Online Supplemental Materials, Interactive Book Reading

Method: Participants

Supplemental Tables S1a and S1b provide detailed information about the participant characteristics in each of the four intensity conditions. Table S1a provides percentile scores on clinical tests as well as the percentage of children in each group who scored at or below the 10th percentile. A Kruskal–Wallis test is shown for each variable. A significant effect of intensity was not obtained for any of the variables, suggesting that the groups did not differ significantly. However, the probability of the intensity effect was low (.10 or less) for two measures: RIAS Nonverbal IQ and CREVT Expressive Vocabulary. For the RIAS, children in intensities 36 and 48 tended to have lower percentile ranks than children in intensities 12 and 24. For the CREVT, children in intensity 36 tended to have lower percentile ranks than children in the other intensities. Notably, correlation analyses show that these two measures were not significantly correlated with treatment outcomes (see Supplemental Table S3a). Moreover, the condition with the lowest scoring individuals on these measures (i.e., intensity 36) was actually the intensity with the best treatment response.

Supplemental Table S1a. Percentile scores for participants in each intensity condition on standardized clinical tests. Results of Kruskal–Wallis test are indicated for each variable.

Standardized clinical test		Intensity 12	Intensity 24	Intensity 36	Intensity 48
Age (years;months)	*M*	5;10	5;9	5;8	5;8
χ^2 (3, *N* = 27) = 0.48, *p* = .92	*SD*	0;6	0;6	0;5	0;6
	Range	5;0–6;5	5;1–6;4	5;2–6;5	5;0–6;5
RIAS Nonverbal IQ	*M*	75	60	43	46
χ^2 (3, *N* = 27) = 6.35, *p* = .10	*SD*	27	26	21	20
	Range	45–99	23–99	23–79	30–82
	% at or below 10th percentile	0%	0%	0%	0%
CELF Core Language	*M*	2	3	4	5
χ^2 (3, *N* = 27) = 3.69, *p* = .30	*SD*	2	3	3	3
	Range	0–5	0–7	0–10	0–8
	% at or below 10th percentile	100%	100%	100%	100%
Vocabulary: DELV Semantic	*M*	9	7	8	10
χ^2 (3, *N* = 27) = 0.58, *p* = .90	*SD*	11	6	8	8
	Range	0–25	1–16	2–25	1–25
	% at or below 10th percentile	60%	75%	86%	71%
Vocabulary: CELF Word Classes	*M*	22	34	21	18
χ^2 (3, *N* = 27) = 5.50, *p* = .14	*SD*	17	17	16	25
	Range	9–50	9–63	1–50	5–75
	% at or below 10th percentile	40%	13%	29%	71%
Vocabulary: CREVT Expressive	*M*	32	24	15	35
χ^2 (3, *N* = 27) = 6.24, *p* = .10	*SD*	23	15	10	14
	Range	10–63	1–50	5-32	18–50
	% at or below 10th percentile	20%	13%	43%	0%

Standardized clinical test		Intensity 12	Intensity 24	Intensity 36	Intensity 48
CELF Concepts & Following Directions	*M*	4	8	7	8
χ^2 (3, *N* = 27) = 1.88, *p* = .60	*SD*	4	8	8	6
	Range	0–9	0–25	0–25	0–16
	% at or below 10th percentile	100%	88%	86%	71%
CELF Word Structure	*M*	8	10	12	12
χ^2 (3, *N* = 27) = 1.06, *p* = .79	*SD*	7	9	8	9
	Range	1–16	1–25	0–25	2–25
	% at or below 10th percentile	60%	63%	43%	43%
CELF Recalling Sentences	*M*	3	4	4	9
χ^2 (3, *N* = 27) = 3.90, *p* = .27	*SD*	4	3	4	9
	Range	0–9	0–9	0–9	0–25
	% at or below 10th percentile	100%	100%	100%	71%
CELF Formulating Sentences	*M*	8	5	10	9
χ^2 (3, *N* = 27) = 2.45, *p* = .48	*SD*	10	5	7	8
	Range	1–25	0–16	0–16	2–25
	% at or below 10th percentile	80%	88%	57%	86%
CELF Understanding Spoken Paragraphs	*M*	7	7	8	7
χ^2 (3, *N* = 27) = 0.20, *p* = .98	*SD*	6	8	9	8
	Range	0–16	0–25	0–25	0–25
	% at or below 10th percentile	80%	88%	71%	86%
CTOPP Nonword Repetition	*M*	25	24	17	23
χ^2 (3, *N* = 27) = 0.32, *p* = .96	*SD*	29	24	15	21
	Range	1–75	1–63	1–37	1–63
	% at or below 10th percentile	40%	50%	43%	43%
CTOPP Phonological Memory	*M*	7	16	9	28
χ^2 (3, *N* = 27) = 3.43, *p* = .33	*SD*	6	15	6	26
	Range	1–16	1–37	1–16	1–75
	% at or below 10th percentile	80%	50%	57%	29%
CTOPP Phonological Awareness	*M*	7	13	5	6
χ^2 (3, *N* = 27) = 4.60, *p* = .20	*SD*	10	10	4	7
	Range	1–25	3–30	1–12	2–21
	% at or below 10th percentile	80%	50%	86%	86%
GFTA	*M*	36	22	30	36
χ^2 (3, *N* = 27) = 2.06, *p* = .56	*SD*	22	18	24	21
	Range	10–65	1–53	1–67	5–67
	% at or below 10th percentile	20%	25%	14%	14%

Note. RIAS = Reynolds Intellectual Assessment Scale (Reynolds & Kamphaus, 2003); CELF = Clinical Evaluation of Language Fundamentals–Fourth Edition (Semel et al., 2003); DELV = Diagnostic Evaluation of Language Variation (Seymour, Roeper, de Villers, & de Villers, 2005); CREVT = Comprehensive Receptive and Expressive Vocabulary Test–Third Edition (Wallace & Hammill, 2013); CTOPP = Comprehensive Test of Phonological Processing–Second Edition (Wagner, Torgesen, Rashotte, & Pearson, 2013); GFTA = Goldman-Fristoe Test of Articulation–Second Edition (Goldman & Fristoe, 2000).