	-.004 (.29)
6. I feel happy when I am working intensely (AB-1)	4.53 (1.73)	0-6	-1.19 (.14)	.52 (.29)
7. I am proud of the work that I do (DE-3)	4.61 (1.77)	0-6	-1.26 (.14)	.62 (.29)
8. I am immersed in my job (AB-2)	4.59 (1.65)	0-6	-1.19 (.14)	.67 (.29)
9. I get carried away when I am working (AB-3)	4.59 (1.78)	0-6	-1.18 (.14)	.34 (.29)

Note. VI = Vigor; DE = Dedication; AB = Absorption.

The one-factor (M1) and the three factor (M2) models were fitted on the total sample (N=310). CFA results were evaluated by using the χ^2 statistic, including its normed version (Jöreskog, 1969), and a variety of other more practical fit indices: the root mean square error of approximation (RMSEA), the non-normed fit index (NNFI) and the comparative fit index (CFI). Suggested cut-off values for these criteria have been proposed (see Schweizer, 2010). Values at the RMSEA lower than .08 are considered as acceptable. Values at the NNFI and CFI equal or higher than .90 are considered as acceptable, while values close to .95 or higher are considered as good. Table 2 reports the χ^2 and other fit indices of CFA. The 3-factor solution was clearly superior in terms of fit to the 1-factor solution, which didn't prove to be acceptable. The RMSEA of the 3-factor solution was a little bit higher than the suggested threshold of .08, however the other fit indices (particularly the CFI and NNFI) were good (i.e. > .95). To note is that the emerged RMSEA for the 3-factor solution is in line with that found for the same solution in a sample from the general working population in Italy (Balducci, Schaufeli, & Fraccaroli, 2010) and other countries (see Schaufeli & Bakker, 2003, p. 29). The standardized factor loadings for the final 3-factor model were all statistically significant with a $p < .001$, and ranged from .65 to .93, while the intercorrelations between the latent factors were high (*r* between .78 and .85). These results parallel those emerged in previous research (Balducci et al., 2010). Overall, we considered the 3-factor solution of

the UWES-9 emerged in the present study as acceptable. Internal consistency reliability (Cronbach's α) of the scale was excellent (.94), as was the internal consistency of the VI, DE, and AB subscales (.86, .90, and .85, respectively) (see Table 3).

Table 2. Goodness-of-fit indices for confirmatory factor analysis.

	χ^2, p = 0.0	df	χ^2/df	RMSEA	NNFI	CFI
Model 1 (1-factor)	147.22	27	5.45	.132	.956	.967
Model 2 (3-factor)	75.71	24	3.15	.092	.979	.986

Note. χ2 = Chi-square Test; χ^2/df = Normed Chi-square; RMSEA = Root mean square error of approximation; NNFI = Non-normed fit index; CFI = Comparative fit index; WE = work engagement; N=310

Table 3. Means, standard deviations, Cronbach's Alphas (on the diagonal) and correlations among the study variables.

	M (*SD*)	1	2	3	4	5	6
1. Work engagement Vigor	12.61 (4.93)	(.86)					
2. Work engagement Dedication	13.22 (4.98)	.79**	(.90)				
3. Work engagement Absorption	13.49 (4.66)	.80**	.87**	(.85)			
4. Perceived severity of symptoms	3.72 (.91)	-.22*	-.15	-.16	(.97)		
5. Social support coworkers/supervisor	5.98 (1.34)	.23*	.37**	.37**	-.02	(.71)	
6. Occupational self-efficacy	3.95 (1.29)	.40**	.37**	.42**	-.15	.20*	(.82)
7. Working plan Competitive labor market	.48 (.19)	.21*	.07	-.09	-.11	-.03	-.19*

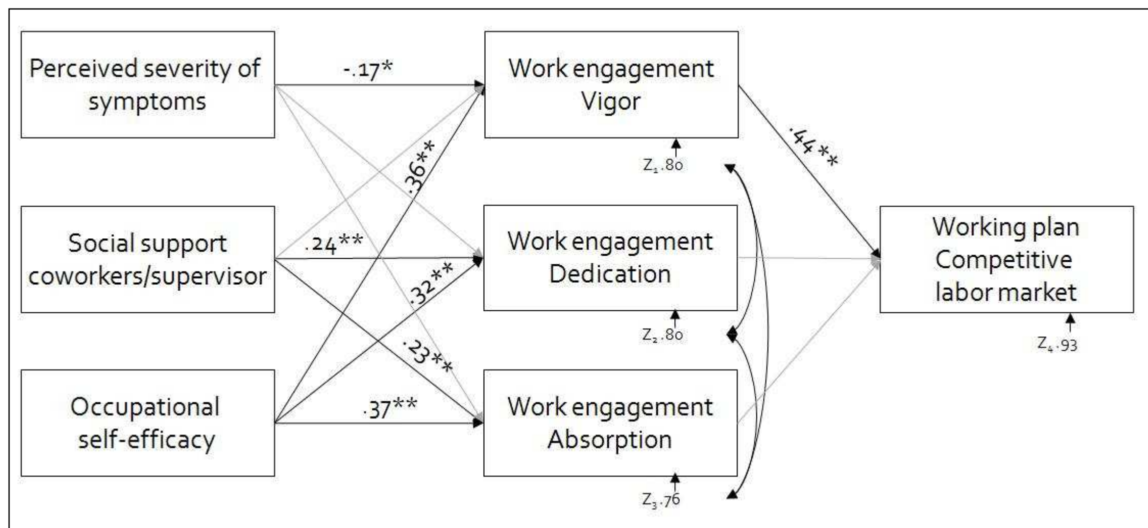
Note. *p < 0.05; ** p < 0.01; N=121.

Model testing

Path Analysis was used on individuals that were still eligible at 12-months follow up phase of the study (N=121) to examine the relationships between drivers and outcome of work engagement as well as to test the study hypotheses regarding how they all fit together. Table 3 presents means, standard deviations, Cronbach's alphas, and correlations among study variables. All constructs had satisfactory internal consistency and all correlations were in the expected direction. Figure 1 shows the standardized parameter estimates for the model of the work engagement and the other variables. The model showed reasonable fit, $\chi^2(6)=3.43$ (p=0.75); comparative fit index (CFI) = 1.00;

root mean square error of approximation (RMSEA) = 0.0; non-normed fit index = 1.03. Regarding H1a and H1b, as Figure 1 shows, a significant and positive path was found between social support from coworkers and supervisor and the two hypothesized work engagement dimensions (Dedication, CR[17] = 2.81; Absorption, CR = 2.87). In support of *H1c*, results showed no significant paths between social support from the organization and the work engagement dimension of Vigor. Regarding *H2*, as Figure 1 shows, the results related to occupational self-efficacy were significant on all the dimensions of work engagement (Vigor, CR = 4.31; Dedication, CR = 3.77 ; Absorption, CR = 4.53). These results support *H2*. A significant and negative path was founded between severity of symptoms perceived and the work engagement dimension of Vigor (Vigor, CR = -2.02), while no significant paths between psychiatric symptoms and the other two dimensions of work engagement (Dedication and Absorption) were found. These results support *H3*. As for *H4*, the relationship between the three work engagement dimension and the intention to work in the competitive labour market, Figure 1 shows a significant and positive path between Vigor and the selected working plan (CR = 2.83). Moreover, non-significant paths resulted between Dedication (CR = -1.02) and Absorption (CR = -0.48), on the one hand, and intention to work in the open labour market on the other. These results support *H4*.

Figure 1 – Model of work engagement, perceived severity of symptoms, job support and occupational self-efficacy, and intention to work in the competitive labor market.



Note. *p < 0.05; ** p < 0.01

[17] CR = critical ratio for two-tailed tests of significance of t-statistic (CR ≥ 1.96, *p*<0.05; CR ≥ 2.58, *p*<0.01)

Discussion

The psychometric proprieties of the UWES-9 were investigated in this study, specifically for workers with mental disorders employed in Italian social enterprises. The objectives were to determine the construct validity and internal consistency of the UWES-9 and to test the link between job and personal resources and engagement in a sample of workers with mental disorders.

We found that the UWES-9 in mentally ill workers shows an excellent internal consistency reliability, well above the suggested threshold of .70 (Nullally & Bernstein, 1994). The internal consistency of the three engagement scales was also adequate. The results obtained from the CFA of the UWES-9 showed that three-factor model including vigor, dedication, and absorption fit significantly better the data than did the one-factor model that assumed that all items weighted on one underlying engagement factor. The psychometric proprieties assessed confirmed the goodness of fit of the scale.

Given the lack in the literature of the work engagement construct as assessed in people with mental disorders, the UWES-9 was used in this study to explore the nomological network of related constructs. An exploratory model including antecedents of work engagement (i.e., severity of symptoms perceived, social support from coworkers and supervisor, and occupational self-efficacy), and a work outcome (i.e., work plan to work in the regular labor market), was tested and showed acceptable fit indexes.

Hypothesis 1 suggesting a positive relationship between social support from the organization and two dimension of work engagement, namely dedication and absorption, was supported. Once again, supports within the workplace have been shown to be important factors influencing work related construct in people with mental disorders (see Fossey & Harvey, 2010 for a review). In particular, it appears that individuals enrolled in social enterprises who receive support from coworkers and supervisor develop a strong sense of belonging, are enthusiastic, inspired, fully concentrated and engrossed in their working tasks and fully integrated in the workplace. In short, they are dedicated and absorbed in their work-related goals (*H1a* and *H1b*). On contrast, organization supports seems to have none influence on the energy, the willingness to invest effort and the persistence and resilience, namely the vigor dimension of work engagement (*H1c*). The concept of vigor, as suggested by Shirom in 2003, relates more to energetic resources only, namely to physical, emotional and cognitive energies. Stajkovic & Luthans (2008) showed that self-efficacy beliefs influence which activities people engage in, how much

effort they will expend and how long they will persevere in the face of adversity. This were confirmed also in the model tested in the present study. Indeed, results showed that occupational self-efficacy was related to all the three-dimensions of work engagement, vigor included (*H2*).

Results regarding the relationship between severity of symptoms perceived and work engagement dimensions are interesting and supporting *H3*. In line with previous studies that highlighted the positive relationship between work engagement and health (see Bakker, Albrecht and Leiter, 2011 for a review) the severity of symptoms perceived was negatively related to the vigor dimension of work engagement. Among the three-dimensions of work engagement, it seems that vigor is the crucial dimension in enhancing well-being, as showed by Shirom in 2003. Thus, it was no surprise to find a negative relationship between gravity of psychiatric symptoms perceived and this dimension of work engagement. On contrast, as expected, the severity of symptoms perceived did not show any influence on the sense of significance, enthusiasm, inspiration, pride and concentration while working in people with mental disorders, giving further demonstrations of the capacity and willingness to work of this population.

Finally, we hypothesized that engagement would be positively associated to the intention to work in the regular labor market (*H4*). Results were in support of this hypothesis. Probably, the vigor dimension facilitates goal-directed behavior or approach behavior, as suggested by several authors (Nelson & Simmons, 2003; Attridge, 2009; Watson, 2002; Fredrickson, 2002; Shirom, 2003). The intention to work in the open labor market, that is the main goal of social enterprises, seems to be achievable for people with mental disorders that find their workload to be manageable, feel high level of energy and resilience. On contrast, high identification with one’s work, a high sense of belonging to the organization, and being highly immersed in work tasks may have an impact on other type of working plans, for example the willingness to remain employed in the social enterprise.

To sum up, the UWES-9 is a useful instrument for measuring work engagement not only in the general working population, but also in workers with mental disorders. In particular, the negative relationship between the dimension of vigor, as assessed at the UWES-9, and the severity of symptoms showed in this study appear to be of no little account for employers and different stakeholders involved in the work integration process of people with mental health issues. Indeed, it seems that employees who experience high levels of energy and resilience are feeling better, have a tendency to explore and are more

likely to invest their resources in their attempt to work in the open labor market. An important starting point for employers could be the baseline measurement of engagement and its drivers (e.g., occupational self-efficacy and severity of symptoms perceived) among mentally ill employees, for example by using the work engagement model presented in this article. Indeed, on the basis of this assessment, it could be determined different working plans for individuals (e.g., to be prepared to work in the open labor market). In terms of individual level intervention, programmes aimed at increasing work engagement could focus on building personal resources such as occupational self-efficacy for employees.

The present study had some limitation we would like to address. Firstly, all data are based on self-reports. Secondly, the limited size of the sample at follow up (N=121), specifically the sampling method, which is based on convenience. Thirdly, the model was tested in a specific context, the social enterprise, which by definition provides higher levels of organizational support and generates a strong sense of belonging and identification in its employees.

This limitation notwithstanding, we believe that this study has provided an interesting investigation of how work engagement, as well as its drivers, impacts on important work outcomes in workers with mental disorders. In particular, we highlighted the important role that the vigor dimension plays in this population as a mechanism through which individuals feel better at work and feel ready to take the further step, that is to work in the open labor market.

CHAPTER 5: DISCUSSION AND CONCLUSION

The first chapter of this thesis has presented people with severe mental illness as characterized by employment marginalization, that is a situation where individuals find themselves located outside of the community-based work force. A review of the literature reporting on the employment status for this population typically begins with a litany of statistics demonstrating their continued poor employment outcomes. This fringe situation is perpetrated by multiple interacting factors that systematically disadvantage mentally ill individuals in securing and maintaining employment, such as psychiatric symptoms, treatment side-effects, discrimination in hiring and stigma, as well as limited access to supportive workplaces in the open labour market. The past few decades have witnessed the advancement of a range of innovative and promising employment initiatives for people with severe mental illness, as illustrated in the second chapter of this work. Unfortunately, the myriad of factors expected to open the doors to the world of work for this population, such as the advent of deinstitutionalization, legislation in support of disabled persons, advancement in treatment efficacy, the development of vocational services and programs, as well as the desire and ability of individuals to work productively, have not had the anticipated impact. Thus, vocational outcomes for people with mental illness is still dramatically poor. Social enterprise is a promising method to improve the employment rates of disadvantaged workers, by offering them several advantages over other social professional integration measures. Social enterprises have not been studied in detail yet, even though several aspects of these organizations seem very useful for the job acquisition and tenure in people with mental health issues. For example, they often make work accommodation available (e.g., flexible schedule), provide support, supervisors usually have a positive attitude and, most importantly, there is less discrimination about mental disabilities since a large proportion of employees have a mental disability. Despite this, the characteristics of people with a mental disability working in social enterprises are not known and have not yet been evaluated.

Thus, this thesis was designed to increase our understanding of social enterprises' work integration model, looking in particular at specific profiles of employees with a mental disability. In particular, our purpose was to develop more understanding of the lived experience of working with a mental health disability, by including the voice of the

mentally ill worker and by giving attention to the organizational support, and social interaction-related approaches and strategies that are used in the workplace context of social enterprises. In doing so, findings from four empirical studies has been examined throughout chapter 4 of this manuscript.

5.1 Overview of results

The main goal of the present thesis was to provide a general understanding of the work integration of people with severe mental illness employed in Italian social enterprises.

Findings from the first study revealed in general a positive picture of the working experience of disadvantage workers in this context. In particular, participants revealed to believe in their ability to successfully accomplish work tasks, and to feel good in spite of their mental illness. They reported high values on individual resources, such as self-esteem and occupational self-efficacy, as well as low levels of gravity of symptoms perceived and high values of well-being. Positive scores were found also on the work engagement variable, meaning that participants are enthusiastic and dedicated to their job. They feel able to focus on working tasks and they feel highly motivated to maintain their job. Participants highly value the work environment of social enterprises, reporting that they do not find it difficult to accomplish their working activities because of organizational constraints. Very low ratings were reported also on the stigma scale, highlighting one more time how the social enterprise model is characterized by minor discrimination and stigmatization for this population. To sum up, individuals were found to be highly satisfied of their job and their working experience. No significant differences were found among people with different psychiatric diagnosis, meaning that, as reported in the literature, the association between psychiatric diagnosis and vocational outcomes is weak.

Once the profiles of mentally ill workers were established, the second study proposed two new measures of motivation, namely the (1) Motivation to Find a Job and the (2) Motivation to Keep a Job scales, as applied to (1) individuals with mental disorders enrolled in supported employment programs in Canada, and in (2) people with severe mental illness enrolled in Italian social enterprises. These brief and easy-to-use scales can be useful for gathering clinical implications, by helping people with low motivation to benefit from specific training programs or interventions aimed at helping

them enhance their awareness of being workers and improving their level of engagement and vocational outcomes in terms of productivity. Furthermore, participants with high scores obtained on the Motivation to Find a Job scale were found to be more likely to obtain a competitive job, while participants with high scores on the Motivation to Keep a Job scale
were found to plan to continue working at the same social enterprise at which they were currently employed, and did not showed the intention to stop working in the future.

The major finding contributed by the third empirical study is the impact and significance of the workplace environment (e.g., workplace accommodation) in understanding and promoting employment for people with severe mental illness. In particular, the more accepted and supported people felt by their work environment, the more satisfied they were with their job and the more adamant about not wanting to change it. By contrast, the obstacles they faced in their job activities were found to negatively impact their level of job satisfaction. Thus, this study highlighted how the potential for participation in community employment is increased when individuals with mental disorders are provided the range of supports and resources they need to maximize their capabilities, and the opportunities within the world of work to exercise and grow these capacities.

Finally, in the last study, we aimed at increase our understanding of the role of work engagement in explaining the intention to work in the open labour market in this population. Results of this study reported that the Utrecht Work Engagement Scale (UWES-9) is a useful instrument for measuring work engagement not only in the general working population, but also in workers with mental disorders. Thus, the study provided an interesting investigation of how work engagement, as well as its drivers, impacts on important work outcomes in workers with mental disorders. In particular, we highlighted the important role that the vigor dimension plays in this population as a mechanism through which individuals feel better at work and feel ready to take the further step, that is to work in the open labor market.

5.2 Limitations

Studies reported in this thesis has several limitations in terms of its population base and its methods of participant selection. Firstly, studies are context specific, namely social enterprise, which by definition provides higher levels of organizational support and

generates a strong sense of belonging and identification in its employees. In particular, the interviews were conducted in social enterprises located in Northern Italy. Therefore, generalization beyond this context is questionable, because it comprises a number of financial, insurance, and government facilitations larger than the national average. The applicability of individual, environmental and organizational variables to individuals with mental disorders from different vocational programs or those working in other Italian regions' social enterprises should therefore be a subject for further investigation. Secondly, the study population was selected through convenience sampling. Neither the social enterprises nor the participants were randomly selected, but rather they self-selected, meaning that the study sample is not representative of the Italian reality. In addition, findings are somewhat limited by the self-nature of the survey. It would have been preferable to have included the perspective of other important informants, such as the "*Responsabile Sociale*" or the supervisor, especially on the environmental characteristics. In addition, the employees did not necessarily answer every question, which reduced the sample size for particular items. Finally, we are conscious that mental disability is a process, and casual sequences are difficult to infer even with longitudinal studies.

5.3 Future directions

There are several identifiable areas of future research activity.

Firstly, more studies on the social enterprise model is needed to increase our understanding of the strategies implemented by these organizations to help disadvantaged workers gain and maintain employment. The studies we presented in this manuscript are a first step in this direction. Further information might focus on economical aspects, such as the amount of subsidies received from public and private funds, in order to highlight the level of economic dependence of social enterprises on external subsidies, as well as an overall view of their economic situation. Also, it could be interesting to learn more on the degree of selection applied in the recruitment policy of the enterprise (from "several criteria to be recruited" to "zero exclusion") in order to learn more on the magnitude of the social mission of social enterprises with respect of the work integration for people with mental disabilities.

Secondly, more studies are needed on interactions among the various factors that can change employers' attitudes towards persons with mental health disability. In this

manuscript we focused on workers' point of view and we did not explore the role of employers and co-workers in dealing with their daily social interaction with mentally ill workers. Knowing more about the strategies implemented by social enterprises' staff and members to cope and fight stigma would be relevant, especially in the sense of knowledge transfer to the open labour market's organizations. Also, research should continue to focus on modifiable (e.g., motivation) versus non modifiable (e.g., demographics) predictors of vocational success with the aim of better target interventions. In this direction, further investigation should keep on focusing on outcome measures that not only indicate whether a participant obtained a job, but also the duration of employment, the wages earned, the participant's level of job satisfaction, measures of quality of life and participation in the community.

In addition, more information is needed regarding the link between social enterprises and mental health services, which is a collaboration that can potentially facilitate the work integration and job tenure of people with severe mental disorders. For example, it might be interesting to learn more on meetings and information exchange between different stakeholders.

Finally, this study did not attempt to address intra-individual variables related to how each mentally ill worker negotiates their appropriate vocational place, which also might be a relevant topic linked to work integration.

5.4 Conclusions

The rationale of this thesis was to advance our knowledge about the work integration process of people with severe mental illness employed in social enterprises. The results of the four studies presented in this manuscript provide new information about the key factors impacting successful vocational outcomes for this specific population of disadvantaged workers. In particular, we aimed at specify how significant factors (both individual and environmental) of job acquisition and retention are integrated into social enterprises. Since social enterprises are part of the social economy and, consequently, subscribe to a philosophy that attaches importance to values such as accepting differences and accommodating the workplace to the needs of employees, these organizations were the ideal context in which investigate the characteristics of the individual and environmental elements. We highlighted how accommodations are key to the inclusion of person with severe mental illness in the workplace. This is of no little account for

practical implication, such as the creation of adequate workplaces for mentally ill workers. At the same time, workplace accommodations are not sufficient by themselves to advance the work lives of adults living with mental disorders, and they must be implemented alongside additional initiatives, including support from the organization, quality job training, and individual resources, such as occupational self-efficacy. Thus, the information gained by the studies may improve and spread effective strategies of job retention of disabled workers in different organizations. Results also created resources for researchers and the academic community, as well as for other important stakeholders in the public sector and among the public at large, such as the new validated instruments to evaluate the motivation to work and the work engagement in people with mental disabilities.

In conclusion, despite the clinical, societal and research advancement in the area of the work integration for people with severe mental illness, a major gap continues to exist between the desire and capability of work of these persons and the lack of chances to work in the competitive labour market on the one hand; and research evidence on what works with whom, where, and when in the workplace on the other. A lot work remains to do in order to address the challenge of mental health disability in the workplace: improve the link between clinical and psychiatric services and social enterprises, so that workers with mental disabilities can be followed in different manners and side; to improve working-related personal resources of people with mental illness, in order to guide them to be able to attain working goals and overcome potential obstacles; to facilitate the interaction between the worker with mental disabilities and the work environment, by removing all the situations or things that interfere with task performance at work, invest on work accommodations, train supervisors and coworkers in order to support and assist colleagues with mental disorders on their work experience inside the co-operative, during which those people could improve also their social abilities. Only by integrating these efforts of researchers, policy-makers, healthcare practitioners, employers, and persons with mental health disabilities can the challenge of mental health disability in the workplace be addressed.

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