DO-WORK

A dynamic, observational tool, for the assessment of work performances in a computerized environment, adapted for people with visual impairment or blindness.

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ESHNAV - Accessible Career Pathways

• Founded in 2004.
• Vision – to enable the pursuit of a career for every individual with a disability.
• Product & technology – monitoring & managing vocational processing tools, technique development of career self efficacy.
• Target markets and clients - government, non governmental organizations, private sector, academics and individuals.
• Projects – ongoing database of work performance skills.
As part of the rehabilitation process, vocational rehabilitation practitioners use various work ability assessment tools (Al-Khodairy, Chamberlain, Gobelet & Luthi, 2007).

These assessments are essential for the accurate tailoring of the optimal vocational program for the specific client (Henriksson et al, 2006).

Most assessments are not dynamic, oblivious to ensuing changes in the individual’s learning potential or to the impact of interventions implemented to augment productivity in the work environment (Brouwer, Bultmann, Groothoff, Reneman, & van der Klink, 2010; Ekbladh, Haglund, & Thorell, 2010; Sandqvist, Törnquist, & Henriksson, 2006; Bolton, & Roessler, 1986).
**Work Ability Assessment**

**Subjective**
- Person’s perspective, values, and self-perception
- Do not assess skills and actual abilities

**Objective**
- Assess skills and interaction between work and environment
- Focus on job performance
- Do not emphasize the person’s values, motivation, etc.

**Assessment of Work Performance (AWP)**
- Work personality Profile (WPP)

**Work involvement Scale (WIS-DLV)**
- Worker role interview (WRI)
Static assessments do not take into account the individual learning potential and his ability to change in order to succeed in his work tasks.

**Dynamic observation:**

- Focuses on learning potential.
- Evaluator-client communication.
- Constant feedback.
- Mediation: a set of facilitators provided to the person at different levels and using different methods when difficulty is evident in performing a task.
- Support in decision making of the accommodation needed, and the learning method for the person, in order to integrate at work (Grigorenko & Sternberg, 1998; Katz, Golstand, Traub Bar illan & Parush, 2007; Josman, 1999)
DO-WORK
Dynamic Observational Assessment of Work Performance

- Simulated office environment.
- 6 core assignments typical of the office environment based on O*net:
  - Collecting information during a phone call
  - Transferring data from a scanned PDF file to Excel
  - Finding information on the web and sending an email
  - Typing a document in Word format
  - Making an appointment
  - Transferring data from Word to Excel and correcting mistakes
Example:

“The secretary of the purchasing department manager left you this message (give the note to the subject). Write her back mentioning on the memo 2 possible time options for your upcoming meeting. Remember: the meeting shall not last more than 2 hours and must end by 15:00“.
DO-WORK
Dynamic Observational Assessment of Work Performance

Scoring has 4 components:

- **Accuracy**: Number of correct activities +
- **Communication Skills**: -
- **Mediation score**: -
- **Time**: =

**Final score**
DO-WORK: Research Method – Validation Process

- **Experts found content validity** - 5 vocational rehabilitation experts

- **High inter-rater reliability of 95%** - 4 occupational therapist from Tel-Aviv University

- **Pilot without disabilities participants** - 15 students went through the assessment process; no “ceiling effect”

- **Research with people with disabilities**
  - 26 people with disabilities (psychiatric and physical)

  We used the AWP Assessment to validate DO-WORK
Research Results

• DO-WORK is a valid dynamic observational assessment tool of work ability skills.

• We found significant correlation between the total ($p<0.01$, $r=0.735$) and subtotal scores ($p<0.05$, $0.35<r<0.634$) of the DO WORK and the AWP.

• The DO WORK provides a broad picture of client performance: accuracy level, amount and type of mediation needed, communication skills, and efficiency.

• Mediation is important in the assessments of work ability, and it has clinical use in work ability assessment.
DO-WORK Suggested Clinical Use

• Assessment of work capabilities before choosing a vocational rehabilitation program.
• Assessment of capabilities before job placement or studies.
• Assessment before placement in order to provide guidance to the employer.
Migdal Or (Lighthouse), Israel

• Israel’s leading provider of vocational and functional rehabilitation services.

• Serving more than 3,000 people a year, of all ages, all sectors, all over the country.

• Our vision is that every person in Israel with blindness or visual impairment is able to fulfill his potential.

• Our mission is to be a leader in Israel in the development and delivery of professional, relevant and innovative services, and to disseminate knowledge about functional and vocational rehabilitation, for the benefit of people with blindness or visual impairment, and for those involved in their lives.
Vocational Assessment for Visually Impaired

- Vocational assessment is the gateway to vocational rehabilitation and an optimal integration of the visually impaired or blind individuals at work.
- Visual impairment and complete blindness narrow the spectrum of available assessment tools.
- Computerized cognitive and personality assessment tests are inaccessible, and personality tests, primarily based on vision, are even more difficult to administer (i.e., analysis of pictures, Rorschach inkblot tests, etc.).
- Visually impaired youth are much less exposed to employment opportunities and therefore less aware of work requirements.
Adaptation of DO-WORK for Visually Impaired

- DO-WORK has been used by 20 recipients.
- PDF assignment converted to word document.
- Handwritten notes converted to a verbal interruption.
- Building a schedule on a Word document converted to an Outlook Schedule.
- Typing after a meeting from handwritten note converted to typing from a meeting recording.
Discussion

- DO-WORK is a valid and dynamic observational assessment tool of work ability skills.
- It provides a broad picture of client performance: accuracy level, amount and type of mediation needed, communication skills and efficiency.

DO-WORK is much more than an assessment tool for visually impaired:
- It provides an opportunity for experiencing a work day at the office.
- It provides a learning opportunity and observation of strategies that can improve performance.
- We are working with Eshnav to develop assessment tools for other career fields.
DO-WORK: a Dynamic Observational Assessment of work performance

Simulated office environment:
# The Mediation

<table>
<thead>
<tr>
<th>Mediation Score</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>0 - No mediation</strong></td>
<td>Subject complete the task himself</td>
</tr>
<tr>
<td><strong>1 - Repeat on the instructions</strong></td>
<td>Read again or give the subject written instructions</td>
</tr>
<tr>
<td><strong>2 - General hint</strong></td>
<td>“You’re doing fine...keep going”, “check again”</td>
</tr>
<tr>
<td><strong>3 - Directed hint</strong></td>
<td>“Look at row 2”, “You need to fill each column according to its title”</td>
</tr>
<tr>
<td><strong>4 - Dismantling the task</strong></td>
<td>“you need to do X and than Y,” “You can use this paper draft”</td>
</tr>
<tr>
<td><strong>5 - Demonstrating</strong></td>
<td>Demonstrate “copy – paste” shortcut</td>
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