Research on assessment methods of work ability

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Topics

- Terms
- What is work ability?
- Assessments
- Research methods
- Final remarks
Term clarification

- Work ability
- Work capacity
- Work capability
- Functional ability/capacity/capability
"The work ability chain"
Source: SOU 2008:66

- Illness
  - Symptoms
    - Functional limitations
    - Work disability
Definition

- A person $P$ has complete work ability if, and only if, $P$ has the work specific manual and intellectual competence, strength, as well as tolerance and courage, relevant virtues, other qualifications and has the physical, mental and social health that is required to fulfil the tasks (or alternatives within a set of tasks) and reach the goals (with some requirements of quality) which belong to the job in question, given that the physical, psychological, and organizational work environment is acceptable to $P$, or can with adjustments easily be made acceptable to $P$.

  – Nordenfelt. L. The concept of work ability, 2008, p 137.
Individual, work and environment

- ”There seem to be consensus that work ability cannot be analysed solely according to the characteristics of the individual. Work and the environment must also be taken into consideration”

Ilmarinen: Dimensions of Work Ability
Fig. Dimensions of work ability
Source: Ilmarinen 2008
The work content

- Anselm Strauss: Social Organization of Medical Work
- Complexity of treatment work in hospital wards:
  - Machine work
  - Safety w.
  - Comfort w.
  - Sentimental w.
  - Articulation w.
Medical research on work ability

- Occupational health: the epidemiology of work disability
  - Predictive instruments
- Rehabilitation: The treatment of work disability
  - Evaluating
- Social security: the medico-legal context (the decision)
  - Discriminatory
Finnish work ability index (WAI)

- Used since the 1970’s
- Finnish Institute of Occupational Health
- Screening and research instrument
- Research area
  - Occupational health
  - Public health
- A good predictive instrument, with good properties
- It is not discriminatory
The instrument

- Current work ability compared with lifetime best (0-10)
- Work ability in relation to demands of the job (2-10)
- Number of current diseases (1-7)
- Estimated work impairment due to disease (1-6)
- Sick leave last year (1-5)
- Own prognosis of work ability in two years (1-5)
- Mental resources (1-4)

- Scores: Poor (27), moderate (36), good (43), excellent (49)
- Used in clinical work (prediction in aging workers) and epidemiology
Health 2000 Survey

- Representative sample of Finnish adults (n=5,199)
- Interview and questionnaire
- Results
  - Well-educated persons have better work ability
  - Psychoses and CHD affect work ability strongest
  - Functional incapacity had strong relation to work ability
  - Competence, work motivation, mental strain related to work ability
  - Health, functional capacity, work characteristics were most important
  - Unemployment lowers work ability
  - Self-reported work ability has improved from 1978 to 2000, and is related to change in educational structure
Work ability in rehabilitation

- Frequently used as an outcome variable. "Is work ability restored?"
- Work ability cannot be measured directly
- Proxies are used, such as
  - Self-reported inability to work
  - Functional status (many clinical instruments)
  - Employment status (working?)
  - Disability benefits
- Evident short-comings of proxies
Functional assessments in vocational rehabilitation

- ICF Research Branch of WHO

- Objective
  - To develop a Generic Core Set for vocational rehabilitation based on ICF

- Methods
  - Preparatory phase
    - (1) systematic review of the literature
    - (2) worldwide survey of experts
    - (3) cross-sectional study
    - (4) focus group interview.
  - Consensus conference
    - to determine the ICF categories
  - Final phase
    - validation studies
Work ability assessments in social security

- In social security, only limitations due to ill health/loss of functional capacities, are accepted as ground for benefit
- Assessments focus on functional capacities and health-related work ability
Aims for work ability assessments

- **Benefit decisions**
  - Disability and incapacity benefits, sick leave, including grading
  - Focus on deficits and loss of work ability
  - Limited - according to legal requirements

- **Guidance**
  - Return to work, rehabilitation, job matching
  - Focus on resources, remaining work ability, compensatory mechanisms
  - Comprehensive

- **(Evaluation**
  - Follow-up of clients
  - Effective measures)

- **It is difficult to combine two aims in one assessment**
Methods for the assessment

- Assisted by instruments (UK; NL; SW)
  - Self assessment
  - Expert assessment

- Purely clinical assessment (NO; DK)

- Short term absence (up to ½ - 2 years)
  - Mainly purely clinical assessment, but guidelines are common

- Long term absence
  - Assistance by instruments and guidelines is fairly common
Clinical assessments for short term absence

- Research on decisions on short term sickness certification
  - Interviews and focus groups
  - Surveys
  - Observation
  - Case studies
  - Register studies


- Results
  - Patients and doctors concur on work ability assessments in the start
  - Patients rate their work ability lower when physical or mental strains at work
  - Doctors rate the patient’s work ability lower when supported by clinical findings
Instrument assessment in long term absence

- Impairment assessments: AMA guides
- Functional assessment: WCA, FML, SLU, Norfunk

- Work capability assessment (WCA) 2008
- PCA 1991
- All applications for disability benefits in UK
- 21 areas of functional capacities (11 physical; 10 mental)
- Descriptors 0-15 points
- Eligibility: minimum 15 points
Descriptors

Reaching

(a) Cannot raise either arm as if to put something in the top pocket of a coat or jacket. 15

(b) Cannot put either arm behind back as if to put on a coat or jacket. 15

(c) Cannot raise either arm to top of head as if to put on a hat. 9

(d) Cannot raise either arm above head height as if to reach for something. 6

(e) None of the above apply. 0
Research

- Limited studies on reliability and validity
- Qualitative studies engaging expert groups, stakeholders. Is WCA valid, relevant, reliable, feasible?
- Hardly a scientific approach – but can it be? Are questions on functional areas, normality and weight scientific?
- It is unclear what research can contribute
Work ability assessments – qualitative research

- To identify new and problem areas
- To explore the decision process
- To explore practice
- Stakeholder’s views and attitudes

- Group interviews
- Narratives
- Document studies
Summary

- Complex field
- Psychology, sociology, medicine, economics, philosophy…
- Both qualitative and quantitative research is necessary
- Research is still in an early stage: nomenclature and classification
- Not a large research field (yet)

Priorities:
- Reviews
- Population studies on work ability
- The relationship between functional abilities and work ability
- Longitudinal studies
References

- SOU 2009:89. *Gränslandet mellan sjukdom och arbete*