

The Assisting Hand Assessment, development of a version for adults with Stroke

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Introduction: Hand function assessments after Stroke has lacked to measure how a person with hemiplegia use his/her affected hand collaboratively with the non-affected hand to handle objects in every day life, which might be the most important aspect of their hand function. The Assisting Hand Assessment, AHA (Krumlind-Sundholm, & Eliasson, 2003) has successfully used this perspective in children with unilateral disabilities. The assessment is conducted from an activity situation which for children is play. To adjust the assessment for adults, two relevant activities were chosen involving bimanual tasks.

Objectives: The aim of this presentation is to report the result from a pilot study evaluating validity for an adult version of the AHA.

Methods: Construct and criterion validity was evaluated in four steps: 1. 24 adults with hemiplegia were video-recorded while performing two activities. 2. Evaluation of the relevance of the original AHA test items and development of new items. 3. Testing of criterion validity by comparison with other tests. 4. Rasch analysis for a larger sample.

Results: The two activities chosen were found to be appropriate according to pre-set criteria. For three of the original 22 test-items the wording was adjusted and two new items were formulated. The AHA-scores showed a high and significant correlation to the results from ABILHAND Stroke and Jebsen Hand Function Test. A Rasch analysis supported construct validity. The AHA scale distributed the person ability measures well with high separation.

Conclusion: This study showed that AHA can be used for adults, and further testing of validity and reliability is ongoing.

Contribution to the practice: AHA is an effective instrument that can be used to measure how a person with hemiplegia can use his/her affected hand collaboratively with the non-affected to handle objects in every day life.

Reference: Krumlind-Sundholm, L., & Eliasson, A-C. (2003). Development of the Assisting Hand Assessment, a Rasch-built measure intended for children with unilateral upper limb impairments. *Scandinavian Journal of Occupational Therapy*, 10, 16-26.