

**Supplemental Material S5.** Treatment outcomes and generalization by treatment category.

Treatment Response			Generalization							
<i>Trained Stimuli</i>			<i>Untrained Stimuli</i>		<i>Formal AC Measures</i>		<i>Informal AC Measures</i>		<i>Other Linguistic Measures</i>	
Study	Improve	Pos Sig	Improve	Pos Sig	Improve	Pos Sig	Improve	Pos Sig	Improve	Pos Sig
<b>Direct Auditory Treatments (<i>n</i> = 7)</b>										
Davidoff & Katz (1985)	Yes	Not reported			Yes (3/3)	Not reported	Yes (1/1)	Not reported		
Haendiges et al. (1996)	Yes	Yes	Yes (1/1)	Yes (1/1)			Yes (3/3)	Yes (3/3)	Yes (1/2)	Not reported
Knollman-Porter et al. (2018)	Yes	Not reported	Yes (1/1)	Not reported						
Mitchum et al. (1995)	Yes	Yes	Yes (1/1)	Yes (1/1)			Yes (2/2)	Yes (2/2)	Yes (3/5)	Yes (2/5)
Morris & Franklin (2012)	Yes	Yes	Yes (1/1)	Yes (1/1)	Yes (1/1)	No	Yes (1/2)	Yes (1/2)	Yes (1/4)	No (1/1)
Musso et al. (1999)							Yes (1/1)	Yes (1/1)		
Woolf et al. (2014)	Yes	No	Yes (1/1)	Yes (1/1)	No (0/1)		Yes (4/4)	Yes (2/4)		
<b>Mixed Auditory Treatments (<i>n</i> = 13)</b>										
Archibald et al. (2009)					Yes (1/1)	Not reported			Yes (2/2)	Yes (1/2)
Behrmann & Lieberthal (1989)	Yes	Not reported	Yes (2/2)	Yes (1/2)	Yes (1/1)	No	Yes (1/1)	Yes (1/1)	Yes (1/1)	No
Francis et al. (2001)	Yes	Yes	Yes	No					No	
Grayson et al. (1997)					Yes (1/1)	Yes (1/1)	Yes (3/3)	Yes (2/3)	Yes (4/4)	Yes (1/1) 3 Not reported
Jacobs & Thompson (2000)	Yes	Not reported	Yes (2/2)	Not reported					Yes (3/3)	Not reported
MacGregor et al. (2015)					Yes (2/2)	Yes (1/2)			Yes (2/2)	1 Yes 1 Not reported

Maneta et al. (2001)			No (2/2)		Yes (1/1)	Not reported	No (2/2)		
Munro & Siyamblapitiya (2017)	Yes	Yes	Yes (1/1)	Yes (1/1)	Yes (2/2)	Not reported		Yes (3/3)	Not reported
Prins et al. (1989)					Yes (1/1)	Yes (1/1)	Yes (3/3)	Yes (2/2) 1 Not reported	Yes (4/4) (1/4)
Raymer et al. (2006)	Yes	Yes	Yes (1/1)	Yes (1/1)	Yes (1/1)	Not reported		Yes (4/4)	Not reported
Schwartz et al. (1994)	Yes	Yes	Yes (1/1)	No			Yes (3/3)	Yes (3/3)	Yes (4/4) Not reported
Thompson et al. (2010)	Yes	Yes	Yes (1/1)	Yes (1/1)	Yes (1/1)	No		Yes (1/1)	Yes (1/1)
Thompson et al. (2003)	Yes	Not reported	Yes (2/2)	Not reported	Yes (3/3)	Not reported		Yes (4/5)	Not reported
<b>Indirect Treatments (n = 8)</b>									
Bonakdarpour et al. (2003)					Yes (1/1)	Yes (1/1)			
Francis et al. (2003)					Yes (1/1)	Yes (1/1)	Yes (1/1)	Yes (1/1)	
Javadipour et al. (2018)					Yes (1/1)	Not reported	Yes (2/2)	Not reported	
Murray et al. (2006)					No (2/2)		No (1/1)		
Szelag et al. (2014)					Yes (1/1)	Yes (1/1)			
Szymaszek et al. (2017)					Yes (1/1)	Yes (1/1)			
You et al. (2011)					Yes (1/1)	Yes (1/1)			
Zakarias (2018)							Yes (1/1)	Yes (1/1)	

*Note.* AC = auditory comprehension; Improve = Improvement reported for All or Some participants (number of measures showing change/number of measures used); Pos Sig = Positive significance reported for All or Some participants (number of measures with significant change/number of measures used); Not reported = Study authors measured treatment outcome and/or generalization but did not report significance; Indirect treatment blacked out columns = Measurement of treatment outcome (trained stimuli) and Other linguistic measures not appropriate for indirect treatments.