

EVIDENCE OF EFFICACY: ULTRASOUND SPEECH THERAPY STUDIES

Study	N	Age	Dx	Speech Targets	+ve Result	Mixed Result
<i>Shawker & Sonies (1985)</i>	1	9	DSSD	r	✓	
<i>Bernhardt et al. (2003)</i>	4	16 to 18	HI	s, ʃ, r, l, i, ɪ, u, ʊ	✓	
<i>Bernhardt et al. (2005a)</i>	4	16 to 18	HI	s, ʃ, r, l, i, ɪ, u, ʊ		✓
<i>Adler-Bock et al. (2007)</i>	2	12, 14	DSSD	r	✓	
<i>Bacsfalvi et al. (2007)</i>	3	18	HI	i, u, ʊ, ɪ, ε	✓	
<i>Bernhardt et al. (2008)</i>	13	8 to 15	RSSE	r		✓
<i>Fawcett et al. (2008)</i>	3	21 to 27	DS	r	✓	
<i>Modha et al. (2008)</i>	1	13	DSSD	r	✓	
<i>Bacsfalvi (2010)</i>	3	15 to 18	HI	r	✓	
<i>Bacsfalvi & Bernhardt (2011)</i>	7	14 to 19	HI	N/A		✓
<i>Klein et al. (2013)</i>	2	5, 6	DSSD	r	✓	
<i>Lipetz & Bernhardt (2013)</i>	1	15	DSSD	s, z, ʃ, tʃ	✓	
<i>Preston et al. (2013)</i>	6	9 to 15	CAS	sequences e.g. re, kr		✓
<i>McAllister Byun & Hitchcock (2014)</i>	4	6 to 10	DSSD	r		✓
<i>McAllister Byun & Hitchcock (2014)</i>	4	7 to 15	DSSD	r	✓	
<i>Preston et al. (2014)</i>	8	10 to 20	RSSE	s, z, θ, ʃ, tʃ, r ; Clusters: r, s, l	✓	
<i>Preston et al. (2014)</i>	1	59	AoS	r		✓
<i>Cleland et al. (2015)</i>	7	6 to 10	DSSD	k, g, r, ʃ, t	✓	
<i>Hitchcock & McAllister Byun (2015)</i>	1	11	DSSD	r	✓	
<i>Lee et al. (2015)</i>	1	13	DSSD	r	✓	
<i>Blyth et al. (2016)</i>	2	53, 59	Glossec tomy	s, t Participant 1; s, l, tʃ Participant 2	✓	
<i>Bressmann et al. (2016)</i>	4	7 to 10	DSSD	r	✓	
<i>Heng et al. (2016)</i>	2	4	DSSD	k,g Velar Fronting		✓
<i>Melo et al. (2016)</i>	1	5	DSSD	k,g Velar Fronting	✓	
<i>Preston et al. (2016)</i>	3	10 to 13	CAS	r		✓
<i>Preston et al. (2016)</i>	12	10 to 16	RSSE	r	✓	
<i>Preston et al. (2016)</i>	3	10 to 14	CAS	r (2 participants), sibilants (1 participant)		✓
<i>Roxburgh et al. (2016)</i>	2	6, 9	CLP	n for one participant; k,g for another	✓	
<i>Sjolie et al. (2016)</i>	4	7 to 9	DSSD	r		✓
<i>Preston et al. (2017)</i>	6	8 to 16	CAS	r (5 participants), r and s (1 participant)		✓
<i>Preston & Leece (2017)</i>	4	13-22	RSSE	r	✓	

DSSD	Developmental Speech Sound Disorder	HI	Hearing Impairment
RSSE	Residual Speech Sound Error	DS	Down syndrome
CAS	Childhood Apraxia of Speech	CLP	Cleft Lip and Palate

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