

Appendix. Articles Selected for Review

Reference	Study Design	Participant Description	Basis of Non-developmental Target Selection	Comparison Target Selection	Intervention Intensity/ Duration	Outcome Measure
Gierut et al. (1987)	Single-subject. Multiple probe and multiple baseline.	$N = 6$; age range 3:7–4:6	Based on assessment of children's phonological knowledge. Children were randomly assigned to receive treatment starting at the end of their knowledge continuum.	Sounds that child had most knowledge of.	Information not provided.	PCC and phonological knowledge protocol (PKP; Gierut, 1990)
Gierut et al. (1996)	Single-subject. Alternating treatment design and staggered multiple baseline.	$N = 9$; age range 3:7–5:6	Phoneme selection based on earlier- or later-acquired sounds, and differed per each child's phonemic inventory.	Later-acquired sounds. Treatment was initially delivered in an imitative phase, until child reached 75% accuracy. Spontaneous phase was next and continued until accuracy was 90%.	1-hour sessions, 3 times per week. Specific treatment duration was not reported, but follow-up probes were administered 2 weeks and 2 months post-treatment.	PKP
Powell & Elbert (1984)	Single-subject. Multiple baseline.	$N = 6$; age range 4:4–6:3	Based on normal acquisition of liquid clusters. Non-developmental group treated on fricative + liquid clusters (e.g., [fl]).	Developmental target was stop + liquid clusters (e.g., [pl]).	Specific information not provided; visual analysis revealed experiment lasted over the course of 9 months.	Percentage accuracy for targeted and non-targeted sounds
Powell et al. (1991)	Single-subject design. Multiple baseline.	$N = 6$; age range 4:11–5:6	Comparison was made looking at /r/ and one other sound that was not present in each child's phonetic inventory. Children in non-developmental group either had /r/ as a non-stimulable sound ($n = 2$) or a different non-stimulable treatment sound ($n = 2$).	There were 2 children receiving treatment for 2 stimulable sounds.	Children were seen 3 times a week with each session consisting of 100 minimal pair responses (approximately 30-minute sessions).	Percentage accuracy for targeted sounds
Rvachew & Nowak (2001)	Randomized controlled group design	$N = 48$; mean age 51.46 months ($SD = 6.02$) in the developmental targets group; mean age of 49.63 months ($SD = 4.99$) in the non-developmental targets group.	Late-acquired phonemes and those for which children had little phonological knowledge.	Early-acquired phonemes and those for which children had greater phonological knowledge.	Initial assessment, 6 weeks of treatment; assessment, 6 weeks of treatment; post-assessment. 30–40 minutes per session.	PCC and PKP
Tyler & Figurski (1994)	Single-subject; ABAB withdrawal and multiple probe.	$N = 2$; ages 2:8 and 2:10.	Targets chosen according to feature complexity. Child 1 treated on /l/.	Child 2 was treated on /s/ (a less complex feature).	Baseline was 3–5 weeks, followed by a treatment period of 9 weeks. 5-week withdrawal period was followed by a second treatment period of 9 weeks and another withdrawal period. Session duration not reported.	Percentage accuracy for targeted sounds and PCC