

## **Supplemental Material S2.** References of excluded studies and reasons for exclusion in the meta-analysis.

### *S2.1 Studies included bilingual persons with aphasia with etiologies other than cerebrovascular accident.*

- Grasso, S. M., Pena, E. D., Kazemi, N., Mirzapour, H., Neupane, R., Bonakdarpour, B., Gorno-Tempini, M. L., & Henry, M. L. (2021). Treatment for anomia in bilingual speakers with progressive aphasia. *Brain Sciences*, 11(11). <https://doi.org/10.3390/brainsci11111371>
- Keane, C., & Kiran, S. (2015). The nature of facilitation and interference in the multilingual language system: Insights from treatment in a case of trilingual aphasia. *Cognitive Neuropsychology*, 32(3–4), 169–194. <https://doi.org/10.1080/02643294.2015.1061982>
- Lerman, A., Mais, D., Nissani, Y., & Malcolm, T. (2022). Preserving lexical retrieval skills across languages in a bilingual person with logopenic primary progressive aphasia. *Aphasiology*, 1–24. <https://doi.org/10.1080/02687038.2021.2020717>
- Meyer, A. M., Snider, S. F., Eckmann, C. B., & Friedman, R. B. (2015). Prophylactic treatments for anomia in the logopenic variant of primary progressive aphasia: Cross-language transfer. *Aphasiology*, 29(9), 1062–1081. <https://doi.org/10.1080/02687038.2015.1028327>

### *S2.2 Studies included bilingual persons with aphasia with less than 6-month post onset.*

- Abutalebi, J., Rosa, P. A. D., Tettamanti, M., Green, D. W., & Cappa, S. F. (2009). Bilingual aphasia and language control: A follow-up fMRI and intrinsic connectivity study. *Brain and Language*, 109(2), 141–156. <https://doi.org/10.1016/j.bandl.2009.03.003>
- Filiputti, D., Tavano, A., Vorano, L., De Luca, G., & Fabbro, F. (2002). Nonparallel recovery of languages in a quadrilingual aphasic patient. *International Journal of Bilingualism*, 6(4), 395–410. <https://doi.org/10.1177/13670069020060040201>
- Gil, M., & Goral, M. (2004). Nonparallel recovery in bilingual aphasia: Effects of language choice, language proficiency, and treatment. *International Journal of Bilingualism*, 8(2), 191–219. <https://doi.org/10.1177/13670069040080020501>
- Kang, H. G., Chung, J. Y., & Kim, B. J. (2016). Selective bilingual impairment and distinctive recovery after stroke. *European Geriatric Medicine*, 7(1), 50–51. <https://doi.org/10.1016/j.eurger.2015.12.003>
- K.D, V., Muhammed, A., Chopra, N., U, V. A., & B, R. (2012). Outcome of language-based intervention in persons with bilingual Wernicke's aphasia: A case study. *Language in India*, 12(9), 726–744.
- Lee, B., Moon, H. I., Lim, S. H., Cho, H., Choi, H., & Pyun, S.-B. (2016). Recovery of language function in Korean-Japanese crossed bilingual aphasia following right basal ganglia hemorrhage. *Neurocase*, 22(3), 300–305. <https://doi.org/10.1080/13554794.2016.1141966>
- Marangolo, P., Rizzi, C., Peran, P., Piras, F., & Sabatini, U. (2009). Parallel recovery in a bilingual aphasic: A neurolinguistic and fMRI study. *Neuropsychology*, 23(3), 405–409. <https://doi.org/10.1037/a0014824>
- Nasrullah, R., Suganda, D., Wagiaty, W., & Sugeng, R. (2019). Recovery patterns and a linguistic therapy model of Sundanese-Indonesian bilingual aphasia: A neurolinguistic study. *Indonesian Journal of Applied Linguistics*, 9(2), 452–462. <https://doi.org/10.17509/ijal.v9i2.20243>

Nikitha, M., Darshan, H. S., Abhishek, B. P., & Goswami, S. P. (2020). Clinical profiling of a bilingual client with anomic aphasia. *Annals of Neurosciences*, 27(2), 75–82. <https://doi.org/10.1177/0972753120927518>

Radman, N., Spierer, L., Laganaro, M., Annoni, J., & Colombo, F. (2016). Language specificity of lexical-phonological therapy in bilingual aphasia: A clinical and electrophysiological study. *Neuropsychological Rehabilitation*, 26(4), 532–557. <https://doi.org/10.1080/09602011.2015.1047383>

### *S2.3 Studies did not provide word-retrieval treatment.*

Altman, C., Goral, M., & Levy, E. S. (2012). Integrated narrative analysis in multilingual aphasia: The relationship among narrative structure, grammaticality, and fluency. *Aphasiology*, 26(8), 1029–1052. <https://doi.org/10.1080/02687038.2012.686103>

Aziz, M. A., Razak, R. A., & Garraffa, M. (2020). Targeting complex orthography in the treatment of a bilingual aphasia with acquired dysgraphia: The case of a Malay/English speaker with conduction aphasia. *Behavioral Sciences*, 10(7). <https://doi.org/10.3390/bs10070109>

Boles, L. (2000). Aphasia therapy in a bilingual speaker: Treatment in language one, with spousal support in language two. *Asia Pacific Journal of Speech, Language and Hearing*, 5(2), 137–142. <https://doi.org/10.1179/136132800805577013>

Conner, P. S., Goral, M., Anema, I., Borodkin, K., Haendler, Y., Knoph, M., Mustelier, C., Paluska, E., Melnikova, Y., & Moeyaert, M. (2018). The role of language proficiency and linguistic distance in cross-linguistic treatment effects in aphasia. *Clinical Linguistics & Phonetics*, 32(8), 739–757. <https://doi.org/10.1080/02699206.2018.1435723>

Goral, M. (2012). Cross-language treatment effects in multilingual aphasia. In M. R. Gitterman, M. Goral, & L. K. Obler (Eds.), *Aspects of Multilingual Aphasia* (pp. 106–121). Multilingual Matters.

Goral, M., Naghibolhosseini, M., & Conner, P. S. (2013). Asymmetric inhibitory treatment effects in multilingual aphasia. *Cognitive Neuropsychology*, 30(7–8), 564–577. <https://doi.org/10.1080/02643294.2013.878692>

Grasso, S. M., Cruz, D. F., Benavidez, R., Peña, E. D., & Henry, M. L. (2019). Video-implemented script training in a bilingual Spanish–English speaker with aphasia. *Journal of Speech, Language, and Hearing Research*, 62(7), 2295–2316. [https://doi.org/10.1044/2018\\_JSLHR-L-18-0048](https://doi.org/10.1044/2018_JSLHR-L-18-0048)

Laganaro, M., & Overton Venet, M. (2001). Acquired alexia in multilingual aphasia and computer-assisted treatment in both languages: Issues of generalisation and transfer. *Folia Phoniatrica et Logopaedica*, 53(3), 135–144. <https://doi.org/10.1159/000052668>

Lai, W. V., Tay, R. Y. L., & Rickard Liow, S. J. (2022). Dyadic conversation training in Mandarin for bilinguals with aphasia and their communication partners. *Aphasiology*, 36(9), 1096–1126. <https://doi.org/10.1080/02687038.2021.1931802>

Meinzer, M., Obleser, J., Flaisch, T., Eulitz, C., & Rockstroh, B. (2007). Recovery from aphasia as a function of language therapy in an early bilingual patient demonstrated by fMRI. *Neuropsychologia*, 45(6), 1247–1256. <https://doi.org/10.1016/j.neuropsychologia.2006.10.003>

Muñoz, M. L. (2017). Cultural adaptation of evidence-based treatments: An example from aphasia. *Perspectives of the ASHA Special Interest Groups*, 2(14), 5–14. <https://doi.org/10.1044/persp2.SIG14.5>

Peñaloza, C., Dekhtyar, M., Scimeca, M., Carpenter, E., Mukadam, N., & Kiran, S. (2020). Predicting treatment outcomes for bilinguals with aphasia using computational modeling: Study protocol for the PROCoM randomised controlled trial. *BMJ Open*, 10(11), e040495. <https://doi.org/10.1136/bmjopen-2020-040495>

*S2.4 Individual single-word naming scores were not reported or could not be extracted due to insufficient detail.*

Bahadoran-Baghbaderani, A., Tahririan, M. H., Saadatnia, M., & Ketabi, S. (2021). Contributions of pre and postmorbid nondominant language interventions to coactivation of L1-L2 lexical representations: A case study of Persian-English bilingual stroke-induced aphasic patients. *Journal of Research in Applied Linguistics*, 12(1), 48–67. <https://doi.org/10.22055/rals.2021.16724>

Miertsch, B., Meisel, J. M., & Isel, F. (2009). Non-treated languages in aphasia therapy of polyglots benefit from improvement in the treated language. *Journal of Neurolinguistics*, 22(2), 135–150. <https://doi.org/10.1016/j.jneuroling.2008.07.003>

*S2.5 Single-word naming performance were not measured.*

Knoph, M. I. K. (2013). Language intervention in Arabic–English bilingual aphasia: A case study. *Aphasiology*, 27(12), 1440–1458. <https://doi.org/10.1080/02687038.2013.832139>

Knoph, M. I. N., Lind, M., & Simonsen, H. G. (2015). Semantic feature analysis targeting verbs in a quadrilingual speaker with aphasia. *Aphasiology*, 29(12), 1473–1496. <https://doi.org/10.1080/02687038.2015.1049583>

Łuczynańska, J. (2011). Recovery patterns in bilingual aphasia. *Acta Neuropsychologica*, 9(1), 59–77.

Sandberg, C. W., Zacharewicz, M., & Gray, T. (2021). Bilingual abstract semantic associative network training (BAbsANT): A Polish-English case study. *Journal of Communication Disorders*, 93, 106143. <https://doi.org/10.1016/j.jcomdis.2021.106143>

*S2.6 Study analyzed retrospective data.*

Peñaloza, C., Scimeca, M., Gaona, A., Carpenter, E., Mukadam, N., Gray, T., Shamapant, S., & Kiran, S. (2021). Telerehabilitation for word retrieval deficits in bilinguals with aphasia: Effectiveness and reliability as compared to in-person language therapy. *Frontiers in Neurology*, 12. <https://doi.org/10.3389/fneur.2021.589330>

*S2.7 Study included bilingual person with aphasia with other ongoing medical issue affecting language abilities.*

Kurland, J., & Falcon, M. (2011). Effects of cognate status and language of therapy during intensive semantic naming treatment in a case of severe nonfluent bilingual aphasia. *Clinical Linguistics & Phonetics*, 25(6–7), 584–600. <https://doi.org/10.3109/02699206.2011.565398>