

Dynamic LOTCA batteries: Performance of healthy and clients following stroke

Noomi Katz¹, Sarah Averbuch², Liat Livni³, Asnat Bar-Haim Erez⁴

¹Research Institute for the Health & Medical Professions, Ono Academic College, Israel, Kyriat Ono, Israel, ²Loewenstein Rehabilitation Hospital, Raanana, Israel, ³Loewenstein Rehabilitation Hospital, Raanana, Israel, ⁴School of Occupational Therapy, Hebrew University, Jerusalem, Israel

Introduction

The Loewenstein Occupational Therapy Cognitive Assessment (LOTCA) development began in 1974 by a team of clinicians. The LOTCA was designed as a primary cognitive evaluation for patients with neurological dysfunctions. Since then it has been standardised and researched extensively for reliability and validity in various populations and cultures. More recently a dynamic version was developed for children DOTCA-Ch based on theoretical postulates of measuring the potential for learning with mediation. This system was applied in the adult dynamic versions (D-LOTCA & D-LOTCA-G).

Learning objectives

The objectives of the workshop are to present the D-LOTCA and D-LOTCA-G batteries for adults and elderly; 1) to present reliability, validity and standards of performance on the batteries for healthy adults and elderly and clients following stroke; and 2) to provide data on the contribution of the dynamic cueing system to the learning potential of the above populations.

Teaching methods

Oral presentation with picture examples of the subtests of the batteries; demonstrations of evaluation with video examples and discussion of scoring methods.

Methods for reliability, validity and standards

Two populations healthy and clients following stroke were tested. Healthy performance was tested on the D-LOTCA with 50 subjects in each of 2 adult age groups 18-40 and 40-65. Healthy elderly were tested on the D-LOTCA-G with 2 age groups 65-75 and 75-85, 50 subjects in each age group, altogether 200 subjects. Data collection is underway. Clients following stroke in the same age groups are tested in 5 rehabilitation facilities. Inter rater reliability among the participating occupational therapists was established.

Results and conclusions

Initial data show that the cueing system resulted in improving individuals' performance for stroke clients and healthy suggesting the benefits of the dynamic versions beyond the assessment of current cognition. Results from all groups of the study will be outlined in the presentation.

Contribution to the practice/evidence base of occupational therapy.

The advantage of dynamic assessment is the ability to understand performance not only in the here and now but to evaluate what the potential of the individual is if provided with cues, or mediation. The information allows for better intervention plans, contributing to effectiveness of occupational therapy intervention.