

Examining the effects of restitutive speech-language interventions in culturally and linguistically diverse individuals with primary progressive aphasia

Stephanie Grasso, Núria Montagut Colomer, Camille Wagner Rodriguez, Laura Auge Domenech, Carlota Faixa Sol, Sonia-Karin Marqués Kiderle, Jan Christian Holst Chaires, Albert Lleo, Jaime Kulisevsky, Sergi Borrego Écija, Raquel Sánchez-Valle Díaz, Maya L. Henry, Miguel Ángel Santos-Santos

State of the Art

Primary progressive aphasia (PPA) is a neurodegenerative disorder characterized by progressive worsening of speech and/or language. There is an increasing body of research indicating that restitutive interventions improve communication in PPA; however, this work has overwhelmingly been conducted in monolingual speakers.

Methodology

In an international Stage 2 (Onken et al., 2014) intervention study, we investigated the effects of personalized, restitutive interventions administered to bilingual speakers with PPA.

Bilingual individuals with semantic or logopenic variant PPA (n = 22) received lexical retrieval treatment (LRT; Henry et al, 2013; 2019) and bilingual individuals with nonfluent variant PPA (nfvPPA; n = 6) received Video-Implemented Script Training for Aphasia (VISTA; Henry et al., 2018). Performance was assessed immediately post-treatment as well as at 3-, 6- and 12-months post-treatment.

Results

Permutation tests revealed significant improvement on trained targets through one year follow-up for LRT and VISTA. Untrained items also showed significant (albeit less robust) improvement relative to baseline for LRT, with maintenance of gains through one-year follow-up. In both treatment approaches, bilingual speakers demonstrated evidence of cross-linguistic transfer. An in-house post-treatment survey also documented participant and carepartner perceptions regarding broader benefits to communication.

Conclusion

The current study confirms that restitutive interventions lead to significant improvements in communicative function in all three variants of PPA. Given that the PPA literature currently lacks representation of individuals from culturally and linguistically diverse backgrounds, this study also serves to characterize the positive effects of intervention using a culturally-sensitive bilingual treatment model.

Conflicts of interest

Nothing to disclose.