



Testing of WD-FAB

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Background

- The Work Disability Functional Assessment Battery
- Requested by US Social Security Administration
- The SSA wanted to move from impairment based assessment to assessment of work disability
- Developed according to the most up-dated scientific standards and methods
- EUMASS core set – what is the link?

Development

- Developer: National Institutes of Health and University of Boston
- Conceptually based on the ICF model
- Self-reported assessment
- Questions relevant to functional ability at work (300+ in item bank)
- Eight domains created by confirmatory factor analysis (CFA)
- A scale for each domain based on item-response theory (IRT)
- The scales provide the foundation for computer adaptive testing (CAT)

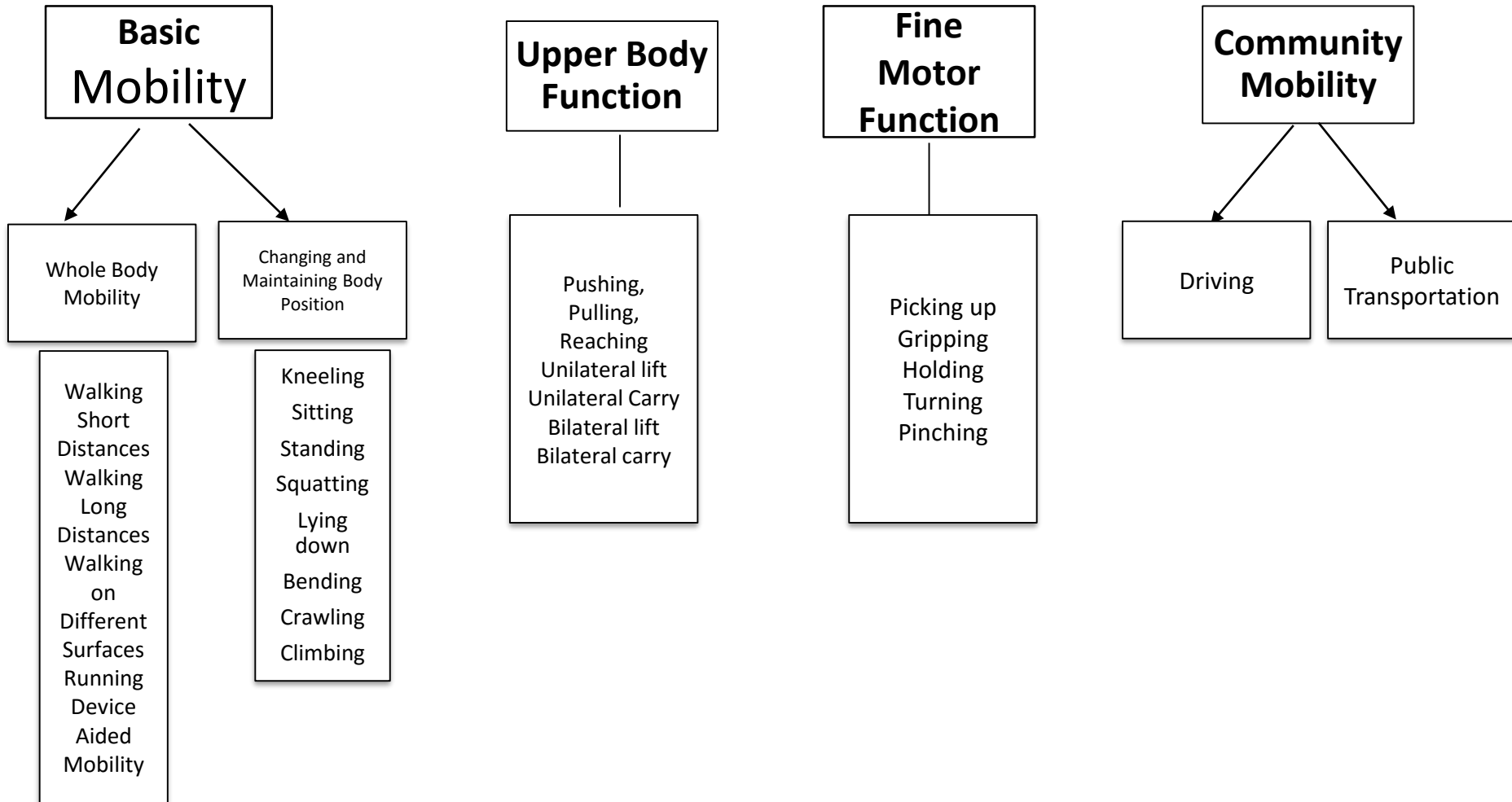
IRT Methodology

- Questions are chosen to cover the range of function in one domain (eg. basic mobility, mood and emotions)
- Questions in one domain are ordered in a hierarchy along a scale
- The scores in one domain are calibrated to an equal interval score
- Creates a final sum score for each domain

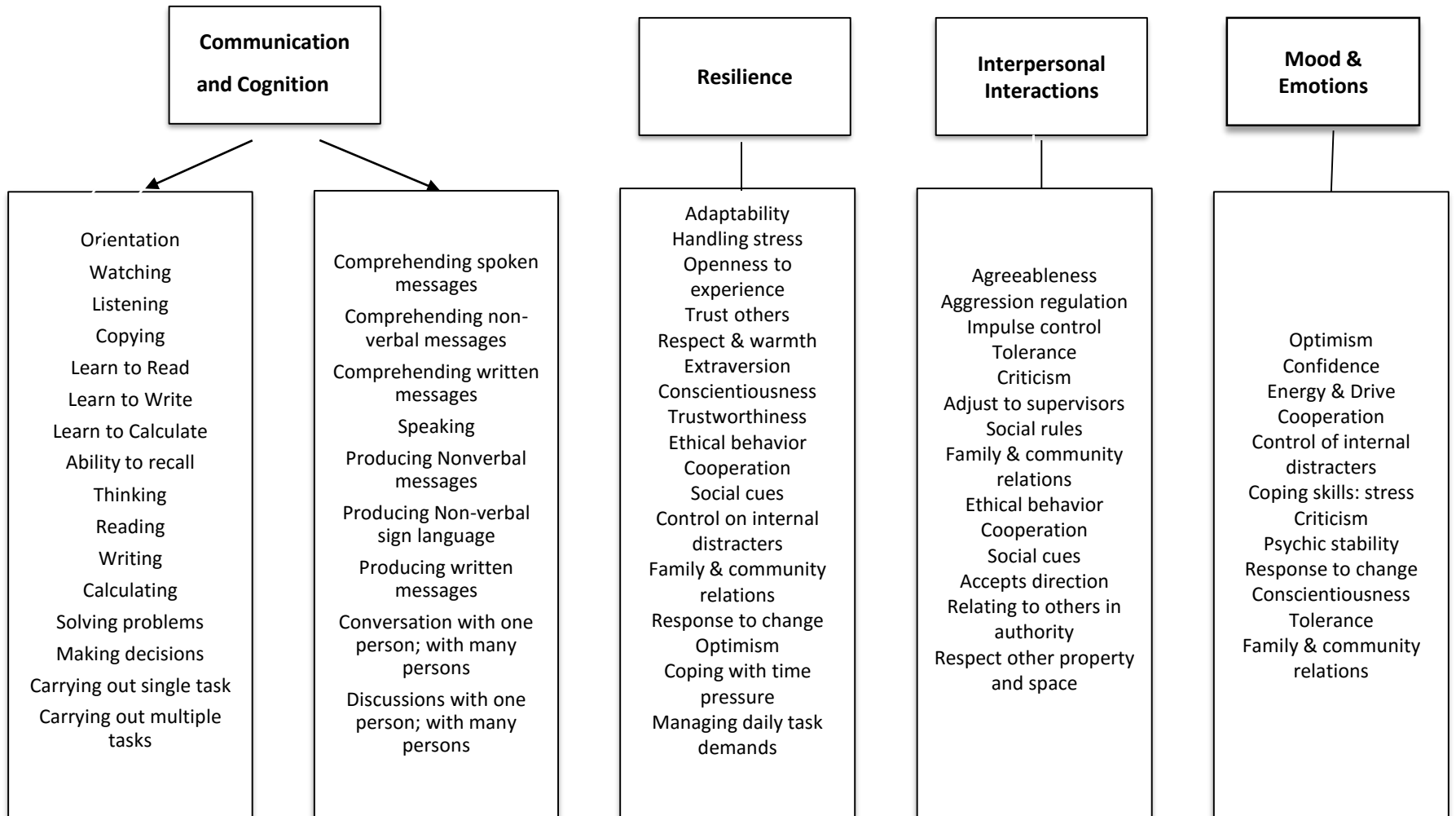
Computer adaptive technology

- Based on earlier answers, a computerized algorithm selects new questions
- The questions are chosen from a large 'item bank' (300+)
- Does not require everyone to respond to all the questions or the same questions
- Time and energy saving, and still precise

WD-FAB Physical Function Domains



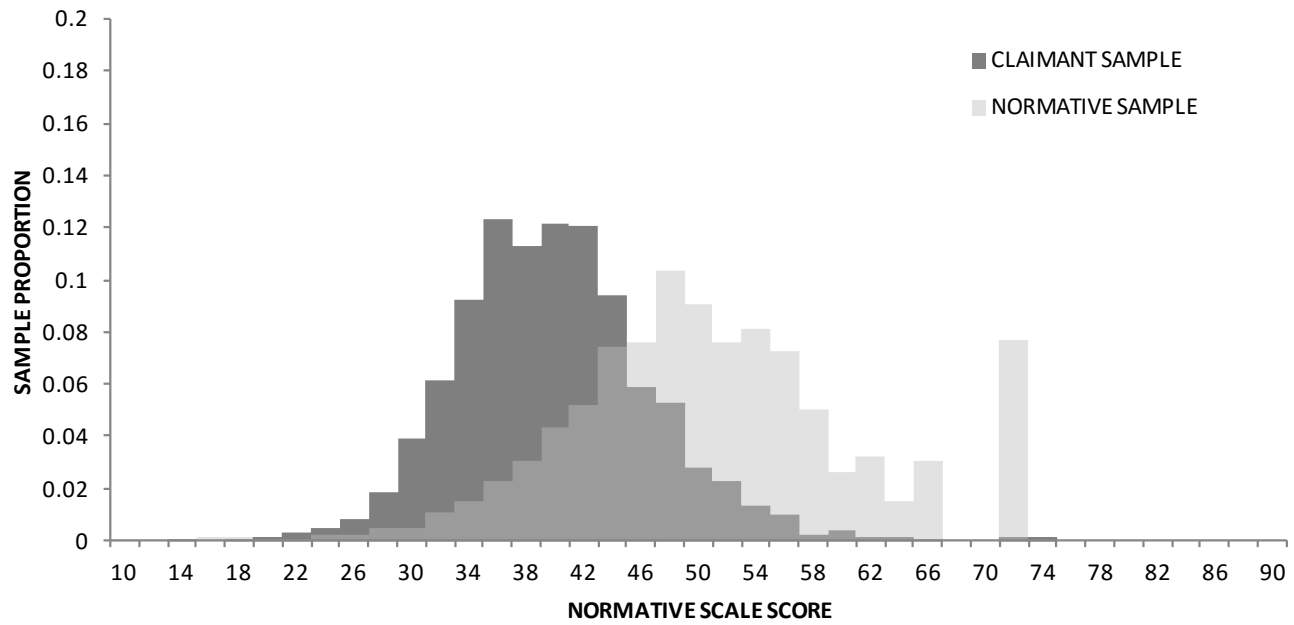
WD-FAB Mental Health Function Domains



Testing of WD-FAB in US

- Reliability
 - Intra-rater (two occasions)
 - Inter-rater (claimant and health care provider)
 - Intra-rater is high, inter-rater is very low
- Validity
 - Comparing general public, claimants, and persons with disability
 - The scales are sensitive and valid (except for resilience)
- Time
 - Appr 25 minutes

Communication and Cognition



WD-FAB accomplishments

- Completion of WD-FAB prototype in 2016
- Scientific validation- 14 publications in peer reviewed journals
- Now ready for testing/further development
- International collaborations? Translations

Potential Applications of the WD-FAB

- Research-
 - Monitor function over time as an indicator of population health
 - Track the influence of intervention strategies on functioning over time
- Claimant support-
 - Who need help? Identify functional profile thresholds.
 - Examine functional profiles relative to occupational demand to allow assessment of “fit”
 - Identify functional thresholds relative to inability to sustain work

Demo

- <https://ysurvey.alphce.com>
- Enter User ID
- Answer all demographic and filter questions
- Select domains

Topics for discussion

- Accessibility
 - A web platform (software) driven by a US firm
 - An entrance fee for each user (100 USD)
 - An agreement has to be reached with this firm by each national institution ready for testing

Topics for discussion (ctd)

- Translation
 - The web platform is in English (only)
 - Cooperation with the developers (BU, NIH) for reasons of
 - Quality
 - Confidentiality
 - A national task with US assistance
 - Possible funding from NIH

Topics for discussion (ctd)

- Data storage
 - Storage in US, anonymously
 - Or in the national institution
 - Agreement on ownership
 - Agreement on amendments of the instrument
 - Agreement on publication

Topics for discussion (ctd)

- Research
 - No existing protocol – has to be written
 - No research questions – has to be written
 - Agreements on publication and on co-authorship
 - It is probably an advantage to seek collaboration with national universities or research centres