

CHAPTER 1: ACTIVITIES OF DAILY LIVING (ADL) PROFILE

Description

The ADL Profile is both a performance-based assessment and questionnaire that is administered through a semi-structured interview and is designed to measure an individual's occupational performance across three dimensions of everyday activities (personal, home, and community) for individuals with a traumatic brain injury (TBI) (Dutil, Bottari, & Vanier, 2013). The conceptual development of the ADL Profile was based on three theoretical models: (1) the Model of Cerebral Functioning, (2) the Model of Human Occupation, and the (3) Disability Creation Process; and is intended to measure four operational concepts considered necessary for successful activity performance: (1) goal formulation, (2) determination and organization of steps to achieve that goal, (3) planning and execution, and (4) verification of quality controls (Dutil et al., 2013). The ADL Profile has two sections: a performance-based section which includes 21 tasks of which 17 are utilized in the final score and a questionnaire section that measures a person's perception of their life habits pre- and post-injury as well as their satisfaction with their present level of functioning (Dutil et al., 2013). Each task is scored along a 4-level ordinal scale that relates to relative independence in task performance (task score) and the manner in which the task is performed (operation score). A score on any item or activity typically reflects the lowest score as it relates to the four operations of goal attainment (Dutil et al., 2013).

Psychometrics

Original research by the assessment's creators found that test-retest reliability coefficients displayed good stability upon repeated measurements 2 weeks apart with global scores ranging from $r=0.53$ to 0.93 (Dutil et al., 2013). However, a study by Dell'Aniello-Gauthier (1994) reported only fair inter-rater reliability for the 3 ADL tasks of preparing a hot meal, eating, and obtaining information in which scores had a range of 0.58 to 0.68 . Similarly, Rousseau et al. found only poor to fair agreement for inter-rater reliability among 4 occupational therapists with minimal training among a sample of 19 subjects with TBI, $r=0.23$ to 0.72 (Dutil et al., 2013). Another study by its creators found that 3 factors represented 69% of the variance for the task section of the assessment: one linked to routine activities such as self-care and the other two involving higher physical and complex cognitive skills (Dutil et al., 2013). Alas, a Gervais (1995) study of the assessment's convergent validity found significant correlations between five tasks of the ADL

Profile related to personal care and corresponding tasks of the Functional Independence Measure with Kendall's tau $c=0.40$ to 0.73 ; $p<.001$ (Poulin & Barfod, 2012).

Advantages

The ADL Profile is a well-designed tool that is both maintained by and can be purchased from the Canadian Association of Occupational Therapy (CAOT) website. Although the assessment is rather extensive, once mastered, the clinician should be able to gain unique insights into the occupational performance of the individual being tested. Lastly, there is a consistent level of evidence in support of its use with the TBI population.

Disadvantages

A 5-day training program is recommended and administration can take up to 7 hours for certain populations across several treatment days. Studies have also noted a substantial amount of variance in its results which may reflect both instability of the assessment itself as well as difficulties associated with measuring performance in TBI populations.

Administration

Administration protocol recommends that the assessment be completed in the person's home or community environment and emphasizes the importance of non-structured observation in a natural setting. This approach allows for the observation of a person's routines and ability to multi-task as opposed to simply the engagement in individual tasks in quick succession. Each item of the ADL Profile is evaluated according to level of performance; thus when a person is able to perform all of the required operations they are considered to be independent and given a score of 2 (Dutil, Forget, Vanier, & Gaudreault, 1990). If the subject is unable to do any of the operations, a score of 0 is given suggesting dependency for the task. When the subject is unable to successfully perform one or more of the operations, they are given a score of 1 which means that assistance is needed to complete the task (Dutil et al., 1990). Under certain conditions a person may receive scores of 7, 8, or 9 if they are unable to perform due to physical or mental state, or if the task is irrelevant (Dutil et al., 1990). The test battery includes three manuals: (1) a description of the instrument, (2) user's guide interviews, and (3) the actual user's guide performance-based assessment. A 5-day training certification is recommended and available at various times through the CAOT website.