

7. Menahemi-Falkov, M., Breitenstein, C., Pierce, J.E., Hill, A.J., O'Halloran, R. & Rose, M.L. (2021) **A systematic review of maintenance following intensive therapy programs in chronic post-stroke aphasia: importance of individual response analysis**, *Disability and Rehabilitation*, DOI: [10.1080/09638288.2021.1955303](https://doi.org/10.1080/09638288.2021.1955303)

Purpose: Recent evidence supports the benefit of intensive aphasia intervention programs for people with chronic aphasia, yet it is unclear if all participants can expect positive outcomes and for how long therapeutic gains last.

Methods: We systematically searched for studies investigating intensive interventions in chronic aphasia. To explore individual response rates and maintenance of therapeutic gains we carried out meta-synthesis by calculating and analysing the Standard Error of Measurement and Minimal Detectable Change metrics of six common outcome measures.

Results: Forty-four studies comprising 24 experimental (13 group, 11 single-subject) and 20 non-experimental studies met our inclusion criteria ($n = 670$). Whereas most group studies reported statistically significant post-therapy improvement and maintenance, analysis of individual participant data (IPD, $n = 393$) from these studies revealed that only about a third of participants were classified as “immediate responders,” of which more than a third had lost their initial immediate gains at follow-up. This pattern did not change when IPD from single-subject studies ($n = 49$) was added to the analysis. Thus, only 22% of all IPD receiving an intensive intervention improved significantly and maintained their therapy gains.

Conclusions: Intensive aphasia therapy is effective when measured at the group-level, but many individuals do not respond significantly to the intervention, and even fewer individuals preserve their initial gains. Group study results do not allow prediction of an individual’s response to the intervention. Future research should elucidate which factors mediate positive treatment response and maintenance for an individual.

Implications for rehabilitation:

- Only a small proportion (about one fifth in this review) of intensive aphasia treatment program participants respond and maintain their therapy gains, a fact that is obscured by traditional p-value group analysis.
- A simple clinical decision-making method is presented for evaluating individual therapy gains and their maintenance.
- For some immediate treatment responders (about one third in this review), gains from intensive therapy programs are unlikely to be maintained in the long-term without additional, ongoing practice.
- Clinicians should consider the possibility of individual clients losing some of their therapy gains and take proactive steps to support long-term maintenance.