SOCIAL SUPPORT, WORK ENGAGEMENT, AND NON-VOCATIONAL OUTCOMES IN PEOPLE WITH SEVERE MENTAL ILLNESS

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The relationships between social support (i.e., supportive relationship between supervisor-coworker), work engagement, self-esteem, and self-awareness (i.e., identity and perceived personal health), were investigated in a group of patients with severe mental illness (i.e., patients suffering from schizophrenia, bipolar disorder, and mood disorders). Seventy Italian working patients were administered the Italian version of the following scales: a) Utrecht Work Engagement Scale, b) Work Climate Questionnaire, c) Rosenberg Self-Esteem Scale, d) Self-Awareness (identity and perceived personal health) ad hoc scale. Results showed that social support is positively related to work engagement, self-awareness, and self-esteem. Moreover, the relationships between social support and identity appeared to be fully mediated by perceived personal health. Practical implications are discussed.

Key words: Social support; Severe mental illness; Work engagement; Non-vocational outcome; Self-awareness.

In the modern western societies, work contributes significantly to the individual's quality of life because it represents one of the strongest instruments of both self-actualization and social inclusion (Jaccard, 1966; Shepherd, 1989). As an instrument of self-actualization, work is essential to ensure people's autonomy and economic security, and it also helps to define personal identity and self-esteem. Work has been found to play an important role in maintaining the mental health of all individuals (Falco et al., 2012; Falco, Girardi, Dal Corso, Di Sipio, & De Carlo, 2013). Furthermore, it contributes to establish goals of personal growth and to set people in a planned existence, especially if it is related to a positive fit between the personal worker's characteristics, the tasks, and the workplace (Catty et al., 2008; Fossey & Harvey, 2010; Kirsh, 2000; Leufstadius, Erlandsson, Bjorkman, & Eklund, 2008; Woodside, Schell, & Allison-Hedges, 2006).

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There are reasons to believe that work could promote the recovery (Huff, Rapp, & Campbell, 2008) of those who suffer from a severe mental illness (SMI) (i.e., people suffering from schizophrenia, bipolar disorder, and other severe forms of depression; National Institute of Mental Health, 1999). Specifically, the support of the supervisor and the chance of experiencing autonomy in the workplace are opportunities to help these people to accept and overcome the challenge of the disability (i.e., recovery; Deegan, 1988). On the other hand, work engagement is considered as a positive experience in itself (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002), and it is also related to good health, generating a positive effect on self-efficacy (Demerouti, Bakker, de Jonge, Janssen, & Schaufeli, 2001; Rothbard, 2001). For this reason it could have a positive effect on self-esteem (Corbière, Lanctot, Sanquirgo, & Lecomte, 2009).

In the present study we explored the possible relationships among social support in the workplace, individual work engagement, and some non-vocational outcomes: self-esteem, identity and perceived personal health (i.e., self-awareness) in patients with SMI.

SOCIAL SUPPORT AT WORK AND POSITIVE OUTCOMES

Social support is defined as the resources provided by other persons (Cohen & Syme, 1985) or as attachments between and among individuals that promote mastery of emotions, offer guidance, provide feedback, validate identity, and foster competence (Caplan, 1979). By viewing social support as a resource, we allow for the possibility that support may have positive effects on health and well-being (Cohen & Syme, 1985).

Previous studies (Barrera, 1986; Furukawa, Harai, Hirai, Kitamura, & Takahashi, 1999; Sarason, Sarason, & Pierce, 1990) showed that social support play an important role in treatment and rehabilitation programs for people with SMI. Several studies (Killeen & O'Day, 2004; Tse & Yeats, 2002; Woodside et al., 2006) showed the importance of the support provided by supervisors and work colleagues in generating a sense of meaningfulness (Gersick, Bartunek, & Dutton, 2000; Kahn, 1990), resilience, security, general motivation (Ryan & Deci, 2001), and socialization (Bejerholm & Eklund, 2006). Rüesch, Graf, Meyer, Rössler, and Hell (2004) noted an increase in the subjective quality of life in people with SMI, due to supportive relations with colleagues or supervisor. However, the process through which social support at work exerts these effects on the recovery process in these people is still not completely clear (Bond et al., 2001; Leufstadius, Eklund, & Erlandsson, 2009).

SOCIAL SUPPORT AND WORK ENGAGEMENT

Previous studies have consistently shown that in the general population social support from colleagues and supervisors is positively associated with work engagement (Bakker & Demerouti, 2008; Halbesleben, 2010; Schaufeli & Bakker, 2004). The relationship between social support and work engagement in people with SMI was recently explored by Villotti, Balducci, Zaniboni, Corbière, and Fraccaroli (2013). However, while Villotti et al. investigated social support from the efficiency and socio-emotional point of view, the aim of the present research is to study social support at work from the perspective of the self-determination theory (Deci & Ryan, 1985; Ryan & Deci, 2000). Social support is here conceptualized as a relationship

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between supervisor and coworker characterized by *autonomy* support versus *control* (Deci et al., 2001). As a matter of fact, Blais, Lachance, Vallerand, Briére, and Riddle (1993) found that, in the general population, when supervisors are perceived as more autonomy supportive, subordinates display greater job satisfaction, less absenteeism, and better physical and psychological well-being. In this perspective, we assumed that:

H1a: a positive relation with a supervisor who promotes autonomy (i.e., social support at work) is positively related to work engagement.

Work Engagement and Self-Esteem

Several studies (Aubin, Hachey, & Mercier, 1999; Bejerholm & Eklund, 2007; Davidson, 2003; Hasselkus, 2002; Hvalsøe & Josephsson, 2003; Laliberte-Rudman, Hoffman, Scott, & Renwick, 2004; Laliberte-Rudman, Yu, Scott, & Pajouhandeh, 2000; Leufstadius et al., 2008; Sutton, Hocking, & Smythe, 2012) demonstrated that occupational engagement (being engaged in some activity) per se is beneficial for many aspects of mental well-being and non-vocational outcome in general (Champney & Dzurec, 1992; Eklund & Backstrom, 2005; Goldberg, Brintnell, & Goldberg, 2002). Occupational engagement was found to be linked to higher ratings of self-related variables (i.e., self-esteem and self-efficacy; Antonovsky, 1987, 1993; Pearlin, Menaghan, Lieberman, & Mullan, 1981; Rotter, 1966), fewer psychiatric symptoms (Bejerholm & Eklund, 2006), and better quality of life ratings (Bejerholm & Eklund, 2007; Chan, Krupa, Lawson, & Eastabrook, 2005; Christiansen, 2005; Christiansen, Baum, & Bass-Haugen, 2005; Goldberg, Killeen, & O'Day, 2005; Laliberte-Rudman et al., 2004). However, these studies focused on the effects of being occupied in general and did not address the specific effects of work engagement on the self-esteem of people with severe mental illness, which are, hence, underinvestigated.

Work engagement is defined as a positive, fulfilling, affective motivational state of work-related well-being that is generally characterized by three aspects: vigor, dedication, and absorption. However, it is also often treated as a single construct which highlights the individual's energy devoted to work, the willingness to invest efforts in it, the enthusiasm and concentration in one's work, whereby time passes quickly and one has difficulties with detaching oneself from work (Bakker, Albrecht, & Leiter, 2011; Schaufeli et al., 2002). Arns and Linney (1993) demonstrated that an improvement in vocational status resulted in increased life satisfaction by modifying feelings of self-esteem and self-efficacy. As a matter of fact, as Kahn (1990) suggested, an engaged individual is one who approaches the tasks associated with a job with a sense of self-investment, energy, and passion, which should translate into higher levels of in-role and extra-role performance. Work engagement is particularly important for people with severe mental illness. In the general population, personal resources such as self-efficacy, self-esteem, and optimism were shown to help workers control and successfully impact their work environment (Bakker, 2011; Bakker & Demerouti, 2008; Luthans, Norman, Avolio, & Avey, 2008). At the same time, as the literature points out, the loss of most personal resources in people with SMI is caused by the mental illness itself, as well as by the lack of social roles and identity related to work, due to the stigma that the disease carries (Eklund & Backstrom, 2005). Of course, this aspect, in turn, clearly plays a role in determining severe damage to these people's self-concept, and, obviously, to their self-esteem. Self-esteem is widely used as an outcome variable in studies of psychiatric

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rehabilitation, based on the assumption that improved functional status leads to higher self-esteem (Torrey, Mueser, McHugo, & Drake, 2000). In the present study we assumed that:

H1b: there is a positive relationship between work engagement and self-esteem.

SOCIAL SUPPORT, WORK ENGAGEMENT, AND SELF-ESTEEM

The previous contributions on social support and work engagement in mentally-ill workers focused on the effects of work engagement on vocational outcomes (e.g., self-efficacy at work; Villotti et al., 2013). Differently, the aim of the present study was to investigate the relationship between social support at work, work engagement, and non-vocational outcomes (i.e., self-esteem). The concept of autonomy support versus control characterizes the quality of social environments, hypothesizing that autonomy-supportive social contexts tend to facilitate self-determined motivation, healthy development, and optimal functioning (Deci et al., 2001).

Individuals working in a resourceful work environment (i.e., have autonomy over their tasks, or receive high-quality supporting) are likely to increase their beliefs in their capabilities (self-efficacy), to feel valued (self-esteem), and to be optimistic that they will meet their goals (Hobfoll, 2002; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009a, 2009b).

Evidence from literature suggests that, on the one hand, social support enhances work engagement; on the other hand that work engagement enhances self-esteem. Then, we assumed that:

H1c: a positive relation with a supervisor who promotes autonomy (i.e., social support at work) will have an indirect effect on self-esteem through work engagement.

SOCIAL SUPPORT AND PERCEIVED PERSONAL HEALTH

Another factor on which social support could have important effects is perceived personal health, namely the extent to which SMI patients are conscious of their difficulties caused by the pathological mental condition. It is well known that people with SMI are often unaware or willfully contest that they have what others think to be a mental illness (Amador, Strauss, Yale, & Gorman, 1991; David, 1990). Taken as a whole, this phenomenon, often referred to as "lack of awareness" or "poor insight," was shown to affect the process of recovery (Lysaker, Roe, & Yanos, 2007). Several studies demonstrated that poor insight can be linked to difficulties in developing working relationships with mental health professionals (Frank & Gunderson, 1990), poorer treatment adherence (Bartko, Herczeg, & Zador, 1988; Cuffel, Alford, Fischer, & Owen, 1996), and poorer clinical outcomes (Schwartz, 2001). Although previous studies recognized the important role of perceived personal health, to our knowledge the potential antecedents of this core variable are not yet investigated. Experiencing oneself in working, through the supervisor's social support, becomes a source of understanding and meaning (Kegan, 1982; Rebeiro & Cook, 1999; Rotter, 1966). One of the consequences of disabling SMI, however, is precisely the difficulty in perceiving the problems caused by mental illness, which affects a person's sense of self (Davidson, Stayner, & Haglund, 1998; Green, Kern, Braff, & Mintz, 2000, McKibbin, Brekke, Sires, Jeste, & Patterson, 2004).

The present study aims to explore the relationship between social support and perceived personal health. Specifically, we assumed that:

H2a: a positive relation with a supervisor who promotes autonomy (i.e., social support at work) is positively related to perceived personal health.

PERCEIVED PERSONAL HEALTH AND IDENTITY

The impact of the experience and diagnosis of mental illness on one's identity has long been recognized (Estroff, 1989; Goffman, 1961). As Yanos, Roe, and Lysaker (2010) suggested, people with SMI develop an "illness identity" that the authors defined as the set of roles and attitudes that people have developed about themselves in relation to their understanding of mental illness. The various difficulties caused by mental illness are affected by both the experience of objective aspects of illness, for example the stigma barriers (Corrigan & Gelb, 2006; Corrigan et al., 2001), or transforming policy (Department of Health and Human Services, 2005), and by how each individual makes meaning of the "illness." The illness identity (Yanos et al., 2010) becomes often the only aspect of one's experience of oneself.

There is substantial evidence that transforming identity is an important part of the process of improving outcomes for people with severe mental illness (Yanos et al., 2010). In a series of qualitative studies, Davidson and colleagues (Davidson, Sells, Sangster, & O'Connell, 2005; Davidson & Strauss, 1992) described how the process of constructing a new "sense of self" is an important part of the process of recovery from mental illness. These studies described how persons with severe mental illness have recaptured a new sense of purpose and health, through daily activities. As Lysaker and colleagues (2007) pointed out, if a person with psychiatric symptoms does not believe that the illness precludes chances for a satisfying life, then the perceived personal health can play an important role in the recovery process.

Other studies (Graffam & Naccarella, 1997; Kirsh, 2000; Ryan, 1997; Strong, 1998) have illustrated that work provides a framework for renegotiating a new sense of self by providing the opportunity and the vehicle through which persons experience connecting, contributing, challenges and success. Based on these considerations, it may be assumed that:

H2b: there is a positive relationship between perceived personal health and identity.

SOCIAL SUPPORT, PERCEIVED PERSONAL HEALTH, AND IDENTITY

Concerning perceived personal health, it is important to highlight that poor insight can affect the general quality of life of patients, as it can be linked to poorer social function (Francis & Penn, 2001; Lysaker & France, 1999; Olfson, Marcus, Wilk, & West, 2006) or vocational dysfunction (Lysaker, Bryson, & Bell, 2002). However, greater insight does not lead directly to positive outcomes. As a matter of facts, greater insight was associated with lower self-esteem (Warner, Taylor, Powers, & Hyman 1989) and decreased well-being and quality of life (Hasson-Ohayon, Kravetz, Roe, David, & Weiser, 2006; Pyne, Bean, & Sullivan, 2001).

One possible explanation for these apparently contradictory findings is that the impact of the acceptance of mental illness depends on the meanings that people attach to mental disorders

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(Roe & Kravetz, 2003). Lysaker and colleagues (2007) pointed out that "if one believes the illness means that he or she is not capable of achieving valued social roles, then awareness could lead to hopelessness and less motivation to persevere." Conversely, as just suggested, "if one does not believe that this illness precludes chances for a satisfying life, then perceived personal health may be a key part of negotiating the challenges posed by the symptoms and diagnostic label" (p. 192).

It might be assumed that a good level of social support in the workplace plays a key role in the recovery process and helps people to accept their problems, which in turn could help to transform their "sense of self" from "patienthood" to "personhood." This represents an important step for improving the functioning of people with severe mental illness, because it allows them to recover a new sense of identity. Then, it could therefore be assumed that:

H2c: a positive relation with a supervisor who promotes autonomy (i.e., social support at work) will have an indirect effect on identity through perceived personal health.

OVERVIEW

We considered the quality of the relationship between supervisor and coworker an important variable related to work engagement and perceived personal health in patients with SMI, which in turn should be related to their self-esteem and identity.

However, we also expected that social support should be related to self-esteem and identity in an indirect way. Specifically, we assumed that a supervisor-coworker relationship based on autonomy (i.e., social support in workplace) would be related to self-esteem promoting work engagement, and to identity through perceived personal health.

METHOD

Participants

Between February and September 2013 a total of 78 patients with a psychiatric diagnosis, enrolled in a supported employment program, were contacted by telephone using the contact database provided partly by the Department of Mental Health of Cagliari (subgroup working as a result of the supported employment program, and subgroup enrolled in a supported employment program) and partly from all Mental Health Centers belonging to the Department of Mental Health of Cagliari (patients working without prior enrollment in supported employment programs). Participants completed a self-administered questionnaire at the presence of psychotherapists.

Eight participants with a psychiatric diagnosis of "anxiety disorder," were not enrolled in the study. Their "anxiety disorder" was so not severe enough to be stigmatized or to prevent a person from working. Therefore, the final group comprised 70 participants, 36 males and 34 females. The mean age was 43 years, with ages ranging from 19 to 62 years. The most predominant diagnostic subgroup were mood disorders (54.3%), the second subgroup in importance were schizophrenic disorders (31.4%). Fifty percent of participants had a junior high school education, 24.3% a high school education, 11.4% held a university degree, 7.1% an elementary school di-

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ploma, and the remaining 7.1% had some form of vocational education, such as a short training period in social or health care, or training for manual work. While 32.9% of the sample consisted of people who were working as a result of the supported employment program, 45.7% of participants was enrolled in a supported employment program, managed by the Department of Mental Health of Cagliari, and the remaining 21.4% were patients of mental health services working without any previous involvement in supported employment programs. As regards positions held, 91.4% worked in the service industry, with 65.7% of participants being workmen, 31.4% clerks, and 2.9% other (freelancers or craftsmen). Concerning duration of employment, 44.3% of the sample had been working for over three years, 4.3% for two to three years, 18.6% for one to two years, while the remaining 32.9% for less than a year.

Measures

The questionnaire contained the following scales.

Social Support. The short form of the Work Climate Questionnaire (WCQ) was used to measure the social support provided by the supervisor to the cowoker. The scale contains six items (Deci, Connell, & Ryan, 1989) to assess individuals' perceptions of the degree to which supervisor is autonomy supportive versus controlling. Participants responded to WCQ items on a 3-point asymmetrical rating scale ranging from 1 (*strongly disagree*) to 3 (*strongly agree*), in which they indicated their perceptions of the supervisors (i.e., "My supervisor trusts into my ability to do my job well"). In the three studies using the WCQ (Baard, Deci, & Ryan 2004; Williams & Deci, 1996; Williams, Grow, Freedman, Ryan, & Deci, 1996) the alpha coefficient of internal consistency was variable, always averaging around .90. In the present study alpha was .79.

Work Engagement. The Italian version (Balducci, Fraccaroli, & Schaufeli, 2010) of the Utrecht Work Engagement Scale (UWES-9) short version developed by Schaufeli and Bakker (2003) was used to measure engagement with work. The UWES-9 scale items were scored on a 7-point asymmetrical rating scale ranging from 0 (*never*) to 6 (*always*). The scale takes into account three aspects of work engagement: vigor, dedication, and absorption. Sample items are: "At my work, I feel bursting with energy"; "I am enthusiastic about my job"; "I feel happy when I am working intensely." A recent study (Villotti et al., 2013) demonstrated the good metric properties of the UWES-9, in terms of internal consistency, for measuring work engagement in workers with mental disorder (the reliability coefficient was .94). In the present study alpha was .95.

Self-Esteem. The Italian version of Rosenberg's Self-Esteem Scale (RSES) was used to assess individual self-esteem (Prezza, Trombaccia, & Armento, 1997). This scale consists of 10 items. Participants are asked to express to what extent they agree with each item on a 7-point scale ranging from 1 (*It does not describe me at all*) to 7 (*It fully describes me*). Sample items are: "I have a positive attitude towards myself"; "I tend to believe that I am a complete failure." A previous study (Di Fabio, 2006) showed a satisfactory internal consistency of the scale (alpha = .84). In the present study alpha was .85.

Self-Awareness. The ability of the patients to recognize themselves in general (identity) and in their lives with an intrusive mental disease (perceveid personal health), were measured by an ad hoc scale. The scale was developed with the help of professional psychologists and psychiatrists working for the Mental Health Department and dealing with employment of psychiatric

patients and on the basis of another scale: the Schedule for Assessment of Insight-Expanded version (SAI-E; Kemp & David, 1995, 1997). Participants are asked to express to what extent they agree with seven items on a 5-point scale from 1 (*absolutely true*) to 5 (*absolutely false*). Sample items are: "Since I started working I have been feeling like a complete person" (identity); "Work brings order to my thoughts" (perceived personal health).

Statistical Analyses

First of all, a principal components analysis (PCA) was performed to examine the dimensionality of the Self-Awareness ad hoc scale used to measure dimensions of identity and perceived personal health in this study. Second, descriptive statistics, bivariate correlations and internal consistencies for all our variables have been examined. Third, predictions concerning the effect of social support on work engagement and perceived personal health (i.e., the proposed mediators) were tested by means of two regression analyses. Furthermore, two multiple regression analyses were performed, in order to examine the association between the proposed mediators and non-vocational outcomes (i.e., identity and self-esteem). In the first one self-esteem was regressed on work engagement, controlling for the effect of social support. In the second one, identity was regressed on perceived personal health, even controlling for the effect of social support. Finally, a Sobel test (Baron & Kenny, 1986) was performed in order to determine whether the indirect effect (i.e., mediation) of social support on both self-esteem and identity was significant.

RESULTS

Self-Awareness Scale, Principal Components Analysis (PCA)

A principal components analysis (PCA) was performed to examine the dimensionality of the Self-Awareness ad hoc scale used to measure dimensions of identity and perceived personal health in this study (see Table 1). One of the items which was intended to measure perceived personal health was excluded from the final compute because it showed higher loadings on Factor 1 (identity) rather than on Factor 2 (perceived personal health). Results indicated the plausibility of a 2-dimension solution which explained 78.83% of the total variance. Factor 1 explained 51.25% of the total variance. Factor 2 explained 27.58% of the total variance. These results provides initial support the dimensionality of Self-Awareness scale. In the present study alphas were .88 for identity, and .73 for perceived personal health.

Social Support, Work Engagement, and Non-Vocational Outcome

Descriptive statistics and internal consistencies for all variables are presented in Table 2, which also reports bivariate correlations among all the constructs considered in the study.

TABLE 1
Descriptive statistics, reliability, and factor loadings for the Self-Awareness Scale

Scale/Items	M	SD	Loading
Identity			
Since I started working I have been feeling like a complete person	4.31	0.99	.92
Working makes me feel like an adult	4.24	0.95	.91
Working makes me feel important	4.10	1.01	.86
Work has allowed me to find out what I can actually do	3.92	1.09	.71
Perceived personal health			
Since I started working, handling problems seems less cumbersome	4.01	1.08	.96
Work brings order to my thoughts	4.15	1.07	.71

TABLE 2
Means, standard deviation, and bivariate correlations among the constructs considered ($N = 70$)

	M	SD	1	2	3	4	5
1) Social Support	2.63	0.44	(.79)				
2) Work Engagement	4.79	1.39	.26[*]	(.95)			
3) Self-Esteem	4.93	1.32	.25[*]	.35[**]	(.85)		
4) Identity	4.15	0.87	.25[*]	.40[**]	.15[**]	(.88)	
5) Perceived personal health	4.01	0.89	.32[**]	.41[***]	.23[*]	.57[***]	(.73)

Note. Cronbach's alphas are shown in brackets.
***$p < .001$. **$p < .01$. *$p < .05$.

Social Support at Work Regression Analyses

Results of the regression analyses partially confirmed our hypotheses. Specifically, social support is positively related to work engagement, and perceived personal health. Hence, Hypotheses 1a and 2a were confirmed. Two hierarchical regressions were then performed, in order to examine the association between the proposed mediators and the two non-vocational outcomes. In the first regression, social support was inserted in Step 1 and then work engagement was added in Step 2. In the second regression, again social support was inserted in Step 1, while perceived personal health was added in Step 2. Tables 3 and 4 show results of the two regressions. The pattern of results indicated that work engagement was associated with self-esteem, controlling for the effect of social support. Additionally, perceived personal health was associated with identity controlling for the effect of social support. Therefore, Hypotheses 1b and 2b were supported. A Sobel test was finally used and the results suggested that the indirect effect of social support on identity through perceived personal health was statistically significant ($z = 2.55$, $p < .01$), while the indirect effect of social support on self-esteem through work engagement was

nearly significant ($z = 1.80$, $p < .08$). Thus Hypothesis 1c was rejected while Hypothesis 2c had to be confirmed. This marginally significant result may be due to the low power of the Sobel test in such a small sample (Fritz & MacKinnon, 2007).

TABLE 3
Hierarchical regression predicting Self-Esteem ($N = 70$)

Criterion: Self-Esteem	β	Adjusted R^2	R^2 change
Step 1		.05	
Social support	.25*		
Step 2		.12	.07
Social support	.17		
Work engagement	.30*		

*$p < .05$

TABLE 4
Hierarchical regression predicting identity ($N = 70$)

Criterion: Identity	β	Adjusted R^2	R^2 change
Step 1		.05	
Social support	.25*		
Step 2		.31	.26
Social support	.07		
Perceived personal health	.55***		

***$p < .001$. *$p < .05$.

DISCUSSION AND CONCLUSIONS

This study analyzes the relationship between social support from supervisor and a set of important factors that could facilitate the recovery process of people with severe mental illness. More specifically, we wanted to find evidence that the quality of the relationship that the supervisor establishes with these people may be related not only to vocational aspects of work but also to various dimensions of non-vocational outcomes capable of improving the life of these people in general. In other words, we expected that a supportive workplace might be related to a better self-awareness in SMI individuals. The quality of the relationship between supervisor and coworker was assumed to foster both the individual's work engagement and the perceived personal health. These aspects, in turn, were expected to enhance self-esteem and recover parts of identity lost due to the illness. The findings of this study partially confirm our hypotheses. High levels of social support are associated with high levels of work engagement, perceived personal health, and indirectly with high levels of identity. Specifically, results show that people receiving autonomy support from supervisors develop a greater sense of belongingness, become more inspired in their work, and more engrossed in their working tasks. The positive relationship with supervisor is

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therefore closely related to the work engagement by psychiatric patients, and this, in turn, is accompanied by a greater self-esteem. In our study, perceived personal health has been found to have a mediation role in the relation between social support and identity. Contrary to what we expected, even if work engagement is positively correlated with social support and self-esteem, data did not confirm the mediation role of work engagement in the relationship between social support and self-esteem. This result could be due to the small number of participants. These findings could imply that social support at work, work engagement, and perceived personal health are associated with important characteristics of the recovery process (self-esteem and identity) of people with mental illness. Our study has several implications, because little is actually known about the recovery process of SMI patients at work. In addition, it sheds some light on the process through which social support from supervisor might affect two important aspects of non-vocational outcomes (self-esteem and identity). To our knowledge, no studies have investigated these aspects before.

Hence, this study provides clues that the quality of the relationship with the supervisor at work can help these people to re-discover their internal resources by increasing self-esteem and regaining a new sense of identity. This process might reawaken interest and allow reinvestment, in oneself and in relationships with others.

LIMITATION AND FUTURE RESEARCH

This study presents some limitations. The difficulty in recruiting for this study led to the limited size of our group of participants. The cross-sectional nature of the study did not allow conclusions about causality and, therefore, a longitudinal study is needed to clarify the casual relationship between social support at work and vocational/non-vocational outcomes (Cook & Razzano, 2000; Falco, Girardi, Parmiani, et al., 2013; Mueser et al., 1997). The use of self-reported measures to detect both independent and dependent variables may result in biased (usually inflated) correlations between variables (common method bias, CMB). Therefore, observer rating (e.g., psychologist's or psychotherapist's assessment of identity/perceived personal health) may be used together with self-report measures, in order to reduce CMB (Falco, Girardi, Marcuzzo, De Carlo, & Bartolucci, 2013). Finally, the present study should be viewed as hypothesis-generating, more research is needed in order to validate our descriptive model.

PRACTICAL IMPLICATION

This study provides further knowledge about occupation, health, and non-vocational outcomes in people with SMI. Together with previous research (Bejerholm & Eklund, 2006), this study further confirms that work may be an important source of self-esteem and a provider of a sense of identity. Especially a functional relation between coworkers and supervisors, which enhances patients' autonomy, should be considered in the treatment and rehabilitation process. In conclusion, work gives these people the opportunity to not only regain confidence in themselves, but, most of all, play a role in society other than that of "patienthood."

REFERENCES

Amador, X. F., Strauss, D. H., Yale, S. A., & Gorman, J. M. (1991). Awareness of illness in schizophrenia. *Schizophrenia Bulletin*, *17*, 113-132.

Antonovsky, A. (1987). *Unraveling the mystery of health: How people manage stress and stay well*. San Francisco: Jossey-Bass.

Antonovsky, A. (1993). The structure and properties of the sense of coherence scale. *Social Science and Medicine*, *36*(6), 725-733. doi:10.1016/0277-9536(93)90033-Z

Arns, P. G., & Linney, J. A. (1993). Work, self, and life satisfaction for persons with severe and persistent mental disorders. *Psychosocial Rehabilitation Journal*, *17*(2), 63-79. doi:10.1037/h0095599

Aubin, G., Hachey, R., & Mercier, C. (1999). Meaning of daily activities and subjective quality of life in people with severe mental illness. *Scandinavian Journal of Occupational Therapy*, *6*(2), 53-62. doi:10.1080/110381299443744

Baard, P. P., Deci, E. L., & Ryan, R. M. (2004). Intrinsic need satisfaction: A motivational basis of performance and well-being in two work settings. *Journal of Applied Social Psychology*, *34*, 2045-2068. doi:10.1111/j.1559-1816.2004.tb02690.x

Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science*, *20*, 265-269. doi:10.1177/0963721411414534

Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Work engagement: Further reflections on the state of play. *European Journal of Work and Organizational Psychology*, *20*, 74-88. doi:10.1080/1359432X.2010.546711

Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, *13*, 209-223. doi:10.1108/13620430810870476

Balducci, C., Fraccaroli, F., & Schaufeli, W. B. (2010). Psychometric properties of the Italian version of the Utrecht Work Engagement Scale (UWES-9). *European Journal of Psychological Assessment*, *26*(2), 143-149. doi:10.1027/1015-5759/a000020

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*(6), 1173-1182. doi:10.1037/0022-3514.51.6.1173

Barrera, M. (1986). Distinctions between social support concepts, measures, and models. *American Journal of Community Psychology*, *14*(4), 413-445. doi:10.1007/BF00922627

Bartko, G., Herczeg, I., & Zador, G. (1988). Clinical symptomatology and drug compliance in schizophrenia. *Acta Psychiatrica Scandinavica*, *77*(1), 74-76. doi:10.1111/j.1600-0447.1988.tb05080.x

Bejerholm, U., & Eklund, M. (2006). Construct validity of a newly developed instrument: Profiles of Occupational Engagement in people with Schizophrenia, POES. *Nordic Journal of Psychiatry*, *60*, 200-206. doi:10.1080/08039480600636239

Bejerholm, U., & Eklund, M. (2007). Occupational engagement in persons with schizophrenia: Relationships to self-related variables, psychopathology, and quality of life. *American Journal of Occupational Therapy*, *61*, 21-32. doi:10.5014/ajot.61.1.21

Blais, M. R., Lachance, L., Vallerand, R. J., Briére, N. M., & Riddle, A. S. (1993). L'inventaire des motivations au travail de Blais [The Work Motivation Inventory by Blais]. *Revue Québé coise de Psychologie*, *14*, 185-215.

Bond, G. R., Resnick, S. G., Drake, R. E., Xie, H., McHugo, G. J., & Bebout, R. R. (2001). Does competitive employment improve nonvocational outcomes for people with severe mental illness? *Journal of Consulting and Clinical Psychology*, *69*, 489-501. doi:10.1037/0022-006X.69.3.489

Caplan, R. D. (1979). Social support, person-environment fit, and coping. In L. A. Ferman & J. P. Gordus (Eds.), *Mental health and the economy* (pp. 89-131). Kalamazoo, MI: Upjohn, Institute for Employment Research

Catty, J., Lissouba, P., White, S., Becker, T., Drake, R. E., Fioritti, A., ... Burns, T. (2008). Predictors of employment for people with severe mental illness: Results of an international six-centre randomized controlled trial. *The British Journal of Psychiatry*, *192*(3), 224-231. doi:10.1192/bjp.bp.107.041475

Champney, T., & Dzurec, L. (1992). Involvement in productive activities and satisfaction with living situations among severely mentally disabled adults. *Hospital and Community Psychiatry*, *43*, 899-903.

Chan, P. S., Krupa, T., Lawson, J. S., & Eastabrook, S. (2005). An outcome in need of clarity: Building a predictive model of subjective quality of life for persons with severe mental illness living in the community. *American Journal of Occupational Therapy*, *59*, 181-190. doi:10.5014/ajot.59.2.181

Christiansen, C. H. (2005). Time use and patterns of occupations. In C. H. Christiansen, C. M. Baum, & J. Bass-Haugen (Eds.), *Occupational therapy: Performance, participation, and well-being* (3rd ed., pp. 71-92). Thorofare, NJ: Slack.

Christiansen, C. H., Baum, C., & Bass-Haugen, J. (2005). *Occupational therapy: Performance, participation, and well-being*. Thorofare, NJ: Slack Incorporated, NJ.

Cohen, S., & Syme, S. L. (1985). Issues in the study and application of social support. *Social Support and Health*, *3*, 3-22.

Cook, J. A., & Razzano, L. (2000). Vocational rehabilitation for persons with schizophrenia: Recent research and implications for practice. *Schizophrenia Bulletin*, *26*(1), 87-103.

Corbière, M., Lanctot, N., Sanquirgo, N., & Lecomte, T. (2009). Evaluation of self-esteem as a worker for people with severe mental disorders. *Journal of Vocational Rehabilitation*, *30*, 87-98. doi:10.3233/JVR-2009-0455

Corrigan, P. W., & Gelb, B. (2006). Three programs that use mass approaches to challenge the stigma of mental illness. *Psychiatric Services*, *57*(3), 393-398. doi:10.1176/appi.ps.57.3.393

Corrigan, P. W., River, L. P., Lundin, R. K., Penn, D. L., Uphoff-Wasowski, K., Campion, J., ... Kubiak, M. A. (2001). Three strategies for changing attributions about severe mental illness. *Schizophrenia Bulletin*, *27*, 187-195.

Cuffel, B. J., Alford, J., Fischer, E. P., & Owen, R. R. (1996). Awareness of illness in schizophrenia and outpatient treatment adherence. *Journal of Nervous & Mental Disease*, *184*, 653-659.

David, A. S. (1990). Insight and psychosis. *The British Journal of Psychiatry*, *156*, 798-805. doi:10.1192/bjp.156.6.798

Davidson, L. (2003). *Living outside mental illness: Qualitative studies of recovery in schizophrenia*. New York, NY: New York University Press.

Davidson, L., Sells, D., Sangster, S., & O'Connell, M. (2005). Qualitative studies of recovery: What can we learn from the person? In R. O. Ralph & P. W. Corrigan (Eds.), *Recovery in mental illness: Broadening our understanding of wellness* (pp. 147-170). Washington, DC: American Psychological Association.

Davidson, L., Stayner, D., & Haglund, K. (1998). Phenomenological perspectives on the social functioning of people with schizophrenia. In K. Mueser & N. Tarrier (Eds.), *Handbook of social functioning in schizophrenia* (pp. 97-120). Boston: Allyn & Bacon.

Davidson, L., & Strauss, J. S. (1992). Sense of self in recovery from severe mental illness. *British Journal of Medical Psychology*, *65*, 131-145. doi:10.1111/j.2044-8341.1992.tb01693.x

Deci, E. L., Connell, J. P., & Ryan, R. M. (1989). Self-determination in a work organization. *Journal of Applied Psychology*, *74*, 580-590. doi:10.1037/0021-9010.74.4.580

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York, NY: Plenum.

Deci, E. L., Ryan, R. M., Gagné, M., Leone, D. R., Usunov, J., & Kornazheva, B. P. (2001). Need satisfaction, motivation, and well-being in the work organizations of a former eastern bloc country: A cross-cultural study of self-determination. *Personality and Social Psychology Bulletin*, *27*, 930-943. doi:10.1177/0146167201278002

Deegan, P. E. (1988). Recovery: The lived experience of rehabilitation. *Psychosocial Rehabilitation Journal*, *11*(4), 11-19. doi:10.1037/h0099565

Demerouti, E., Bakker, A. B., de Jonge, J., Janssen, P. P. M., & Schaufeli, W. B. (2001). Burnout and engagement at work as a function of demands and control. *Scandinavian Journal of Work Environment and Health*, *27*, 279-286. doi:10.5271/sjweh.615

Department of Health and Human Services (2005). *Federal action agenda*. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Di Fabio, A. (2006). Decisional procrastination correlates: Personality traits, self-esteem or perception of cognitive failure? *International Journal for Educational and Vocational Guidance*, *6*, 109-122. doi:10.1007/s10775-006-9000-9

Eklund, M., & Backstrom, M. (2005). A model of subjective quality of life for outpatients with schizophrenia and other psychoses. *Quality of Life Research*, *14*, 1157-1168. doi:10.1007/s11136-004-2960-7

Estroff, S. E. (1989). Self, identity, and subjective experiences of schizophrenia: In search of the subject. *Schizophrenia Bulletin*, *15*, 189-196. doi:10.1093/schbul/15.2.189

Falco, A., Girardi, D., Dal Corso, L., Di Sipio, A., & De Carlo, N. A. (2013). Fear of workload, job autonomy, and work-related stress: The mediating role of work-home interference. *TPM – Testing, Psychometrics, Methodology in Applied Psychology*, *20*(3), 217-234. doi:10.4473/TPM20.3.2

Falco, A., Girardi, D., Marcuzzo, G., De Carlo, A., & Bartolucci, G. B. (2013). Work stress and negative affectivity: A multi-method study. *Occupational Medicine*, *63*(5), 341-347. doi:10.1093/occmed/kqt054

Falco, A., Girardi, D., Parmiani, G., Bortolato, S., Piccirelli, A., Bartolucci, G. B., & De Carlo, N. A. (2013). Presenteismo e salute dei lavoratori: Effetti di mediazione dello strain psico-fisico in un'indagine longitudinale [Presenteism and health among workers: Effects of mediation on psycho-physical strain in a longitudinal survey]. *Giornale Italiano di Medicina del Lavoro ed Ergonomia 35*(3), 138-150.

Falco, A., Girardi, D., Sarto, F., Marcuzzo, G., Vianello, L., Magosso, D., ... De Carlo, N. A. (2012). Una nuova scala di misura degli effetti psico-fisici dello stress lavoro-correlato in una prospettiva d'integrazione di metodi [A new scale for measuring the psycho-physical effects of work-related stress in a perspective of methods integration]. *La Medicina del Lavoro*, *103*(4), 288-308.

Fossey, E. M., & Harvey, C. A. (2010). Finding and sustaining employment: A qualitative meta-synthesis of mental health consumer views. *Canadian Journal of Occupational Therapy*, *77*, 311-322. doi:10.2182/cjot.2010.77.5.6

Francis, J. L., & Penn, D. L. (2001). The relationship between insight and social skill in persons with severe mental illness. *Journal of Nervous and Mental Disease*, *189*, 822-829.

Frank, A., & Gunderson, J. G. (1990). The role of the therapeutic alliance in the treatment of schizophrenia. *Archives of General Psychiatry*, *47*, 228-236. doi:10.1001/archpsyc.1990.01810150028006

Fritz, M. S., & MacKinnon, D. P. (2007). Required sample size to detect the mediated effect. *Psychological science*, *18*(3), 233-239. doi:10.1111/j.1467-9280.2007.01882.x

Furukawa, T. A., Harai, H., Hirai, T., Kitamura, T., & Takahashi, K. (1999). Social support questionnaire among psychiatric patients with various diagnoses and normal controls. *Social Psychiatry and Psychiatric Epidemiology*, *34*(4), 213-222.

Gersick, C. G., Bartunek, J. M., & Dutton, J. E. (2000). Learning from academia: The importance of relationships in professional life. *Academy of Management Journal*, *43*(6), 1026-1044. doi:10.2307/1556333

Goffman, E. (1961). *Asylums: Essays on the social situation of mental patients and other inmates*. Garden City, NY: Anchor Books.

Goldberg, B., Brintnell, S., & Goldberg, J. (2002). The relationship between engagement in meaningful activities and quality of life in persons disabled by mental illness. *Occupational Therapy in Mental Health*, *18*, 17-44. doi:10.1300/J004v18n02_03

Goldberg, S. G., Killeen, M. B., & O'Day, B. (2005). The disclosure conundrum: How people with psychiatric disabilities navigate employment. *Psychology, Public Policy, and Law*, *11*, 463-500. doi:10.1037/1076-8971.11.3.463

Graffam, J., & Naccarella, L. (1997). Disposition towards employment and perspectives on the employment process held by clients with psychiatric disabilities. *Australian Disability Review*, *3*, 3-15.

Green, M., Kern, R., Braff, D., & Mintz, J. (2000). Neurocognitive deficits and functional outcome in schizophrenia: Are we measuring the right stuff? *Schizophrenia Bulletin*, *26*, 119-136.

Halbesleben, J. R. (2010). A meta-analysis of work engagement: Relationships with burnout, demands, resources, and consequences. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 102-117). New York-Hove, NY-UK: Psychology Press.

Hasselkus, B. R. (2002). *The meaning of everyday occupation.* Thorofare, NJ: Slack.

Hasson-Ohayon, I., Kravetz, S., Roe, D., David, A. S., & Weiser, M. (2006). Insight into psychosis and quality of life. *Comprehensive Psychiatry*, *47*, 265-269. doi:10.1016/j.comppsych.2005.08.006

Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of General Psychology*, *6*(4), 307-324. doi:10.1037/1089-2680.6.4.307

Huff, S. W., Rapp, C. A., & Campbell, S. R. (2008). Everyday is not always Jell-O: A qualitative study of factors affecting job tenure. *Psychiatric Rehabilitation Journal*, *31*, 211-218. doi:10.2975/31.3.2008.211.218

Hvalsøe, B., & Josephsson, S. (2003). Characteristics of meaningful occupations from the perspective of mentally ill people. *Scandinavian Journal of Occupational Therapy*, *10*, 61-71. doi:10.1080/11038120310009489

Jaccard, P. (1966). *Psyco-sociologie du travail* [Work psychology]. Paris: Payot.

Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, *33*(4), 692-724. doi:10.2307/256287

Kegan, R. (1982). *The evolving self.* Cambridge, MA: Harvard University Press.

Kemp, R., & David, A. (1995). Insight and adherence to treatment in psychotic disorders. *British Journal of Hospital Medicine*, *54*(5), 222-227.

Kemp, R., & David, A. (1997). Insight and compliance. In B. Blackwell (Ed.), *Compliance and treatment alliance in serious mental illness* (pp. 61-86). Amsterdam: Harwood Academic Publishers.

Killeen, M. B., & O'Day, B. L. (2004). Challenging expectations: How individuals with psychiatric disabilities find and keep work. *Psychiatric Rehabilitation Journal*, *28*, 157-163. doi:10.2975/28.2004.157.163

Kirsh, B. (2000). Work, workers, and workplaces: A qualitative analysis of narratives of mental health consumers. *Journal of Rehabilitation*, *66*, 24-30.

Laliberte-Rudman, D., Hoffman, L., Scott, E., & Renwick, R. (2004). Quality of life for individuals with schizophrenia: Validating an assessment that addresses client concerns and occupational issues. *OJTR: Occupation, Participation, and Health*, *24*(1), 13-21.

Laliberte-Rudman, D., Yu, B., Scott, E., & Pajouhandeh, P. (2000). Exploration of the perspectives of persons with schizophrenia regarding quality of life. *American Journal of Occupational Therapy*, *54*, 137-147. doi:10.5014/ajot.54.2.137

Leufstadius, C., Eklund, M., & Erlandsson, L. K. (2009). Meaningfulness in work. Experiences among employed individuals with persistent mental illness. *Work*, *34*(1), 21-32. doi:10.3233/WOR-2009-0899

Leufstadius, C., Erlandsson, L. K., Bjorkman, T., & Eklund, M. (2008). Meaningfulness in daily occupations among individuals with persistent mental illness. *Journal of Occupational Science*, *15*, 27-35. doi:10.1080/14427591.2008.9686604

Luthans, F., Norman, S. M., Avolio, B. J., & Avey, J. B. (2008). The mediating role of psychological capital in the supportive organizational climate employee performance relationship. *Journal of Organizational Behavior*, *29*, 219-238. doi:10.1002/job.507

Lysaker, P. H., Bryson, G. J., & Bell, M. D. (2002). Insight and work performance in schizophrenia. *Journal of Nervous and Mental Disease*, *190*, 142-146.

Lysaker, P. H., & France, C. M. (1999). Psychotherapy as an element in supported employment for persons with severe and persistent mental illness. *Psychiatry*, *62*, 209-220.

Lysaker, P. H., Roe, D., & Yanos, P. T. (2007). Toward understanding the insight paradox: Internalized stigma moderates the association between insight and social functioning, hope, and self-esteem among people with schizophrenia spectrum disorders. *Schizophrenia Bulletin*, *33*(1), 192-199. doi: 10.1093/schbul/sbl016

McKibbin, C., Brekke, J., Sires, D., Jeste, D., & Patterson, T. (2004). Direct assessment of functional abilities: Relevance to persons with schizophrenia. *Schizophrenia Research*, *72*, 53-67. doi:10.1016/j.schres.2004.09.011

Mueser, K. T., Becker, D. R., Torrey, W. C., Xie, H., Bond, G. R., Drake, R. E., & Dain, B. J. (1997). Work and nonvocational domains of functioning in persons with severe mental illness: A longitudinal analysis. *The Journal of Nervous & Mental Disease*, *185*(7), 419-426.

National Institute of Mental Health (1999). *A report of the surgeon general*. Retrieved from http://www.surgeongeneral.gov/library/mentalhealth/chatter2/sec21.html

Olfson, M., Marcus, S. C., Wilk, J., & West, J. C. (2006). Awareness of illness and non adherence to antipsychotic medications among persons with schizophrenia. *Psychiatric Services*, *57*, 205-211. doi:10.1586/ern.09.55

Pearlin, L., Menaghan, E., Lieberman, M., & Mullan, J. (1981). The stress process. *Journal of Health and Social Behavior*, *22*, 337-356.

Prezza, M., Trombaccia, F. R., & Armento, L. (1997). La scala dell'autostima di Rosenberg: traduzione e validazione italiana [Rosenberg self-esteem scale: Italian translation and validation]. *Bollettino di Psicologia Applicata*, *223*, 35-44.

Pyne, J. M., Bean, D., & Sullivan, G. (2001). Characteristics of patients with schizophrenia who do not believe they are mentally ill. *Journal of Nervous and Mental Disease*, *189*, 146-153.

Rebeiro, K., & Cook, J. (1999). Opportunity, not prescription: An exploratory study of the experience of occupational engagement. *Canadian Journal of Occupational Therapy*, *66*, 176-187.

Roe, D., & Kravetz, S. (2003). Different ways of being aware of and acknowledging a psychiatric disability. A multifunctional narrative approach to insight into mental disorder. *Journal of Nervous and Mental Disease*, *191*, 417-424.

Rothbard, N. P. (2001). Enriching or depleting? The dynamics of engagement in work and family roles. *Administrative Science Quarterly*, *46*, 655-684. doi:10.2307/3094827

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcements. *Psychological Monographs*, *80*, 1-28.

Rüesch, P., Graf, J., Meyer, P. C., Rössler, W., & Hell, D. (2004). Occupation, social support and quality of life in persons with schizophrenic or affective disorders. *Social Psychiatry and Psychiatric Epidemiology*, *39*, 686-694. doi:10.1007/s00127-004-0812-y

Ryan, R. (1997). Social networks and employment. *Australian Disability Review*, *3*, 16-28.

Ryan, R. M., & Deci, E. L. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*(4), 227-268. doi:10.1207/S15327965PLI1104_01

Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, *52*, 141-166. doi:10.1146/annurev.psych.52.1.141

Sarason, B. R., Sarason, I. G., & Pierce, G. R. (1990). *Social support: An interactional view*. New York, NY: Wiley.

Schaufeli, W. B., & Bakker, A. B. (2003). *Test manual for the Utrecht Work Engagement Scale*. Unpublished manuscript. Utrecht University, Utrecht, The Netherlands. Retrieved from http://www.schaufeli.com

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, *25*, 293-315. doi:10.1002/job.248

Schaufeli, W. B., Salanova, M., Gonzalez-Roma, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Organizational Behavior*, *25*, 293-315. doi:10.1023/A:1015630930326

Schwartz, R. C. (2001). Self-awareness in schizophrenia: Its relationship to depressive symptomatology and broad psychiatric impairments. *Journal of Nervous and Mental Disease*, *189*, 401-403.

Shepherd, G. (1989). The value of work in the 1980s. *Psychiatric Bulletin*, *13*, 231-233. doi:10.1192/pb.13.5.231

Strong, S. (1998). Meaningful work in supportive environments: Experiences with the recovery process. *American Journal of Occupational Therapy*, *52*, 31-38. doi:10.5014/ajot.52.1.31

Sutton, D. J., Hocking, C. S., & Smythe, L. A. (2012). A phenomenological study of occupational engagement in recovery from mental illness. *Revue Canadienne d'Ergothérapie*, *79*(3), 142-150. doi:10.2182/cjot.2012.79.3.3

Torrey, W. C., Mueser, K. T., McHugo, G. H., & Drake, R. E. (2000). Self-esteem as an outcome measure in studies of vocational rehabilitation for adults with severe mental illness. *Psychiatric Services*, *51*, 229-233. doi:10.1176/appi.ps.51.2.229

Tse, S., & Yeats, M. (2002). What helps people with bipolar affective disorder succeed in employment: A grounded theory approach. *Work*, *19*, 47-62.

Villotti, P., Balducci, C., Zaniboni, S., Corbière, M., & Fraccaroli, F. (2013). An analysis of work engagement among workers with mental disorders recently integrated to work. *Journal of Career Assessment*, *22*(1), 18-27. doi:10.1177/1069072713487500

Warner, R., Taylor, D., Powers, M., & Hyman, R. (1989). Acceptance of the mental illness label by psychotic patients: Effects on functioning. *American Journal of Orthopsychiatry*, *59*, 398-409. doi:10.1111/j.1939-0025.1989.tb01675.x

Williams, G. C., & Deci, E. L. (1996). Internalization of biopsychosocial values by medical students: A test of self-determination theory. *Journal of Personality and Social Psychology*, *70*, 767-779. doi:10.1037/0022-3514.70.4.767

Williams, G. C., Grow, V. M, Freedman, Z., Ryan, R. M., & Deci, E. L. (1996). Motivational predictors of weight loss and weight-loss maintenance. *Journal of Personality and Social Psychology*, *70*, 115-126. doi:10.1037/0022-3514.70.1.115

Woodside, H., Schell, L., & Allison-Hedges, J. (2006). Listening for recovery: The vocational success of people living with mental illness. *Canadian Journal of Occupational Therapy*, *73*, 36-43. doi:10.2182/cjot.05.0012

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009a). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior*, *74*, 235-244. doi:10.1016/j.jvb.2008.11.003

Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009b). Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of Occupational and Organizational Psychology*, *82*(1), 183-200. doi:10.1348/096317908X285633

Yanos, P. T., Roe, D., & Lysaker, P. H. (2010). The impact of illness identity on recovery from severe mental illness. *American Journal of Psychiatric Rehabilitation*, *13*(2), 73-93. doi:10.1080/15487761003756860