**Title:** Relearning in Semantic Dementia: Word retraining programs to help rebuild vocabulary

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**Background**: Semantic dementia (SD) is a syndrome which significantly impacts word knowledge, results in marked deficits in both spoken and written word retrieval. Research has now shown that spoken retrieval can be improved via word retraining, but remediation of written retrieval has not been studied. The aim of this study was to investigate benefits of word retraining to both spoken and written word retrieval in patients with SD.
**Methods**: Data were analysed from 8 patients who completed an individually tailored 2-month word retraining program. Participants engaged in a “Look, Listen, Repeat” practice of everyday words using their home computer. Performance on both verbal and written word retrieval was assessed at baseline, immediate post-intervention, and at a 2-month follow-up.
**Results**: All patients improved in their ability to say and write words immediately post-intervention (p<0.001). For the majority of participants, this reflected an improvement from not being able to produce the word at all to producing the correct response. Patients with milder semantic impairments achieved up to 100% accuracy for both oral and written retrieval at immediate post-intervention, with performance well maintained at the 2-month follow-up. Word retrieval was less accurate for those with severe semantic impairments, however, the majority of newly relearned words were both said and spelt correctly (e.g. 57% accuracy). Words untrained did not change over the period of the study.
**Conclusions**: Patients with SD can successfully relearn words, both in spoken and written formats. Future word retraining programs should include verbal and written practice.

Word count: 246 (word limit = 250)