## **Critical Review:**

In bilingual adults with aphasia what is the evidence that semantic naming treatment leads to crosslinguistic generalization?\*

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This critical review examines the impact of a semantic naming treatment on crosslinguistic generalization for bilingual individuals with aphasia. A literature search yielded 5 articles (single subject designs and case studies). Overall, the evidence for crosslinguistic generalization in individuals with bilingual aphasia following semantic naming treatment is variable. Future recommendations and clinical implications are discussed.

## Introduction

It is estimated that over half of the world is bilingual or multilingual and this creates a clinical need for Speech-Language Pathologists (SLP) to consider the effectiveness of semantic naming treatment of bilingual individuals and the manner in which it may differ from the treatment of monolingual individuals (Kiran, Sandberg, Gray, Ascenso & Kester, 2013). This is particularly relevant in a multicultural country such as Canada where over 200 languages are spoken and over 20% of Canadians report speaking a language other than French or English as their first language (L1) (Statistics Canada, 2012).

For the purpose of this review, bilingualism will be defined as: "an individual who uses two or more languages in their everyday life, regardless of the context of use" (A nsaldo, Marcotte, Scherer & Raboyeau, 2008). Other factors contributing to an individual's bilingualism such as age of acquisition, exposure and proficiency are acknowledged however they will not be considered at this time.

Damage to a bilingual individual's language dominant hemisphere can result in a loss of one or both languages (Edmonds & Kiran, 2006).<sup>1</sup>

There are various treatment047 ≥ 5(e)-4(v)6(ar)-5(io)-4(u)6(s)33 ETBT308(io

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variable were included. Studies that involved multiple types of treatment

Authors employed a procedure to measure Effect Size (ES) in single subjects. However, the authors reported no other statistical analysis. Overall, the evidence for crosslinguistic generalization from this particular study is equivocal.

A third study of the same design by Kiran, Sandberg, Gray, Ascenso and Kester (2013) built upon the two previous studies by examining the effect of a five-step semantic naming treatment on crosslinguistic generalization in a larger group of Spanish-English individuals with aphasia (n=17). All of the participants were native Spanish speakers and English was their L2. Five of the participants were noted to have been previously reported on in other studies (Edmonds and Kiran, 2006; Kiran and Roberts, 2010). The participants received semantic naming treatment twice a week for 2 hours in one language, 9 receiving it in English and 8 in Spanish. Baseline and outcome measures were taken in both languages. Within-language and between-language generalizations were observed to be variable across the participants. They concluded that language of the environment, proficiency and use are likely to influence the extent of crosslinguistic generalization.

Although the authors specified the selection criteria for the participants, there was an uneven sex distribution in icipants

- Edmonds, L. A., & Kiran, S. (2006). Effect of Semantic Naming Treatment on Crosslinguistic Generalization in Bilingual Aphasia. *Journal of Speech, Language, and Hearing Research*, 49(4), 729-748.
- Kiran, S., & Iakupova, R. (2011). Understanding the relationship between language proficiency, language impairment and rehabilitation: Evidence from a case study. *Clinical linguistics & phonetics*, *25*(6-7), 565-583.
- Kiran, S., & Roberts, P. M. (2010). Semantic feature analysis treatment in Spanish–English and French–English bilingual aphasia. *Aphasiology*, *24*(2), 231-261.
- Kiran, S., Sandberg, C., Gray T., Ascenso, E., & Kester, E. (2013). Rehabilitation in Bilingual