

## Critically Appraised Paper (CAP)

**CLINICAL BOTTOM LINE:** In this study, there was benefit from attempted naming followed by repetition for oral naming for relatively few people with aphasia, the written naming of more individuals was found to benefit from attempted written naming followed by copying.

**Clinical Question [patient/problem, intervention, (comparison), outcome]:** Is repetition therapy effective in improving lexical access/word find difficulties?

Sugushita M, Seki K, Kabe S, Yunoki K (1993). A material-control single-case study of the efficacy of treatment for written and oral naming difficulties, *Neuropsychologica*. 31(6):559-569.

### Design/Method:

Adaptation of single case design: material control single case design.

2 sets of pictures representing 2 syllable words: Set 1 24 pictures, set 2 19 pictures. Set 1 treated first – divided into groups of 5 pictures. Two pictures at a time, when 90% correct in written naming, two more words added in, until 90% then the final picture. Then the next set. Each treatment involved trying to name the picture, if failed then repeated word, then tried to write, if failed copied the (hiragana form of) the word. 20-40 min daily sessions, 6 days a week. 7/22 participants did not reach 90% criterion after 4 sessions and did not participate further.

4 subjects only participated in phase 1.

Spoken and written naming tested for all items before phase 1, after phase 1 (before phase 2) and after phase 2.

**Participants:** 22 Japanese speaking individuals with aphasia.

**Experimental Group:** 22 aphasia post (L) Stroke patients with mean age 50.1 years + 5.9 mean years post onset. 14 – Broca's, 4 Global, 2 – Wernicke's 2 – alexia and graphia.

**Control Group:** Nil. Experimental group acted as its own control in modified AB design: Two sets of items, those not treated in phase 1 acted as the control, and then the treated group in phase 1 acted as the control for phase 2. However, this led to problems in evaluating the effects of phase 2 accurately (ceiling effects and/or a lack of maintenance and/or continued improvement).

### Results:

**Phase 1:** 9/15 showed improved written naming (treated items significantly better than control items, using analysis both in terms of number of words correct and number of letters). [Plus 1 who showed significant improvement in number of words alone. 2 improved on both treated and control – could have been a treatment effect or spontaneous recovery]. 2/15 showed improved spoken naming (treated items significantly better than control items, using analysis both in terms of number of words correct and number of "letters" – presumably means phonemes). [Plus two who clearly showed improvement, but weren't analysed at the letter level, and 1 who showed significant improvement in number of letters alone].

**Phase 2:** Authors report 3/10 improve in written naming, more likely actually 7/10. Similarly only 2/10 reported significant for spoken naming, more likely actually 4/10.

### Comments

Data only for very small subject group due to exclusions and dropouts. Variation in length of time maintenance evaluated. Statistics only compare across groups of items not within a set (from pre to post), lack of a control group of items that was never treated. The authors are very conservative with what they conclude is effective, may underestimate actual benefit.

**Level of Evidence (NH&MRC):** IV

*May 2002*

**Appraised By:** Adult Language EBP Group

**Date:** 2007