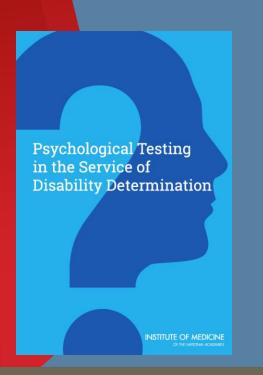
Developing and Assessing Medical Evidence for Extreme Limitations in the Ability to Focus on Tasks

National Disability Forum



Elizabeth W Twamley, PhD
CESAMH Investigator, Clinical Research Unit
Professor of Psychiatry, UC San Diego







Cognitive Impairment and Employment

- Cognitive impairments can limit functioning, including ability to work
- Neurocognitive functioning is strongly associated with employment status across a variety of disorders (e.g., TBI, HIV, epilepsy, and psychiatric disorders)
 - » Executive functioning d=.62
 - \sim Learning and memory d=.61
 - » Attention/concentration d=.53
- Difficulty learning job tasks, distractibility, or slowness in job performance can lead to job failures

Kalechstein et al., 2003; Leahy & Lam, 1998; Drake et al., 2000; Andelic et al., 2012





Attention, Concentration, and Persistence

- Extreme limitations in attention, concentration, and persistence could result in inability to work
 - Attention ability to focus on task for brief periods
 - Concentration (vigilance) sustained attention over time (could be passive), despite normal distractions
 - Persistence ability to sustain attention over time while completing a task (more active), which may entail shifting attention between two tasks
- IOM Report: "Attention and vigilance refers to the ability to sustain focus of attention in an environment with ordinary distractions (Occupational Information Development Advisory Panel, 2009)."
- Attention is required for concentration, and concentration is required for persistence



Severity

- At what level do impairment-related limitations in attention, concentration, and persistence cause off-task behavior to the extent a person could not do any job on the national economy? What research supports this threshold?
 - » > 3 SD would be considered extreme impairment
 - » Unknown whether there are specific cutoffs that would indicate total unemployability





Evaluation Instruments

- What standard tests or questionnaires already exist for assessing attention, concentration, persistence?
 - » Standard, performance-based (objective) tests for attention, concentration, and persistence
 - » IOM Report: "Tests for deficits in attention and vigilance include a variety of continuous performance tests (e.g., Conners Continuous Performance Test, Test of Variables of Attention), the WAIS-IV working memory index, Digit Vigilance (Lewis, 1990), and the Paced Auditory Serial Addition Test (Gronwall, 1977)."
 - » Questionnaires or self-report (subjective) measures are not sufficient because people are not reliable raters of their cognitive abilities

Authorities

- Who should we consult to help us gauge a person's capacity to focus on job-related tasks?
 - » Neuropsychologists
 - » Specialty training in neuropsychology would be appropriate for measurement of attention, concentration, and persistence and interpretation of those results within a profile of test performance





Employers

- What does previous research tell us about employer expectations around productivity? For example, what are employer tolerances for employees being "off task"? Do employers typically make reasonable accommodations in relation to off-task behavior?
 - » I don't think there is much research about this
 - » Employer reactions to off-task behavior are likely to be variable





Other Limitations

- Are there related limitations besides attention, concentration, and persistence that affect a person's ability to focus on tasks? How severe would they need to be to prevent someone from working? What previous research supports these suggestions?
 - » Processing speed is strongly related to attention
 - » Slow processing speed would limit attention (which would then limit concentration and persistence) if the person could not attend to information flowing at a "normal" pace
 - » Extreme impairment = > -3 SD
 - » Not much research on working



