

---

# Resource-oriented assessment of work ability in psychiatry

**Katinka Tuisku, Kaisla Joutsenniemi, Tanja Rentto,  
Susanne Heikinheimo**

---

## Abstract

The psychosocial functioning and work ability of psychiatric patients are to a large extent affected by factors other than medical. The interactions between state of health, psychosocial environment and personal resources are complex. Some part of the apparent disability is due to not only psychiatric symptoms, but also to "illness career", maladaptive health behaviours and adverse social roles, experiences and environmental factors, and thus not curable with the same treatments as psychiatric symptoms. An individual's positive psychological resources can compensate for deficits brought on by illness. Identifying the strengths and finding the coping skills are an essential part of rehabilitation planning and return to work strategies. Here, we present some tools for the assessment of positive mental health aspects that are associated with function.

## Introduction

Assessment of function should be present at all medical encounters with clients, followed by adequate support for function (1). Working ability is of major concern among working age psychiatric patients, and it is an important outcome measure of effective treatment and rehabilitation in common mental disorders. Among employed patients, the role of the psychiatrist is more consultative in assessment of working ability, whereas the occupational health services (OHS) have the central coordinative role due to their close contact with workplace, and knowledge of work demands and working conditions. The consulting psychiatrist, or the psychiatric team in charge of treatment, instead represents the expertise on psychiatric diagnostics, prognosis and treatment guidelines, in addition to psychological resources and function. Therefore, an active co-operation with OHS is essential for an integrated assessment of work ability and rehabilitation plan.

Growing professional requirements and unemployment threaten the survival of psychiatric patients in working life. Unemployment, over-represented among psychiatric patients, is of special concern due to lack of OHS active preventive and return to work strategies. Assessment of and support for the working ability of an unemployed psychiatric patient calls for co-operation with employment services. This article, however, does not focus on the broad and fundamental issue of co-operation between health care providers and working life, nor on the primary importance of work orientation described elsewhere (2, 3, 4, 5). Instead, the aim of this article is to bring up the resource-oriented and positive psychological view with some practical tools for psychiatric praxis, to complete the more traditional psychopathology-oriented psychiatric assessment of working ability.

Work is an essential element of mental well-being (6, 7) and of great importance even for the most severely ill psychiatric patients (8, 9, 10, 11). The rights of disabled people to participate in working life, the value of work for the mental patient as well as the value of disadvantaged people's contribution to working life has been highlighted by community research and political discourse (12, 13). Prolonged unemployment is related to increased psychiatric morbidity and decreased motivation for re-employment (14, 15). Prolonged sick leave also has an independent negative effect on return to work (16). The return to work of mental patients becomes very hard after a prolonged sick leave (17, 18, 19) and their vocational rehabilitation is often delayed in Finland (18).

Among psychiatric patients, any type of absence from work for more than half a year reduces the chances to return. The return to work rate becomes minimal after one year of absence (20). There are many mechanisms to blame. Some of them are related to social environments, and others to individual psychological reactions and chronicity of illness. During a long sick leave, psychiatric patients, more often than other patients, may encounter rejection by employer, insecure employment future, stigma and social marginalization, psychological alienation from working life and a fear of return, reduced self-esteem, loss of daily routines and maladaptive lifestyles.

In evaluating a psychiatric patient's working ability, a wide range of positive psychological resources should be assessed and harnessed in order to prevent excess absenteeism from work. There is increasing international interest in the concept of positive mental health and its contribution to all aspects of human life, including working life (21).

---

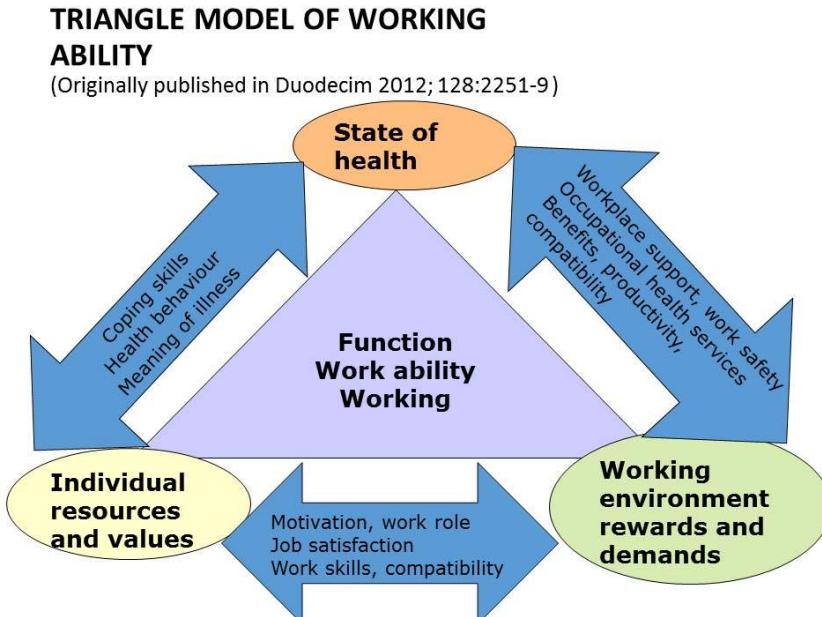
## The many faces of psychiatric function and working ability

Psychiatric assessment of working ability has focused primarily on psychiatric diagnostics and symptom evaluation. The co-operation with the client is loaded by the burden of testimony: in order to obtain disability compensation, there is need to demonstrate the severity of illness and disability, which may, in the worst case, shift the focus of attention far away from resources and rehabilitation prospects. The need for objective assessment of function (22, 23) and for identification of the remaining capabilities (24, 25) have been emphasized. On the other hand, the assessment of function is challenged by subjective experience of disability related to phenomena that are difficult to measure objectively (26). The concrete function tested in real environment, like in work trial, offers valuable evidence for assessment of working ability (4, 27), but it offers no bypass to the patient's subjective experience.

The subjective experience of one's functional capacity predicts return to work outcomes in patients with mental disorders (28, 29) and without client perspective and participation, the rehabilitation planning is unsuccessful. The subjective barriers for return to work, as well as the subjective motivating factors and strengths, should be explored in detail with the patient and be taken into account in return to work strategies and psychological interventions. Concrete assessment tools (see below) can aid finding out the individual resources of the client and to focus the attention on them.

The psychosocial functioning and work ability of psychiatric patients are related to multidimensional interactions including many factors other than medical. These interactions are presented in the dynamic *Triangle model of work ability* (Figure 1). With the same psychiatric symptoms, a patient can be fully capable of working or completely unable to work, depending on demands and resources of the work, compatibility of skills and values with the work, social support, security, roles, routines and individual psychological resources, such as motivation, self-efficacy, resilience, coping skills and personal interpretation and finally, the significance attributed to the symptoms.

Figure 1. Triangle model of work ability. Translated and republished by permission of Duodecim, Medical Journal, originally published in Finnish (4).



The functional deficits related to psychiatric illness can be conceptualized into four categories with different prognosis and different treatment or rehabilitation options (Table 1). There are quite persistent trait-like features, such as primary developmental cognitive deficits that may hamper studying and working unless compensatory skills are learned by neuropsychological rehabilitation, or an adaptation-supportive working environment and coaching provided. Acute psychiatric symptoms instead often respond to medical and psychosocial treatment interventions, including symptom management, or they fade away in time or by elimination of triggers. Secondary symptoms are established, more long-term behavioural patterns, learned adverse coping efforts, such as avoidance in anxiety and fear. They can be deconstructed by behavioural psychotherapeutic interventions, adaptation-supportive, rewarding social environment or by other means.

The last category, that is most difficult to recognize and to differentiate from chronic illness due to overlapping with the symptoms, is the adverse sickness role. This is the negative opposite of an active, adaptive patient role and symptom awareness. An adverse sickness role is developed by social rewards gained by being sick and fear to give them up. There may be a narrowed social circle with limited dysfunctional social interactions supporting the helplessness and regression of personality. The patient may be so fixated on the sickness role, that he or she uses all the psychological resources to prove the severity of illness and disability, to be able to go on with the health care contact or to get disability pension, or to just finally win an exhaustive fight for justice.

**Table 1. Four fields of functional deficits in mental disorders.  
Translated and republished by permission of Duodecim, Medical Journal,  
originally published in Finnish (4).**

**1. Structural deficits related to psychopathology and vulnerability**

- cognitive deficits of schizophrenia and neuropsychiatric developmental disorders
- difficulties of affect modulation in borderline personality
- autonomic nervous system overreactiveness in panic disorder

**2. Immediate symptoms of illness**

- low initiative in depression
- aggressiveness in mania
- attack of anxiety in panic disorder
- paranoid fears in schizophrenia

**3. Secondary symptoms and adverse coping efforts**

- withdrawal from social contacts in depression due to negative experiences and interpretations
- fear-related avoidance in panic disorder, social phobia and post-traumatic stress disorder

**4. Adverse sick role**

- aiming at secondary gains
- regression and helplessness
- adverse self-medication
- selective negative focus of attention in symptoms and deficits
- loss of self-assurance and response to negative expectations

## **The contribution of positive psychology for assessment of work ability**

Besides functional limitations, functional strengths and positive psychological resources should also be addressed, because they can at least partially counteract the deficits. The concepts related to positive psychology in working include, for example, measurable dimensions of well-being, character strengths, positive emotions, self-determination, coherence, resilience, empowerment, gratitude, psychological capital, work engagement, supervisory and organizational support, positive teamwork and co-worker relations, and positive leadership (30). Paying attention to these resources makes them more visible and tangible for the patient and the patients' social network and health care professionals. Thus the hidden resources can be harnessed to help patients attain their full potential and meaningful participation in society. Finding one's potential has an empowering effect on the patient, no matter whether it is facilitated by resource-oriented interview, positive psychology assessment tools, concrete tasks for occupational assessment, other encouraged activities or self-initiated trials with adequate support.

An assessment of positive resources often leads to fruitful discussions on self-help. These discussions potentially broaden the patient's perception from being an object of psychiatric intervention to a functional subject capable of making decisions, alleviating his or her own suffering and increasing his or her well-being. In other words, the patient may gradually gain both the "willpower and waypower" to achieve the goals in (returning to) working life (31). For patients who explicitly have unrealistically high expectations and who repeatedly criticize their own performance, or ruminate on past failures, discussions on self-compassion may be particularly fruitful. Self-compassion exercises are fairly easy and safe to practice on one's own, and they may counteract the harmful effects of excessive self-criticism (32, 33). Those who struggle with finding meaning in work may benefit from discussions on the fluctuating balance between meaning of work and meaning of life in the course of life (34). Normalizing these changes may alleviate possible pressure of finding "the perfect job".

A profound assessment of work ability always includes the investigation of rehabilitation options. In a case of correct timing, a concrete rehabilitation plan is designed together with the patient considering the patient's personal goals and values. In successful rehabilitation and mental recovery, the key issue is rather to

---

build on what is strong than getting rid of the deficits. The definition of recovery by SAMSHA (35) does not assume withdrawal of symptoms, nor even alleviation of them, but it emphasizes ability to live a meaningful life in a community, free choice, and striving to achieve one's full potential. This comes very close to the concepts of happiness and well-being that belong to the field of positive psychology. The approach of positive psychology can be used to strengthen and broaden psychiatric rehabilitation practices and pathways to recovery (36).

## **Concepts of positive psychology and assessment tools**

Positive psychology seeks to find the resources of coping with work and stress, and the focus of interest is positive mental health instead of psychopathology (37). The concept of positive mental health and mental well-being (often used as synonyms) covers both positive affects, including the subjective happiness with life satisfaction and psychological functioning with self-realization (21). The approach of positive mental health is concerned with the feelings and functioning of all individuals, e.g. feelings of hope and satisfaction, confidence, sense of purpose and control, with or without the presence of mental illness (38).

Mental well-being is worth attention as an independent and important dimension of health and function, instead of an opposite for mental illness. Although there is a tendency for mental health to improve as mental illness symptoms decrease, this relationship is modest. People diagnosed with mental disorder may have poor mental well-being, but equally they may have moderate mental well-being or be flourishing (39). The WHO (40) outlines that mental health and well-being are fundamental to quality of life, enabling people to experience life as meaningful and to be creative and active citizens. Mental health is an essential component of social cohesion, productivity and peace and stability in the living environment, contributing to social capital and economic development in societies (40).

Below, some measures of positive psychology related to working ability are presented. Only the first ones, The sense of coherence and the Return to work-Self Efficacy have been validated for the assessment of psychiatric patients.

## **The sense of coherence**

The sense of coherence (SOC) is a subjective experience of comprehensibility, manageability and meaningfulness of life (41). SOC is quite a stable trait throughout life (41, 42). It is associated with functional and vocational outcomes (43, 44, 45). Among unemployed people, a higher SOC predicts better subjective functional capacity and maintenance of self-esteem (46), whereas among employed people it predicts maintenance of mental health during organizational reform (47). SOC is associated with occupational well-being and coping with stress (45). Low SOC is associated with poor health behaviour (44), intention to retire (48) and maladaptive psychological defenses (49, 50).

SOC seems to be a health promoting resource, which strengthens resilience and develops a more positive subjective perception of health, especially mental health (51). Psychiatric patients with complicated disability problems seemed to have quite low SOC scores in screening of a developmental project of working ability assessment (52): The mean SOC-13 was only 49.4, compared to Finnish population SOC-13 mean scores 61.6-66.6 (53) and Swedish community population sample 70.7 (54). The range and variation of SOC scores among psychiatric patients with complicated disability was large: 19-82 (52).

In conclusion, a higher sense of coherence refers to better return to work and rehabilitation prognosis because of better coping skills for working life, better coping with chronic illness and less obstacles related to low motivation or life control. Among psychiatric patients with complicated disability, a higher SOC seems to predict greater variety of working life activity in the near future even if the competitive employment is available for only a few patients (55). The patients with lower SOC need more intensive support, in addition to smaller and more frequent intermediate goals to pursue. The social support of their working environment has greatest significance for those with low SOC (56).

## **Return to work Self-Efficacy**

Return to work Self-Efficacy (RTW-SE) measures the individual's belief in having the capabilities needed for returning to work and it predicts return to work from sick leave over the next three months (57). According to the validation study (57), RTW-SE is correlated with coping, experience of locus of control and general self-efficacy (GSE). The concept of GSE (58) is very closely related to RTW-SE. Among patients with sick leave due to common mental disorders, the RTW-SE is lower (Mean 3.27) and more sensitive to change compared to patients with physical disability (Mean 4.24). The scores of mental patients, however, reached or even exceeded the level of other patients or mixed sample during 3-6 months of psychotherapy (57).



Recent findings from a study on 388 male security agents suggest that work self-efficacy is a key mechanism in turning positive orientation into positive future job performance (59). In particular, positive orientation had a direct effect on job performance when work self-efficacy beliefs were high or medium, but not when they were low. In other words, those who have a positive outlook towards future achievements may be more likely to perform better if they perceive themselves to be capable of executing work-related tasks (59).

The scale to measure RTW-SE has been translated into Finnish by the Finnish Institute of Occupational Health (FIOH) and Helsinki University Central Hospital (HUCH) in 2011 by permission of the author, Lagerveld. The translated version of the scale (3) has been in pilot use during the HUCH developmental project (52). The mean RTW-SE was 2.35 among psychiatric patients with complicated disability problems referred to the specialized unit for assessment of work ability at HUCH (60). This was considerably lower than in patients with uncomplicated common mental disorders and a shorter absence from work (57). The predictive value of RTW-SE for return to work was also demonstrated in the more severe and comorbid psychiatric patients with more chronic disability, but the follow-up time period was longer, one year (60).

RTW-SE has proved to be a useful assessment tool in psychiatric assessment of working ability, as it brings attention to the ideas and attitudes that reflect either psychological resources or obstacles that are important to know for planning successful return to work strategies and rehabilitation pathways. Besides, it is possible to enhance RTW-SE by psychotherapeutic interventions (57).

## **Recovery from work**

During the recovery process, the employee's physical and psychological resources are restored to the pre-stress level after work. Well-functioning recovery mechanisms protect from fatigue and burnout (61). The four major recovery mechanisms include psychological detachment from work, relaxation with low arousal and positive emotions, mastery experiences and control that refers to the freedom of choice over leisure (62). The mechanisms of recovery can be explored by the Recovery Experience Questionnaire (62) and subjective recovery can be assessed by a single 1-5 Likert-scale Recovery question (61) that has been published in Finnish (63). The former offers rich qualitative information about recovery to explore how to enhance recovery by social and environmental changes, or by behavioural and cognitive practices. It also offers quantitative data for follow-up of an individual. The latter instead, is not very informative for a solitary individual assessment, but it may offer rough quantitative follow-up data of an individual or community-level data of workplace.

## **Work engagement**

The positive psychological approach to well-being at work explores the individual and organizational factors and the interactions between them, in particular, that maintain employee well-being, health and productivity during strain. Work engagement is a positive, fulfilling, work-related state of mind characterized by vigour, dedication and absorption (64). The short form of the Utrecht Work Engagement Scale (UWES-9) has been validated among Finnish employees (65). The questions of UWES-9 are rather more suitable for healthy working populations than for clinical psychiatric patients with disability, who may find the questions inappropriate. Besides, UWES questions are not applicable during sick leave, unemployment or other absence from work.

## **Creativity**

Creativity is a fundamental human feature that is not limited to producing art or innovation, as it is present in everyday life in areas such as problem solving, flexible adaptation and putting new skills into practice. Therefore, creativity is essential for coping with a changing working life, as well as for coping with illness and functional deficits. Creativity, as a complex concept, is difficult to measure (66), and having creative skills does not necessarily mean that one uses them (67). Mood and social environment, for example, affect the way creativity is expressed and used (67, 68).

A narrow aspect of practical creativity, the perceived creative working mode, has been measured by a single Likert scale question among working populations as a dimension of occupational well-being (69, 70, 71). The question is based on the assumption that the respondent is currently working, but it is also applicable for voluntary or transitional work. The clinical value of the single question is limited, but it may offer complementary information about the patient's adaptation resources for work modifications, re-employment and coping with occupational stress. Psychiatric disability may also concern creativity, but some individuals are able to maintain and even develop their creativity despite illness (68).

## **Character strengths**

Identifying one's character strengths, cultivating them and living in accordance with them to achieve a higher purpose leads to meaningfulness. Accordingly, work allows for engagement and meaning when individual character strengths can be used to perform the work tasks (72). To the best of our knowledge, the VIA, Values in Action, measurement (73,74) has not been validated among psychiatric populations.

---

VIA could be helpful in employment services and vocational rehabilitation of mental patients who suffer from negative stigma and have difficulties in identifying their strengths. Because VIA measures a profile, instead of absolute values, there is no risk of discouragement and further stigmatization with pathological or poor results. By clinical experience, the major challenge of VIA with mental patients may be related to sufficiency of initiative and interest of the patient to use this positive and quite long web-based self-assessment questionnaire. However, during recovery there would probably be adequate time for VIA, that may enhance and enrich recovery by offering a counterbalance for the routine monitoring of deficits by identification of strengths integrated into a more positive self-image.

A new application of VIA has been validated in the working population for the investigation of the congruence between character strengths and situational circumstances in the workplace. The validation study of Applicability of Character Strengths Rating Scales (ACS-RS) (72) showed that the more signature strengths that were applied at the workplace, the higher were the positive experiences at work. Furthermore, the character strengths matter in vocational environments irrespective of the working field. Strength-congruent activities in the workplace are important for positive experiences at work, like job satisfaction and experiencing pleasure, engagement and meaning fostered by one's job. All these are closely related to intrinsic motivation, which is fundamental for attaining full potential and best possible functional capacity.

### **Other positive measures**

There are positive mental health scales developed for mental health promotion and validated by population studies, such as the compact 14-item Warwick-Edinburgh Mental Well-being Scale (WEMWBS) that combines a few previous positive scales (21). The short version of WEMWBS with 7 items (SWEMWBS) (75) has been recently translated into Finnish and validated by the National Institute of Health and Welfare in the Northern Mental Health Survey and in the Regional Health and Well-being Study in Bothnia, but there is no data available yet about the scale on individual assessment. The clinical use of the SWEMWBS is currently piloted in psychiatric consultations and assessment of work ability by authors.

Social capital is a concept of community well-being that has been assessed among individuals. The structural dimension includes social interactions and the cognitive component includes subjective perceptions of support, reciprocity, sharing and trust. A short 8-item scale has been developed in Finland for assessment of social capital in the workplace (76). Subjective perceptions of high social capital are associated with better mental health outcomes of employees (77). The scale measures a social dimension of occupational well-being that may have an effect on psychiatric health and function, but so far there is no data on the applicability for psychiatric assessment.

## **Work- and resource-oriented assessment tools**

Because the interaction between employee and workplace (Figure 1), or more broadly, the individual's personal relationship with working life is of extreme importance in assessment of working ability, the assessment has to be focused on that. The same work-oriented assessment tools described below also take into account the positive aspects of the relationship between individual and the work, and the resources from both parts of the relationship. All three assessment tools described below have been tested in clinical assessment of Finnish psychiatric patients, and the first two have also been used in OHS.

### **Return to work Readiness questionnaire**

Return to work Readiness questionnaire (RTW-RQ) is based on a simple visual analogue scale 0-10 of Return to work Readiness scale (RTW-RS) (78) that was later complemented with two specifying questions: 1. *What hinders you from returning to work at the moment?* and 2. *What would facilitate your returning to work?* For each question, the respondent is asked to name three items, ranked by importance. The present form of the RTW-RQ, completed with specifying qualitative questions (3), has been formulated in developmental projects (52, 79).

The first part of the test is based on recognizing the patient's stage of readiness for return to work in the context of the Readiness for Change Model (80). Five stages of the model are precontemplation, contemplation, preparation for action, action and maintenance. Franche et al. (81) have studied return to work behaviour with this model and they developed and validated a 22-item scale in order to assess stage of readiness for return to work. Their test is named Readiness for Return-to-Work (RRTW) scale and consists of 22 stage-specific statements that had been previously generated by a group

of researchers. The validation was conducted in a patient group with work-related musculoskeletal injury and the test was performed one month after the injury. The wide range of statements in RRTW was later reduced to one question in RTW-RS (78). Thus the RRTW is the precursor of RTW-RS.

When expressed with a simple Visual Analogue Scale the test is both easy to perform and usable as means of progress follow-up. The discussion of the current or earlier stages with the patient makes them more aware of the situation and its development, and can also help to analyse factors hindering or facilitating return to work. RTW-RQ is a useful tool in OHS for preparing the return to work by considering flexible work modifications that lower the threshold to return (82). In psychiatry, there is clinical evidence of the usefulness of RTW-RQ in assessment of work ability and in rehabilitation planning: the information value of the RTW-RQ was rated even higher than that of the gold standard, SOFAS (52). RTW-RQ is easy to use in psychiatric assessment and it helps to face subjective factors that affect the return to work (4).

**Figure 2. Return to work Readiness questionnaire (RTW-RQ). Translated and republished by permission of Duodecim Medical Publications Ltd, originally published in Finnish (3).**

**The readiness for return**

How do you feel now? Are you ready to return to work? (circumscribe)

0.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

Not at all ready

Completely ready

- What hinders you from returning to work at the moment?
- 1.
- 2.
- 3.
- What would facilitate your returning to work?
- 1.
- 2.
- 3.

## **Mental Well-being Impact Assessment**

Mental Well-being Impact Assessment (MWIA) is a tool for assessment of prerequisites for well-being at work and is based on the concept of positive mental health (38). Resilience is a key element of positive mental health, referring to a person's ability to adapt or recover in the face of adversity (38). In addition to individual psychological resilience, MWIA also comprises the aspect of social resilience that refers to a characteristic of a community, or more precisely, the ability of the workplace community to recover from strain (38, 78). The four aspects that are assessed by MWIA include: 1. Control of work, 2. Psychological Resilience of employee, 3. Social Resilience of workplace community and 4. Participation (78). In Finland, MWIA has been qualitatively studied and validated for evaluating and developing mental well-being in the workplace (78, 83). MWIA has also been used for individual assessment and support for working ability of employees with depression (84) or other mental disorders (52). In Finland, MWIA is better known by the names MIVA or The Four aspects of Well-being at work. Practical instructions for clinicians have been published in Finnish (84). MWIA, like many other well-being or resource-oriented assessment tools, also serves as an intervention to promote occupational well-being.

## **Visual expression interview: Relationship to work**

Relationship to work, visual expression interview, opens new themes for discussion about factors affecting work ability (85). The use of art materials for self-expression often enriches communication and interaction with the patient, enhances concentration on questions and makes some images and ideas visible that are essential for understanding possible hidden obstacles, experiences and strengths that affect working, or return to work. In most cases, visual expression interview produces new clinically relevant information (86). The information is useful for rehabilitation planning and preparing for work. The visual expression interview often encourages the patient to explore his or her professional role and identity, work-related values, rewards and setbacks, career expectations, risks and options, workplace social interactions and the personal meaning of work. The patient's embarrassment and confusion about the controversial situation that often precedes referral to psychiatric assessment of work ability, is often relieved and new insight is gained. Sometimes the creative task stimulates more flexible thinking and new ideas about future options.

---

## Epilogue

In psychiatry, despite neurocognitive, metabolic and limbic pathogenesis, we have the unique opportunity to work with images and meanings that have transformative powers. Besides, via plasticity and epigenetics, even morphological change may be obtained by recruiting and rehearsal of adaptive functional circuits. Stress and mental illness are associated with shortening of telomeres through life (87), but resilience protects from the effects of oxidative stress (88). Cognitive reappraisal, the ability to cognitively reframe adverse and negative events in a more positive light is strongly associated with resilience (88). Maintenance of positive affect and positive cognitions seems to counteract the negative inflammatory and depressive responses to stress (89).

The positive psychosocial factors have an impact on overall health beyond emotional and cognitive functioning (90). The focus of psychiatric assessment and practice has remained on pathology, symptoms and deficits, rather than expanding and building the positive aspects of patients' mental and social functioning (90).

Mental patients, like all people, possess a continuum of mental well-being. In addition to alleviating symptoms, we can enhance well-being. By using a positive psychology framework in assessment of function, we can help our client to identify and integrate more positive aspects of self-image and working life, and to find meaningful goals for rehabilitation by making the positive aspects of mental health and function more visible and tangible by assessment, it also serves as an intervention: we find what we look for, and we build on what we find.

## Acknowledgements

We thank the original publisher Duodecim Medical Publications Ltd for the permissions to reprint the English translations of the Triangle Model of Work Ability (Figure 1) and the Four fields of Functional deficits in mental disorders (Table 1) and the Return to Work Readiness questionnaire (Figure 2).

We owe our gratitude to Aki Vuokko, MD, for his remarkable contribution to this article. Besides, we thank Sirkku Kivistö, MA, Lic.Psych, health psychology and Kaija Appelqvist-Schmidlechner, Senior researcher, PhD, for their comments on assessment tools of their expertise.

We also thank the Finnish Medical Association (Suomen Lääkäriliitto) for the Award for Development of Quality that was granted to Outpatient Clinic for Assessment of Ability to work, and we thank the team for developing the assessment methods.

## References

1. The Ministry of Employment and the Economy. Työttömien työkyvyn arviointi- ja terveystalvet. Reports of Ministry of Employment and the Economy. TEM raportteja10/2011 [http://www.tem.fi/files/29341/TEM\\_raportti\\_10\\_2011.pdf](http://www.tem.fi/files/29341/TEM_raportti_10_2011.pdf)
2. The Ministry of Social Affairs and Health. Työterveyshuolto ja työkyvyntukeminen työterveysyhteistyönä. Reports of Ministry of Social Affairs and Health. Sosiaali- ja terveysministeriön selvityksiä 2011:6 [http://www.stm.fi/c/document\\_library/get\\_file?folderId=2872962&name=DLFE-14934.pdf](http://www.stm.fi/c/document_library/get_file?folderId=2872962&name=DLFE-14934.pdf)
3. Liira J, Juvonen-Posti P, Viikari-Juntura E, Takala EP, Honkonen T, Tuisku K, Martimo KP, Redemann B. Työhön paluun tuki. Työterveyshuollon hyvät käytännöt: Työhön paluun tuki. Terveystalvet, työterveyden tietokannat. Artikkelitk00111 (000.111). Helsinki: Duodecim Medical Publications Ltd 18.4.2012.
4. Tuisku K, Vuokko A, Laukkala T, Mäntynen J, Melartin T. Psykiatrisen työ- ja toimintakykyarvio - miksi, milloin ja miten? Duodecim 2012;128:2251-9.
5. Tuisku K, Juvonen-Posti P, Härkäpää K, Heilä H, Vainiemi K, Ropponen T. Ammatillinen kuntoutus mielenterveyshäiriöissä. Duodecim 2013;129:2623-32.
6. Jahoda M. Employment and unemployment: A social psychological analysis. Cambridge University Press, New York, 1982.
7. Black C. Working for the healthier tomorrow. Crown Copyright, London 2008.
8. Bond GR, Drake RE, Becker DR. An update on randomized controlled trials of evidence-based supported employment. *Psychiatric Rehabilitation* 2008;31:280-90.
9. Burns T, Catty J, Becker D, ym. The effectiveness of supported employment for people with severe mental illness: a randomized controlled trial. *Lancet* 2007; 370:1146-52.
10. Vuorela M. New options for employment. Työtä haluaville uusia mahdollisuuksia työhön. The report of the Ministry of Employment and the Economy 10.3.2008. The Ministry of Employment and the Economy, Helsinki 2008. [https://www.tem.fi/files/18750/Vuorela\\_loppuraportti.pdf](https://www.tem.fi/files/18750/Vuorela_loppuraportti.pdf)
11. Fossey E, Harvey Carol. Finding and sustaining employment: a qualitative meta-synthesis of mental health consumer views. *Canadian Journal of Occupational Therapy* 2010;77:303-14
12. Lehto M. Osatyökykyisten työllistymisen suurimmat esteet ovat luottamuksen puute ja ennakkoluulot. Reports of Ministry of Social Affairs and Health. STM tiedote 09.02.2011. [http://www.stm.fi/c/document\\_library/get\\_file?folderId=2664824&name=DLFE-14646.pdf](http://www.stm.fi/c/document_library/get_file?folderId=2664824&name=DLFE-14646.pdf)
13. Vuorento M, Terävä M. Osatyökykyisen työssä jatkamisen ja työllistymisen tukeminen. Working papers 48/2014. Kuntoutussäätiö, Helsinki 2014.



14. Pensola T, Järvikoski A, Järvisalo J. Työttömyyden ja muiden syrjäytymisriskien yhteys työkykyyn. Kirjassa: Gould R, Ilmarinen J, Järvisalo J, Koskinen S, toim. Työkyvyn ulottuvuudet. Terveys 2000 - kyselyn tuloksia. Helsinki: Eläketurvakeskus, Kansaneläkelaitos, Kansanterveyslaitos, Työterveyslaitos, Helsinki 2006.
15. Kuvaja A. Työnhakumotivaation dynamiikkaa. Näkökohtia motivaatiokysymysten käsittelystä sosiaalisessa kuntoutuksessa. Kuntoutus 2012;4:17-29.
16. Hultin H, Lindholm C, Möller J. Is There an Association between Long-Term Sick Leave and Disability Pension and Unemployment beyond the Effect of Health Status? - A Cohort Study. PLoS ONE 2012; 7(4): e35614. doi:10.1371/journal.pone.0035614
17. Gould R, Grönlund H, Korpiluoma R, Nyman H, Tuominen K. Miksi masennus vie eläkkeelle? Eläketurvakeskuksen raportteja 2007:1
18. Gould R, Härkäpää K, Järvikoski A. Mielenterveysongelmat ja oikea-aikainen reagointi työeläkekuntoutuksen haasteina. Kuntoutus 2008;1:39-53.
19. Joensuu M, Kivistö S, Malmelin J, Lindström K. Pitkä sairausloma ja työhönpaluu. Työ ja ihminen tutkimusraporttisarja 34. Työterveyslaitos, Helsinki 2008.
20. Heikinheimo S, Tuisku K. Kuntoutustulokset ja työhönpaluu psykiatrisen työkykyarvion jälkeen. Duodecim 2014;130:77-83.
21. Tennant R, Hiller L, Fishwick R, Platt S, Joseph S, Weich S, Parkinson J, Secker J, Stewart-Brown S. The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): development and UK validation. Health and Quality of Life Outcomes 2007, 5:63 doi:10.1186/1477-7525-5-63
22. Kivekäs J, Hannu T, Rokkanen T, Ropponen T. Pitkäaikaisen työkyvyttömyyden arviointi kannattaa keskittää työterveyshuoltoon. Suomen Lääkärilehti 2012;33: 2229-2233.
23. Telakivi T. Toimintakyvyn arvioinnin kehittäminen. Suomen Lääkärilehti 2011;66:3127-32.
24. Juntunen J. Hoitava lääkäri, vakuutuslääkäri ja työkyvynarviointi. Suomen Lääkärilehti 2010; 35: 2787-8.
25. Vuokko A, Juvonen-Posti P, Kaukiainen A. Miten lääkäri arvioi työttömän toimintakykyä? Suom Lääkäril 2011;66: 3659-66.
26. Filppu T. Luuloista ja tulkintaeroista vakuutuslääketieteellisen arvioinnin todellisuuteen. Tampereen yliopisto, oikeustieteiden laitos, Pro gradu-tutkielma 2010.
27. Heikkilä VM. Vajaakuntoisuuden yksilöllis-lääketieteellisen ja sosiaalisen mallin vertailua. Kuntoutus 2011;1:48-54.
28. Blank L, Peters J, Pickvance S, Wilford J, Macdonald E. A systematic review of the factors which predict return to work for people suffering episodes of poor mental health. Journal of Occupational Rehabilitation 2008; 18(1):27-34.
29. Cornelius LR, van der Klink JLL, Groothoff JW, Brouwer S. Prognostic factors of Long-term disability due to mental disorders: A systematic review. Journal of Occupational Rehabilitation epub 06.11.2010
30. Mills MJ, Fleck CR, Kozikowski A. The Journal of Positive Psychology: Dedicated to furthering research and promoting good practice 2013; 8 (2): 153-164.
31. Reichard RJ, Avey JB, Lopez S, Dollwet M. Having the will and finding the way: A review and meta-alysis of hope at work. The Journal of Positive Psychology. 2013;8(4):292-304.

- 
32. Smeets E, Neff K, Alberts H, Peters M. Meeting Suffering With Kindness: Effects of a Brief Self-Compassion Intervention for Female College Students. *Journal of Clinical Psychology*. 2014; 70(9):794-807.
33. Neff KD, Rude SS, Kirkpatrick KL. An examination of self-compassion in relation to positive psychological functioning and personality traits. *Journal of Research in Personality* 2007;41(4):908-916.
34. Allan BA, Duffy, RD, Douglass R. Meaning in life and work: A developmental perspective. *The Journal of Positive Psychology*. 2014 [http://dx.DOI.10.1080/17439760.2014.950180](http://dx.doi.org/10.1080/17439760.2014.950180)
35. SAMSHA, Substance Abuse and Mental Health Services Administration 2004: National consensus statement on mental health recovery. U.S.A, Rockville 2004.
36. Moran GS, Nemeč PB. Walking on the sunny side: what positive psychology can contribute to psychiatric rehabilitation concepts and practice. *Psychiatric Rehabilitation Journal* 2013 Sep;36(3):202-8.
37. Seligman M, Csikszentmihalyi M. Positive psychology: An introduction. *American Psychologist* 2000; 55(1), 5-14.
38. Coggins T, Cooke A, Friedli L, Nicholls J, Scott-Samuel A, Stansfield J. Mental Well-being Impact Assessment: A Toolkit. Care services improvement partnership. North West Development center, Cheshire 2007. [www.northwest.csip.org.uk](http://www.northwest.csip.org.uk)
39. Keyes CLM. Mental Illness and/or Mental Health? Investigating Axioms of the Complete State Model of Health. *Journal of Consulting and Clinical Psychology* 2005; 73:539-548.
40. WHO 2005: Mental Health Action Plan for Europe. [www.euro.who.int/document/mnh/edoc06.pdf](http://www.euro.who.int/document/mnh/edoc06.pdf)
41. Antonovsky, A. *Unraveling the Mystery of Health*. Jossey-Bass, San Francisco 1987.
42. Hakanen J, Feldt T, Leskinen E. Change and stability of sense of coherence in adulthood: Longitudinal evidence from the Healthy Child study. *Journal of Research in Personality* 2007; 41 (3): 602-617.
43. Rivinoja M. Psykkisen kuormittamisen vuoksi uhkaavan työkyvyttömyyden varhaiskuntoutus. University of Jyväskylä, Department of Psychology, Pro graduate study, Jyväskylä, 1999.
44. Poppius E. *The Sense of Coherence and Health*. Acta Universitatis Tampensis; 1241, Tampere University Press, Tampere 2007.
45. Kuoppala J, Lamminpää A, Väänänen-Tomppo I, Hinkka K. Employee Well-being and Sick Leave, Occupational Accident, and Disability Pension. A Cohort Study of Civil Servants. *JOEM* 2011; 53 (6):633-40.
46. Vesalainen J, Vuori J. Työttömänä koettu toimintakyky ja itsetunto. Työ ja ihminen tutkimusraportti 9. Finnish Institute of Occupational Health, Helsinki 1996.
47. Kouvonen AM, Väänänen A, Vahtera J, Heponiemi T, Koskinen A, Cox SJ, Kivimäki M. Sense of coherence and psychiatric morbidity: a 19-year register-based prospective study. *Journal of Epidemiology and Community Health* 2010; 64(8): 255-261.
48. Volanen SM, Suominen S, Lahelma E, Koskenvuo K, Koskenvuo M, Silventoinen K. Sense of Coherence and intentions to retire early among Finnish women and men. *BMC Public Health* 2010; 10: 22.
49. Knekt P, Lindfors O, Eds. *A randomized trial of the effect of four forms of psychotherapy on depressive and anxiety disorders*. Kela, Helsinki, 2004.
50. Sammallahti P, Holi M, Komulainen E, Aalberg V. Comparing two self-report measures of coping - the Sense of Coherence Scale and the Defense Style Questionnaire. *Journal of Clinical Psychology* 1996; 52 (5): 517-24.

- 
51. Eriksson M, Lindström B. Antonovsky's sense of coherence scale and the relation with health: a systematic review. *J Epidemiol Community Health* 2006; 60: 376-381.
52. Kostamo T, Heikinheimo S, Tuisku K. Työkyvynarvioinnin laadun seuranta asiakkaiden ja työryhmän näkökulmasta. HUS, Helsinki, 2013.
53. Feldt T, Lintula H, Suominen S, Koskenvuo M, Vahtera J, Kivimäki M. Structural validity and temporal stability of the 13-item sense of coherence scale: Prospective evidence from the population-based HeSSup study. *Quality of Life Research* 2007; 16 (3): 483-493.
54. Nilsson B, Holmgren L, Westman G. Sense of coherence in different stages of health and disease in northern Sweden. Gender and psychosocial differences. *Scandinavian Journal of Primary Health Care* 2000;18:14-20.
55. Heikinheimo S, Tuisku K, Lamminpää A. The Sense of coherence in psychiatric assessment of work ability and its relationship to psychopathology and function, unpublished data, to be submitted.
56. Feldt T. The role of sense of coherence in wellbeing at work: Analysis of main and moderator effects. *Work and Stress* 1997; 11(2): 134-147.
57. Lagerveld SE, Blonk RWB, Brenningkmeijer V, Schaufeli WB. Return to work among employees with mental health problems: Development and validation of a self-efficacy questionnaire. *Work and Stress* 2010; 24(4): 369-374.
58. Bandura A. Self-efficacy: toward a unifying theory of behavioral change. *Psychology Review* 1977;84(2):191-215.
59. Alessandri G, Borgogni L, Schaufeli WB, Caprara GV, Consiglio C. From Positive Orientation to Job performance: The Role of Work Engagement and Self-efficacy Beliefs. *J Happiness Stud* 2014 DOI 10.1007/s10902-014-9533-4.
60. Heikinheimo S, Tuisku K, Luukkonen R, Lagerveld S. Return to work and functional capacity of psychiatric patients -clinical assessment tools as predictors of outcome, submitted.
61. Kinnunen U, Feldt T, Siltaloppi M, Sonnentag S. Job demands-resources model in the context of recovery: Testing recovery experiences as mediators. *European Journal of Work and Organizational Psychology* 2011; 20 (6), 805-832.
62. Sonnentag S, Fritz C. The Recovery Experience questionnaire: Development and validation of a measure for assessing recuperation and unwinding from work. *Journal of Occupational Health Psychology* 2007;12, 204-221.
63. National TOIMIA network: The Measurement of functioning in Finland. [www.toimia.fi](http://www.toimia.fi)
64. Schaufeli WB, Bakker AB, Salanova M. The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement* 2006; 66 (4): 701-16.
65. Hakanen J. Työn imun arviointimenetelmä, Utrecht Work Engagement Scale/Assessment Method for Work Engagement, Utrecht Work Engagement Scale. Finnish Institute of Occupational Health, Helsinki, 2009.
66. Kerr B, Gagliardi C. Measuring creativity in research and practice, pp 87-98 in book: Lopez SJ, Snyder RC, eds. *Positive Psychological Assessment: A Handbook of Models and Measures*. American Psychological Association, Washington DC, 2003. pp. 155-69.
67. Sternberg RJ. The nature of creativity. *Creativity Research Journal* 2006; 18 (1): 87-98.
68. Martin AS, Harmell AL, Mausbach BT. Positive psychological traits, pp 19-43 in book: Jeste DV, Palmer BW, eds. *Positive psychiatry: A clinical handbook*. American Psychiatric Publishing, Arlington, 2015.

69. Holmqvist R. *Förändring och stabilitet/Change and Stability*. Psychologiförlaget, Stockholm 1986.
70. Herloff B. *Rapport från Yrkes- och miljömedicin nr 98/A Report from Occupational and Environmental Medicine*. University of Göteborg, Göteborg 2003.
71. Tuisku K, Pulkki-Råback L, Ahola K, Hakanen J, Virtanen M. Cultural leisure activities and well-being at work: A study among health-care professionals. *Journal of Applied Arts & Health* 2011; 2: 273-287.
72. Harzer C, Ruch W. The Application of Signature Character Strengths and Positive Experiences at Work. *The Journal of Positive Psychology*. 2014 <http://dx.doi.org/10.1080/17439760.2014.950180>
73. Park N, Peterson C, Seligman MEP. Character strengths in fifty-four nations and the fifty US states. *Journal of Positive Psychology* 2006;1 (3), 118-129.
74. McGrath RE. Scale- and item-level factor analysis of the VIA Inventory of Strengths. *Assessment* 2014; 21(1); 4-14.
75. Stewart-Brown S, Tennant A, Tennant R, Platt S, Parkinson J, Weich S. Internal construct validity of the Warwick-Edinburgh Mental Well-being Scale (WEMWBS): a Rasch analysis using data from the Scottish Health Education Population Survey. *Health and Quality of Life Outcomes* 2009, 7:15 doi:10.1186/1477-7525-7-15
76. Kouvonen A, Kivimäki M, Vahtera J, Oksanen T, Elovainio M, Cox T, Virtanen M, Pentti J, Cox SJ, Wilkinson G. Psychometric evaluation of a short measure of social capital at work. *BMC Public Health* 2006; 6:251 doi:10.1186/1471-2458-6-251.
77. Oksanen, T. *Workplace Social Capital and Employee Health*. Turku: Doctoral thesis. University of Turku, Turku, 2010. <http://urn.fi/URN:ISBN:978-951-29-4083-7>.
78. Kivistö S, Kallio E, Turunen G. *Työ, henkinen hyvinvointi ja mielenterveys*. Työterveyslaitos, Helsinki 2008.
79. Tuisku K, Joensuu M, Ahola K, Ropponen T, Rossi H, Virtanen M. Hyvä masennuksen hoito työterveyshuollossa edellyttää yhteistyötä. *Suomen Lääkärelehti* 2010; 65 (49): 4068-4069.
80. Rollnick S, Mason P & Butler C: *Health behavior change: A guide for practitioners*. Churchill Livingstone, Edinburgh 1999.
81. Franche R-L, Corbiere M, Lee H, Breslin FC, Hepburn CG: The Readiness for Return-To-Work (RRTW) scale: Development and Validation of a Self-report Staging Scale in Lost-time Claimants with Musculoskeletal Disorders. *Journal of Occupational Rehabilitation* 2007;17:450-472.
82. Johansson G. Anpassningar av arbetet vid ohälsa. *Socialmedicinsk tidskrift* 2009;86(3):256-64.
83. Turunen G, Kivistö S, Tuisku K. Työolojen mielenterveysvaikutusten arvioinnilla (MIVA) työhyvinvoinnin parempaan tiedostamiseen ja edistämiseen. *Kirjallisuusterapia* 2009; 2: 17-22.
84. Tuisku K ja Rossi H. Masennuksen ehkäisy ja hoito -työkaluja ja toimintamalleja työterveyshuoltoon. Työterveyslaitos, Helsinki 2010.
85. Huttula K. Kuvahaastattelu Työkykyyn vaikuttavien tekijöiden kartoittamisessa. Jyväskylän yliopisto 2005.
86. Tuisku K, Aarnio-Salmi K. Kuva heijastaa työkyvyn taustatekijöitä. Pages 147-156 in book: *Luovat menetelmät työhyvinvoinnin apuna*. Ed. Laine P. Unipress, Kuopio, 2012.
87. Shalev I, Entringer S, Wadhwa PD, Wolkowitz OM, Puterman E, Lin J, Epel ES. Stress and telomere biology: A lifespan perspective. *Psychoneuroendocrinology* 2013; 38 (9): 1835-1842.

- 
88. Southwick SM, Charney DS. The Science of Resilience: Implications for the Prevention and Treatment of Depression. *Science* 2012; 338 (5): 79-82.
89. Aschbacher K, Epel E, Wolkowitz OM, Prather AA, Puterman E, Dhabhar FS. Maintenance of a positive outlook during acute stress protects against pro-inflammatory reactivity and future depressive symptoms. *Brain, Behavior, and Immunity* 2012; 26 (2): 346-352.
90. Jeste DV, Palmer BW. Introduction: What is positive psychiatry, pp 1-16 in book: Eds Jeste DV, Palmer BW. *Positive psychiatry: A clinical handbook*. American Psychiatric Publishing, Arlington, 2015.

Katinka Tuisku, MD, PhD, Specialist in Psychiatry  
University of Helsinki and Helsinki University Hospital,  
Outpatient Clinic for Assessment of Ability to work  
Finnish National Expert Network to Improve the Measurement and  
Assessment of Functional Capacity (TOIMIA), Working Age People group

Kaisla Joutsenniemi, MD, Docent, MSocSci, Specialist in Public Health  
University of Helsinki and Helsinki University Hospital

Tanja Rentto, MD  
Finnish National Expert Network to Improve the Measurement and Assessment of  
Functional Capacity (TOIMIA), Working Age People group  
Helsinki University Hospital,  
Outpatient Clinic for Assessment of Ability to work

Susanne Heikinheimo MD, Specialist in Occupational Health  
Mehiläinen Working Life Services and Helsinki University Central Hospital,  
Outpatient Clinic for Assessment of Ability to work

Correspondence:  
katinka.tuisku@hus.fi