CLINICAL BOTTOM LINE: Independent computer assisted therapy (CAT) improves naming for trained words but results are not maintained at two month post and no generalisation was observed.

Clinical Question [patient/problem, intervention, (comparison), outcome]: Is computer-only therapy in people with chronic aphasia efficacious?

Citation: Pedersen, P.M., Vinter, K. & Skyhøj Olsen, T. (2001) Improvement of oral naming by unsupervised computerised rehabilitation. Aphasiology 15(2); 151-169

Design/Method: Case series (multiple baseline crossover design) using WAB AQ, selected tests of the PALPA and Snodgrass & Vanderwart (S&V) naming as outcome measures. The computer therapy programs were developed for the study and ran in pre-defined ordered (semantic, phonological and written tasks) with set criterion performance for each task. Words were selected from training sets that patient had naming errors on. Output was digitally recorded. Trained and untrained words were analysed by Cochran's Q and Chi-square. Matching of word frequency across training sets of words was assessed to look at changes in errors and to assess changes with trained and untrained words (used paired MacNemar test).

Unpaired t-test used to analyse difference between animate versus animate words. Follow-up completed at 2 months with WAB and S&V naming.

Participants: 3 subjects with unilateral stroke and resulting anomic aphasia. Aged ranged from 57-71. Time post stroke ranged from 6/12 - 18/12.

Experimental Group: Recruited from Neurological departments of two hospitals. First language is Danish. Variable characteristics in terms of age, aphasia severity and time post-stroke. Participants were 'selected', recruitment process unclear.

Control Group: No control group

Results: P1: Naming improved p<0.001 specific to trained words only. No significant change in naming at follow-up. No change in WAB scores. P2: Naming improved p<0.02 trained words only but deteriorated at follow-up. No change in WAB. P3: Naming improved p<0.04 with no difference between trained and untrained words. Not maintained at follow-up. Improved in the WAB but significance not discussed.

Comments – Strengths Criterion performance as opposed to predetermined time/intensity.

Level of Evidence (NH&MRC): Level IV

Appraised By:
Clinical Group: Hunter ACI EBP Group

Date: 18/10/11

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Form based on Worrall & Bennett, Evidence based Practice: Barriers & Facilitators for Speech-Language Pathologists, Journal of Medical Speech-Language Pathology 2:9, xi – xvi
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