

Supplemental Material S3. Nonword Repetition Task (NWR; Dollaghan & Campbell, 1998).

Demographics

Norms for Nonword Repetition Task (NWR; Dollaghan & Campbell, 1998) included children who were attending regular education only. Children were excluded from the standardization sample if they were receiving any special education services (e.g., resource, reading, speech-language services); were receiving English as a second language service; participated in an extended learning program; or had been diagnosed with autism spectrum disorder (ASD), attention-deficit/hyperactivity disorder (ADHD), or a psychiatric disorder.

Ethnic Category	Females	Males	Total
Hispanic	2 (3.4%)	3 (4.1%)	5 (3.8%)
Not Hispanic	57 (96.6%)	67 (91.8%)	124 (93.9%)
Unknown	—	3 (4.1%)	3 (2.3%)
ETHNIC TOTAL	59 (44.7%)	73 (55.3%)	132
Racial Categories			
American Indian	—	1 (1.4%)	1 (0.8%)
Asian	2 (3.4%)	4 (5.5%)	6 (4.5%)
Pacific Islander	—	2 (2.7%)	2 (1.5%)
Black	3 (5.1%)	1 (1.4%)	4 (3.0%)
White	54 (91.5%)	62 (84.9%)	116 (87.9%)
More than one race	—	—	—
Unknown	—	3 (4.1%)	3 (2.3%)
RACIAL TOTAL	59 (44.7%)	73 (55.3%)	132

NWR Consistency

Interrater consistency was performed by randomly selecting 36 participants from the Redmond standardization sample and relistening and rescoreing the audio recording of the NWR administration. Analyzed using Pearson’s *r*.

n = 36

	#agreements/(#agreements + #disagreements) × 100	<i>r</i>
NWR	96.67%	.89**

p* < .05. *p* < .01. ****p* < .001 (two tailed).

NWR (*n* = 132) Raw Scores

AGE	<i>N</i>	<i>M</i>	<i>SD</i>	RANGE	15TH %ILE	10TH %ILE	5TH %ILE
5;0–5;11	20	84.00	6.94	72–98	76.15	75.10	72.15
6;0–6;11	30	86.20	9.03	59–96	75.60	71.20	65.05
7;0–7;11	33	88.79	6.25	77–98	79.00	78.00	77.00
8;0–8;11	37	90.41	5.55	79–99	83.70	82.20	79.00
9;0–9;11	12	92.42	5.09	82–100	85.80	83.20	82.00

NWR Standard Score Conversion Tables: 5;0–5;11

n = 20 (11 boys, 9 girls)

Raw Score	Standard Score	Percentile	Raw Score	Standard Score	Percentile	Raw Score	Standard Score	Percentile
0	40	< 0.1	40	40	< 0.1	80	91	27
1	40	< 0.1	41	40	< 0.1	81	93	32
2	40	< 0.1	42	40	< 0.1	82	95	37
3	40	< 0.1	43	40	< 0.1	83	97	42
4	40	< 0.1	44	40	< 0.1	84	100	50
5	40	< 0.1	45	40	< 0.1	85	102	55
6	40	< 0.1	46	40	< 0.1	86	104	61
7	40	< 0.1	47	40	< 0.1	87	106	66
8	40	< 0.1	48	40	< 0.1	88	108	70
9	40	< 0.1	49	40	< 0.1	89	110	75
10	40	< 0.1	50	40	< 0.1	90	112	79
11	40	< 0.1	51	40	< 0.1	91	115	84
12	40	< 0.1	52	40	< 0.1	92	117	87
13	40	< 0.1	53	40	< 0.1	93	119	90
14	40	< 0.1	54	40	< 0.1	94	121	92
15	40	< 0.1	55	40	< 0.1	95	123	94
16	40	< 0.1	56	40	< 0.1	96	125	95
17	40	< 0.1	57	41	< 0.1	97	128	97

18	40	< 0.1	58	43	< 0.1	98	130	98
19	40	< 0.1	59	45	< 0.1	99	132	98
20	40	< 0.1	60	48	< 0.1	100	134	99
21	40	< 0.1	61	50	< 0.1			
22	40	< 0.1	62	52	0.1			
23	40	< 0.1	63	54	0.1			
24	40	< 0.1	64	56	0.1			
25	40	< 0.1	65	58	0.2			
26	40	< 0.1	66	61	0.5			
27	40	< 0.1	67	63	1			
28	40	< 0.1	68	65	1			
29	40	< 0.1	69	67	1			
30	40	< 0.1	70	69	2			
31	40	< 0.1	71	71	3			
32	40	< 0.1	72	74	4			
33	40	< 0.1	73	76	5			
34	40	< 0.1	74	78	7			
35	40	< 0.1	75	80	9			
36	40	< 0.1	76	82	12			
37	40	< 0.1	77	84	14			
38	40	< 0.1	78	87	19			
39	40	< 0.1	79	89	23			

NWR Standard Score Conversion Tables: 6;0-6;11

n = 30 (14 boys, 16 girls)

Raw Score	Standard Score	Percentile	Raw Score	Standard Score	Percentile	Raw Score	Standard Score	Percentile
0	40	< 0.1	40	40	< 0.1	80	89	23
1	40	< 0.1	41	40	< 0.1	81	91	27
2	40	< 0.1	42	40	< 0.1	82	93	32
3	40	< 0.1	43	40	< 0.1	83	94	34
4	40	< 0.1	44	40	< 0.1	84	96	40

5	40	< 0.1	45	40	< 0.1	85	98	45
6	40	< 0.1	46	40	< 0.1	86	99	47
7	40	< 0.1	47	40	< 0.1	87	101	53
8	40	< 0.1	48	40	< 0.1	88	102	55
9	40	< 0.1	49	40	< 0.1	89	104	61
10	40	< 0.1	50	40	< 0.1	90	106	66
11	40	< 0.1	51	41	< 0.1	91	107	68
12	40	< 0.1	52	43	< 0.1	92	109	73
13	40	< 0.1	53	44	< 0.1	93	111	77
14	40	< 0.1	54	46	< 0.1	94	112	79
15	40	< 0.1	55	48	< 0.1	95	114	82
16	40	< 0.1	56	49	< 0.1	96	116	86
17	40	< 0.1	57	51	< 0.1	97	117	87
18	40	< 0.1	58	53	0.1	98	119	90
19	40	< 0.1	59	54	0.1	99	121	92
20	40	< 0.1	60	56	0.1	100	122	93
21	40	< 0.1	61	58	0.2			
22	40	< 0.1	62	59	0.3			
23	40	< 0.1	63	61	0.5			
24	40	< 0.1	64	63	1			
25	40	< 0.1	65	64	1			
26	40	< 0.1	66	66	1			
27	40	< 0.1	67	68	2			
28	40	< 0.1	68	69	2			
29	40	< 0.1	69	71	3			
30	40	< 0.1	70	73	4			
31	40	< 0.1	71	74	4			
32	40	< 0.1	72	76	5			
33	40	< 0.1	73	78	7			
34	40	< 0.1	74	79	8			
35	40	< 0.1	75	81	10			
36	40	< 0.1	76	83	13			
37	40	< 0.1	77	84	14			
38	40	< 0.1	78	86	18			
39	40	< 0.1	79	88	21			

NWR Standard Score Conversion Tables: 7;0–7;11

n = 33 (15 boys, 18 girls)

Raw Score	Standard Score	Percentile	Raw Score	Standard Score	Percentile	Raw Score	Standard Score	Percentile
0	40	< 0.1	40	40	< 0.1	80	78	7
1	40	< 0.1	41	40	< 0.1	81	81	10
2	40	< 0.1	42	40	< 0.1	82	83	13
3	40	< 0.1	43	40	< 0.1	83	86	18
4	40	< 0.1	44	40	< 0.1	84	88	21
5	40	< 0.1	45	40	< 0.1	85	90	25
6	40	< 0.1	46	40	< 0.1	86	93	32
7	40	< 0.1	47	40	< 0.1	87	95	37
8	40	< 0.1	48	40	< 0.1	88	98	45
9	40	< 0.1	49	40	< 0.1	89	100	50
10	40	< 0.1	50	40	< 0.1	90	102	55
11	40	< 0.1	51	40	< 0.1	91	105	63
12	40	< 0.1	52	40	< 0.1	92	107	68
13	40	< 0.1	53	40	< 0.1	93	110	75
14	40	< 0.1	54	40	< 0.1	94	112	79
15	40	< 0.1	55	40	< 0.1	95	114	82
16	40	< 0.1	56	40	< 0.1	96	117	87
17	40	< 0.1	57	40	< 0.1	97	119	90
18	40	< 0.1	58	40	< 0.1	98	122	93
19	40	< 0.1	59	40	< 0.1	99	124	95
20	40	< 0.1	60	40	< 0.1	100	126	96
21	40	< 0.1	61	40	< 0.1			
22	40	< 0.1	62	40	< 0.1			
23	40	< 0.1	63	40	< 0.1			
24	40	< 0.1	64	40	< 0.1			
25	40	< 0.1	65	42	< 0.1			
26	40	< 0.1	66	45	< 0.1			
27	40	< 0.1	67	47	< 0.1			
28	40	< 0.1	68	50	< 0.1			

29	40	< 0.1	69	52	0.1
30	40	< 0.1	70	54	0.1
31	40	< 0.1	71	57	0.1
32	40	< 0.1	72	59	0.3
33	40	< 0.1	73	62	1
34	40	< 0.1	74	64	1
35	40	< 0.1	75	66	1
36	40	< 0.1	76	69	2
37	40	< 0.1	77	71	3
38	40	< 0.1	78	74	4
39	40	< 0.1	79	76	5

NWR Standard Score Conversion Tables: 8;0-8;11

n = 37 (22 boys, 15 girls)

Raw Score	Standard Score	Percentile	Raw Score	Standard Score	Percentile	Raw Score	Standard Score	Percentile
0	40	< 0.1	40	40	< 0.1	80	71	3
1	40	< 0.1	41	40	< 0.1	81	74	4
2	40	< 0.1	42	40	< 0.1	82	77	6
3	40	< 0.1	43	40	< 0.1	83	79	8
4	40	< 0.1	44	40	< 0.1	84	82	12
5	40	< 0.1	45	40	< 0.1	85	85	16
6	40	< 0.1	46	40	< 0.1	86	88	21
7	40	< 0.1	47	40	< 0.1	87	90	25
8	40	< 0.1	48	40	< 0.1	88	93	32
9	40	< 0.1	49	40	< 0.1	89	96	40
10	40	< 0.1	50	40	< 0.1	90	98	45
11	40	< 0.1	51	40	< 0.1	91	101	53
12	40	< 0.1	52	40	< 0.1	92	104	61
13	40	< 0.1	53	40	< 0.1	93	107	68
14	40	< 0.1	54	40	< 0.1	94	109	73
15	40	< 0.1	55	40	< 0.1	95	112	79

16	40	< 0.1	56	40	< 0.1	96	115	84
17	40	< 0.1	57	40	< 0.1	97	117	87
18	40	< 0.1	58	40	< 0.1	98	120	91
19	40	< 0.1	59	40	< 0.1	99	123	94
20	40	< 0.1	60	40	< 0.1	100	125	95
21	40	< 0.1	61	40	< 0.1			
22	40	< 0.1	62	40	< 0.1			
23	40	< 0.1	63	40	< 0.1			
24	40	< 0.1	64	40	< 0.1			
25	40	< 0.1	65	40	< 0.1			
26	40	< 0.1	66	40	< 0.1			
27	40	< 0.1	67	40	< 0.1			
28	40	< 0.1	68	40	< 0.1			
29	40	< 0.1	69	42	< 0.1			
30	40	< 0.1	70	44	< 0.1			
31	40	< 0.1	71	47	< 0.1			
32	40	< 0.1	72	50	< 0.1			
33	40	< 0.1	73	52	0.1			
34	40	< 0.1	74	55	0.1			
35	40	< 0.1	75	58	0.2			
36	40	< 0.1	76	61	0.5			
37	40	< 0.1	77	63	1			
38	40	< 0.1	78	66	1			
39	40	< 0.1	79	69	2			

NWR Standard Score Conversion Tables: 9;0–9;11

n = 12 (11 boys, 1 girl)

Raw Score	Standard Score	Percentile	Raw Score	Standard Score	Percentile	Raw Score	Standard Score	Percentile
0	40	< 0.1	40	40	< 0.1	80	63	1
1	40	< 0.1	41	40	< 0.1	81	66	1
2	40	< 0.1	42	40	< 0.1	82	69	2

3	40	< 0.1	43	40	< 0.1	83	72	3
4	40	< 0.1	44	40	< 0.1	84	75	5
5	40	< 0.1	45	40	< 0.1	85	78	7
6	40	< 0.1	46	40	< 0.1	86	81	10
7	40	< 0.1	47	40	< 0.1	87	84	14
8	40	< 0.1	48	40	< 0.1	88	86	18
9	40	< 0.1	49	40	< 0.1	89	89	23
10	40	< 0.1	50	40	< 0.1	90	92	30
11	40	< 0.1	51	40	< 0.1	91	95	37
12	40	< 0.1	52	40	< 0.1	92	98	45
13	40	< 0.1	53	40	< 0.1	93	101	53
14	40	< 0.1	54	40	< 0.1	94	104	61
15	40	< 0.1	55	40	< 0.1	95	107	68
16	40	< 0.1	56	40	< 0.1	96	110	75
17	40	< 0.1	57	40	< 0.1	97	113	81
18	40	< 0.1	58	40	< 0.1	98	116	86
19	40	< 0.1	59	40	< 0.1	99	119	90
20	40	< 0.1	60	40	< 0.1	100	122	93
21	40	< 0.1	61	40	< 0.1			
22	40	< 0.1	62	40	< 0.1			
23	40	< 0.1	63	40	< 0.1			
24	40	< 0.1	64	40	< 0.1			
25	40	< 0.1	65	40	< 0.1			
26	40	< 0.1	66	40	< 0.1			
27	40	< 0.1	67	40	< 0.1			
28	40	< 0.1	68	40	< 0.1			
29	40	< 0.1	69	40	< 0.1			
30	40	< 0.1	70	40	< 0.1			
31	40	< 0.1	71	40	< 0.1			
32	40	< 0.1	72	40	< 0.1			
33	40	< 0.1	73	42	< 0.1			
34	40	< 0.1	74	45	< 0.1			
35	40	< 0.1	75	48	< 0.1			
36	40	< 0.1	76	51	< 0.1			
37	40	< 0.1	77	54	0.1			

38	40	< 0.1	78	57	0.1	
39	40	< 0.1	79	60	0.4	

Reference

Dollaghan, C., & Campbell, T. F. (1998). Nonword repetition and child language impairment. *Journal of Speech, Language, and Hearing Research, 41*, 1136–2246.