

### **Critical Review:**

Does naming in the primary language of bilingual individuals with aphasia benefit from intervention targeting naming in the secondary language? \*

Amber Wiggins

M.Cl.Sc. SLP Candidate

University of Western Ontario: School of Communication Sciences and Disorders

This critical review examines the transfer effect of naming therapy from secondary language to primary language in bilingual individuals with aphasia. A literature search yielded five papers, four of which were single-subject designs, and one systematic review. Overall, the literature reviewed indicates that naming therapy in a bilingual person with aphasia's second language results in equivocal improvements for naming in the first language. The clinical implications of these findings are discussed.

### ***Introduction***

Aphasia is an acquired neurogenic language disorder

*\*This paper was created as a required assignment for the CSD9639 Evidence Based Practice for Clinicians course at Western. While it has been evaluated by course instructors for elements of accuracy and style, it has not undergone formal peer-review.*

find articles included in this review. The search was conducted using the following terms: [(bilingual aphasia) OR (bilingual with aphasia) AND ((naming therapy) OR (naming intervention))].

#### Selection Criteria

Articles selected for inclusion in this review examined the influence of naming therapy in L2 on naming outcomes in L1 for bilingual individuals with aphasia. Papers that did not specify the primary language of the participants or that were published prior to 2010 were excluded from this review.

#### Data Collection

Results of the search generated five articles that met the previously described criteria from the last five years. Four papers examined the effect of naming treatment in L2 on naming outcomes in the L1 using a single-subject design. One qualitative systematic review examining the effects of cross-language transfer following treatment for bilingual individuals with aphasia was also included.

### *Results*

**Kurland and Falcon** (2011) conducted a single-subject design with a bilingual individual with aphasia to examine the within- and cross-language effect of semantic naming treatment in L1, L2, and both L1 and L2. The participant was a 65 year old Spanish (L1) and English (L2) speaker who was 10 months post-onset of a cardiovascular accident (CVA) in the left hemisphere. The participant underwent two and a half hours of treatment per day, 5 days a week (g)6(e)-245(tr).74 (h)6(i)-10(n)]9 1 156.86 343.L2

and one control set. Each participant completed

articles reviewed, 11 studies examined L2 treatment and its' effect on L1 language outcomes. Five of these 11 studies found cross language transfer, indicating improvements in L1 following treatment in L2. Of these five studies, three focused on naming therapy and naming outcomes and reported an improvement in L1 naming following naming treatment in L2. The remaining two articles did not use naming as an outcome measure following treatment in L2. The authors concluded that there is some evidence for cross-linguistic transfer in naming treatment for bilingual individuals with aphasia in the second language.

The systematic review by Faroqi-Shah et al. (2010) identified all the appropriate studies and eliminated inappropriate studies to address the research question with a thorough search of appropriate databases. The present systematic review reports on the quality markers of each citation that was included. The study reports limitations, including the quality of the research that was reviewed as it lacked random sampling, blinding and evaluation of fidelity. The greatest limitation for the research question remains the limited number of articles that specifically included naming therapy and explicitly measured naming outcomes in L1 after treatment in L2.

Considering the results obtained in this review, it provides equivocal evidence for providing naming therapy in L2 in order to obtain improvements in naming ability in L1.

### *Discussion*

The primary objective of this paper was to review the current literature on the effect of naming therapy in L2 on naming outcomes in L1 for bilingual individuals with aphasia. Overall, there is limited transfer of naming improvements from L2 to L1 in this population. Of the five articles, Kiran and Roberts (2010) conducted a study with the highest level of evidence and clear well-designed treatment implementation. They reported suggestive support for naming therapy in L2 showing improvement in L1 naming outcomes in one out of four bilingual participants with aphasia. Faroqi-Shah et al. (2010) also provided equivocal evidence suggesting that there is a possibility for the improvement in L1 naming following L2 naming therapy. The remaining articles (Croft et al., 2011; Kurland & Falcon, 2011; Miller

imperative to the effectiveness for bilingual individuals with aphasia for more reliable comparison between studies.

- 1.3 Using standardized measures to determine proficiency in language rather than self-report.

### ***Conclusion & Clinical Implications***

Based on the findings of these studies, the evidence is equivocal and requires further research before implementing the use of naming therapy in L2 for the goal of improving naming in L1 into clinical practice. Clinical application of this type of intervention should be used with extreme caution considering the individual differences in the population and proficiency levels in both languages.

### ***References***

- Beeson, P. M. & Robey, R. R. (2006). Evaluating single-subject treatment research: Lessons learned from the aphasia literature. *Neuropsychological Review, 16*(4), 161-169.
- Chapey, R. (Ed.). (2008). *Language intervention*