

Applying Aspects of Disability Determination Methods From the Netherlands in the U.S.

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Disability Assessment in the Netherlands

- ▶ DI systems around the world offer informative models for improving disability assessment in the U.S.
- ▶ The Netherlands uses a unique, direct method of measuring an applicant's residual work capacity
 - ▶ Disability assessment focuses on first identifying residual functional abilities (as opposed to limitations).
 - ▶ Functional abilities are directly linked to job requirements, allowing direct computation of feasible jobs and residual earnings capacity.
- ▶ The goal of this project is to explain work capacity measurement in the Netherlands, and then apply aspects of the method to a representative sample of Americans.

Measurement of Job Requirements and Functional Abilities

- ▶ Occupational analysts maintain a database of nearly 5,500 job profiles, which describe the tasks, functional capacity requirements, and earnings of actual jobs in the Netherlands.
- ▶ An examining physician records medical conditions and completes the 106-item Functional Capacities List questionnaire, based on an interview with the applicant and medical records.
- ▶ The functional capacity requirements of jobs and the functional capacities of applicants are *measured on the same scale*.

Disability Determination in the Netherlands

- ▶ The disability assessor then runs the “automated pre-selection” procedure which accepts, flags, or rejects job profiles in the database, by comparing occupational requirements to functional limitations and educational attainment of the applicant.
- ▶ Next, the disability assessor manually accepts the three highest-earning feasible job profiles; the second highest-earning job profile determines the applicant’s residual earnings capacity.
- ▶ The disability percentage is calculated by the ratio of the residual earnings capacity over the actual earnings prior to disability onset. This percentage determines (partial) disability benefit eligibility.

Our Application to an American Sample

- ▶ We adapted the Dutch Functional Capacities List for self-administration over the internet, in English.
- ▶ We fielded the adapted questionnaire to the nationally representative RAND American Life Panel (N=2657 respondents, 78.29% completion rate) as part of our Health and Functional Capacities (HFCS) survey.
- ▶ We applied the automated pre-selection procedure, which selects only job profiles for which a respondent's abilities meet all job requirements.
- ▶ We determined for each respondent the set of feasible jobs and the associated residual earnings capacity.

Automated Pre-Selection Matching Example

Job Requirement 53: Collaboration

Functional Limitation 2.9: Collaboration	Not required	re-Required, but with own defined sub-task	Joint contribution in interaction with others
Normal, no difficulties working in teams	Accept	Accept	Accept
Limited, can work in teams only if tasks are clearly mine	Accept	Accept	Flag
Very limited, unable to work in teams	Accept	Flag	Reject

Distribution of the Number of Feasible Job Profiles (American Sample)

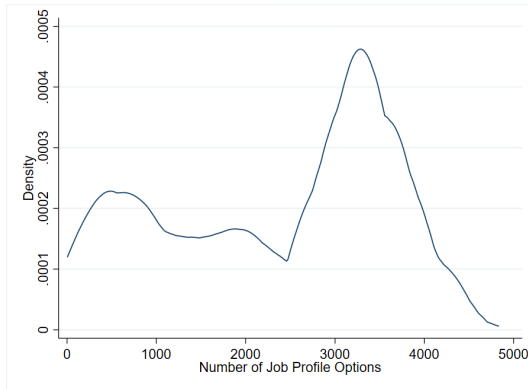
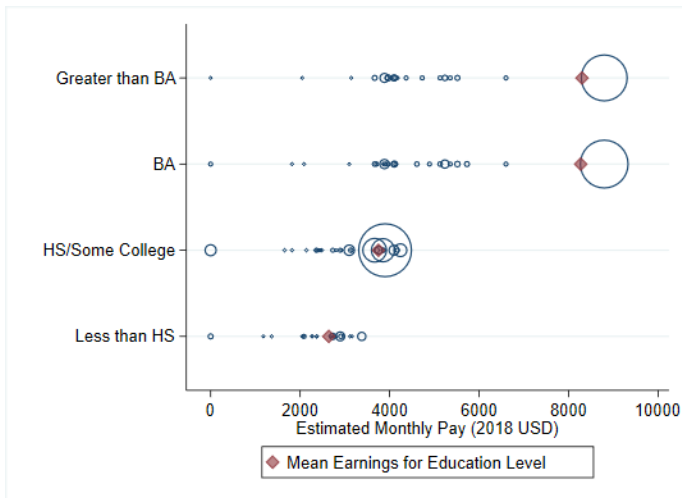
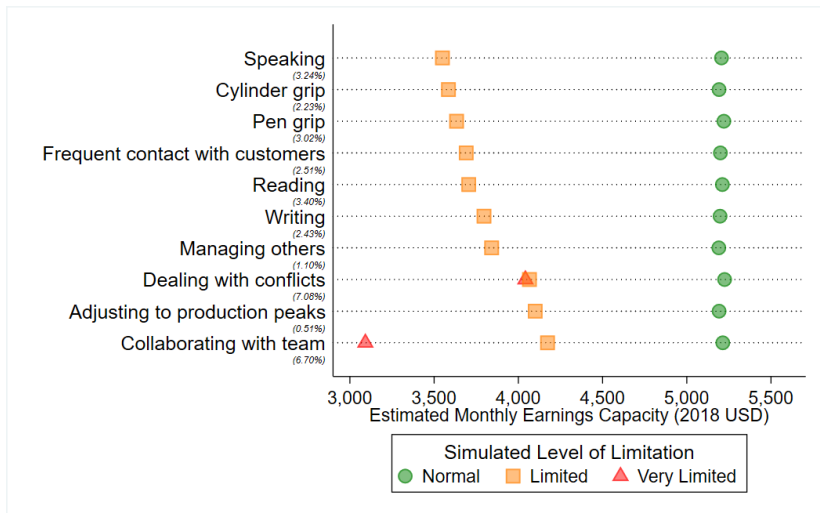


Figure: There are 5479 job profiles in the UWV database. However, no one will be able to do all job profiles due to education field requirements.

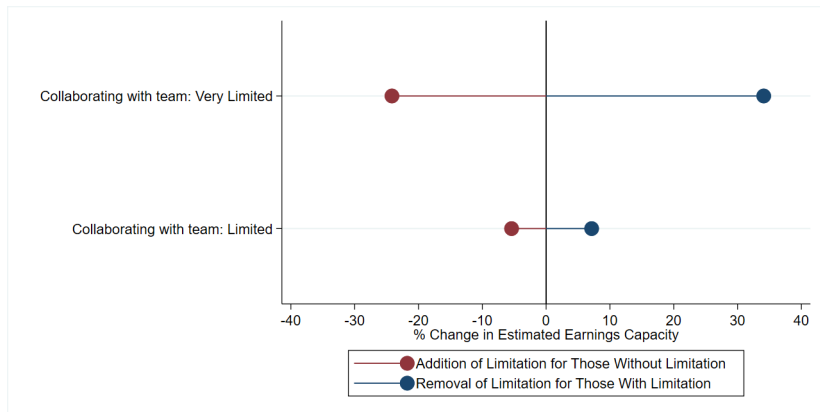
Estimated Earnings Capacity in the U.S Population by Education



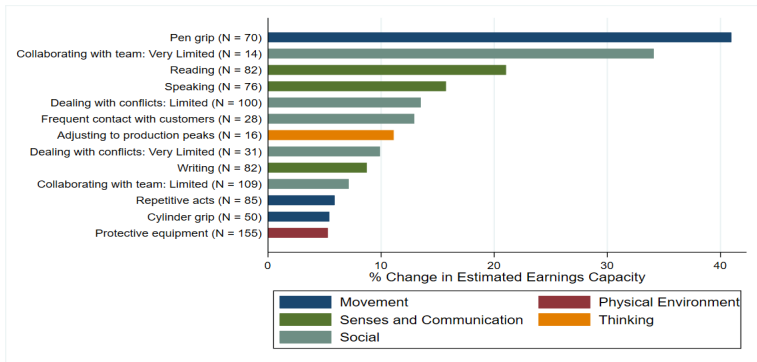
Simulation: 10 Most Consequential Limitations for Earnings Capacity



Potential Productivity Impacts of Collaborate



Potential Productivity Gains from Accommodation for Those With Limitation



Potential Productivity Losses for Those Without Limitation

