

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), receiving English as a second language service, participated in an extended learning program, or had been diagnosed with ASD, 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 re-listening and re-scoring 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	15 TH %ILE	10 TH %ILE	5 TH %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.