

Supplemental Material S1. Subgroup item data.

Distribution of 0–4 ratings (%) for ASRS items (see Appendix for complete item labels); highest frequency for each group in boldface. Last row provides Total score median (Q1, Q3).

Part 1: AOS absent cases

	Dysarthria & aphasia absent (<i>n</i> = 20)	Dysarthria & aphasia present (<i>n</i> = 3)	Dysarthria absent & aphasia present (<i>n</i> = 100)	Dysarthria present & aphasia absent (<i>n</i> = 65)	Total (<i>N</i> = 188)
1. Distortions					
0	13 (65%)	0 (0%)	82 (82%)	14 (22%)	109 (58%)
1	5 (25%)	3 (100%)	17 (17%)	20 (31%)	45 (24%)
2	1 (5%)	0 (0%)	1 (1%)	21 (32%)	23 (12%)
3	1 (5%)	0 (0%)	0 (0%)	6 (9%)	7 (4%)
4	0 (0%)	0 (0%)	0 (0%)	4 (6%)	4 (2%)
2. Distorted substitutions					
0	20 (100%)	1 (33%)	72 (72%)	63 (97%)	156 (83%)
1	0 (0%)	2 (67%)	27 (27%)	2 (3%)	31 (16%)
2	0 (0%)	0 (0%)	1 (1%)	0 (0%)	1 (1%)
3. Distorted additions					
0	18 (90%)	3 (100%)	97 (97%)	65 (100%)	183 (97%)
1	2 (10%)	0 (0%)	3 (3%)	0 (0%)	5 (3%)
4. Increased errors with length/ complexity					
0	19 (95%)	1 (33%)	73 (73%)	56 (86%)	149 (79%)
1	1 (5%)	2 (67%)	23 (23%)	7 (11%)	33 (18%)
2	0 (0%)	0 (0%)	4 (4%)	2 (3%)	6 (3%)
5. Segmentation within words					
0	19 (95%)	3 (100%)	96 (96%)	62 (95%)	180 (96%)
1	1 (5%)	0 (0%)	4 (4%)	3 (5%)	8 (4%)

6. Segmentation across words

0	19 (95%)	3 (100%)	98 (98%)	60 (92%)	180 (96%)
1	1 (5%)	0 (0%)	2 (2%)	3 (5%)	6 (3%)
2	0 (0%)	0 (0%)	0 (0%)	2 (3%)	2 (1%)

7. Slow rate

0	16 (80%)	1 (33%)	98 (98%)	38 (58%)	153 (81%)
1	3 (15%)	1 (33%)	1 (1%)	16 (25%)	21 (11%)
2	1 (5%)	1 (33%)	1 (1%)	9 (14%)	12 (6%)
3	0 (0%)	0 (0%)	0 (0%)	2 (3%)	2 (1%)

8. Lengthened segments

0	19 (95%)	1 (33%)	92 (92%)	62 (95%)	174 (93%)
1	1 (5%)	2 (67%)	8 (8%)	3 (5%)	14 (7%)

9. AMRs

0	15 (75%)	2 (67%)	88 (88%)	31 (48%)	136 (72%)
1	2 (10%)	0 (0%)	12 (12%)	19 (29%)	33 (18%)
2	2 (10%)	1 (33%)	0 (0%)	12 (18%)	15 (8%)
3	1 (5%)	0 (0%)	0 (0%)	2 (3%)	3 (2%)
4	0 (0%)	0 (0%)	0 (0%)	1 (2%)	1 (1%)

10. SMRs

0	17 (85%)	1 (33%)	73 (73%)	48 (74%)	139 (74%)
1	2 (10%)	2 (67%)	13 (13%)	9 (14%)	26 (14%)
2	1 (5%)	0 (0%)	10 (10%)	8 (12%)	19 (10%)
3	0 (0%)	0 (0%)	4 (4%)	0 (0%)	4 (2%)

11. Reduced words or AMRs per breath

0	20 (100%)	3 (100%)	100 (100%)	64 (98%)	187 (99%)
2	0 (0%)	0 (0%)	0 (0%)	1 (2%)	1 (1%)

12. Visible/silent groping

0	20 (100%)	1 (33%)	95 (95%)	65 (100%)	181 (96%)
1	0 (0%)	2 (67%)	5 (5%)	0 (0%)	7 (4%)

13. False starts

0	17 (85%)	1 (33%)	49 (49%)	54 (83%)	121 (64%)
1	2 (10%)	2 (67%)	43 (43%)	8 (12%)	55 (29%)
2	0 (0%)	0 (0%)	7 (7%)	2 (3%)	9 (5%)
3	1 (5%)	0 (0%)	1 (1%)	1 (2%)	3 (2%)
Total score					
Median (Q1, Q3)	1 (0, 3)	7 (6, 7)	1 (0, 4)	4 (2, 6)	2 (0, 5)

Note. 0 = feature not present; 4 = always evident or marked in severity. Total AOS Present group includes participants with or without dysarthria and aphasia.

Part 2: AOS present cases

	Dysarthria & aphasia absent (<i>n</i> = 42)	Dysarthria & aphasia present (<i>n</i> = 18)	Dysarthria absent & aphasia present (<i>n</i> = 41)	Dysarthria present & aphasia absent (<i>n</i> = 19)	Total (<i>N</i> = 120)
1. Distortions					
0	5 (12%)	0 (0%)	2 (5%)	2 (11%)	9 (8%)
1	18 (43%)	2 (11%)	16 (39%)	5 (26%)	41 (34%)
2	12 (29%)	4 (22%)	17 (41%)	6 (32%)	39 (32%)
3	5 (12%)	6 (33%)	3 (7%)	4 (21%)	18 (15%)
4	2 (5%)	6 (33%)	3 (7%)	2 (11%)	13 (11%)
2. Distorted substitutions					
0	10 (24%)	0 (0%)	3 (7%)	4 (21%)	17 (14%)
1	18 (43%)	2 (11%)	17 (41%)	10 (53%)	47 (39%)
2	9 (21%)	6 (33%)	13 (32%)	2 (11%)	30 (25%)
3	1 (2%)	5 (28%)	5 (12%)	2 (11%)	13 (11%)
4	4 (10%)	5 (28%)	3 (7%)	1 (5%)	13 (11%)
3. Distorted additions					
0	23 (55%)	2 (11%)	24 (59%)	11 (58%)	60 (50%)
1	15 (36%)	12 (67%)	9 (22%)	6 (32%)	42 (35%)
2	2 (5%)	3 (17%)	6 (15%)	1 (5%)	12 (10%)
3	1 (2%)	0 (0%)	1 (2%)	1 (5%)	3 (2%)
4	1 (2%)	1 (6%)	1 (2%)	0 (0%)	3 (2%)
4. Increased errors with length/ complexity					
0	4 (10%)	0 (0%)	0 (0%)	1 (5%)	5 (4%)
1	17 (40%)	2 (11%)	11 (27%)	10 (53%)	40 (33%)
2	12 (29%)	5 (28%)	17 (41%)	6 (32%)	40 (33%)
3	6 (14%)	5 (28%)	8 (20%)	2 (11%)	21 (18%)
4	3 (7%)	6 (33%)	5 (12%)	0 (0%)	14 (12%)
5. Segmentation within words					
0	8 (19%)	3 (17%)	14 (34%)	4 (21%)	29 (24%)
1	18 (43%)	2 (11%)	16 (39%)	5 (26%)	41 (34%)

2	11 (26%)	7 (39%)	7 (17%)	6 (32%)	31 (26%)
3	3 (7%)	5 (28%)	4 (10%)	2 (11%)	14 (12%)
4	2 (5%)	1 (6%)	0 (0%)	2 (11%)	5 (4%)
6. Segmentation across words					
0	6 (14%)	3 (17%)	11 (27%)	1 (5%)	21 (18%)
1	10 (24%)	1 (6%)	9 (22%)	5 (26%)	25 (21%)
2	7 (17%)	4 (22%)	11 (27%)	3 (16%)	25 (21%)
3	14 (33%)	6 (33%)	9 (22%)	7 (37%)	36 (30%)
4	5 (12%)	4 (22%)	1 (2%)	3 (16%)	13 (11%)
7. Slow rate					
0	4 (10%)	1 (6%)	8 (20%)	0 (0%)	13 (11%)
1	7 (17%)	1 (6%)	13 (32%)	0 (0%)	21 (18%)
2	8 (19%)	2 (11%)	7 (17%)	3 (16%)	20 (17%)
3	15 (36%)	4 (22%)	10 (24%)	10 (53%)	39 (32%)
4	8 (19%)	10 (56%)	3 (7%)	6 (32%)	27 (22%)
8. Lengthened segments					
0	14 (33%)	6 (33%)	21 (51%)	10 (53%)	51 (42%)
1	24 (57%)	8 (44%)	20 (49%)	7 (37%)	59 (49%)
2	4 (10%)	4 (22%)	0 (0%)	2 (11%)	10 (8%)
9. AMRs					
0	20 (48%)	1 (6%)	18 (44%)	5 (26%)	44 (37%)
1	9 (21%)	2 (11%)	12 (29%)	7 (37%)	30 (25%)
2	9 (21%)	5 (28%)	10 (24%)	4 (21%)	28 (23%)
3	4 (10%)	8 (44%)	1 (2%)	2 (11%)	15 (12%)
4	0 (0%)	2 (11%)	0 (0%)	1 (5%)	3 (2%)
10. SMRs					
0	3 (7%)	0 (0%)	4 (10%)	2 (11%)	9 (8%)
1	13 (31%)	1 (6%)	9 (22%)	2 (11%)	25 (21%)
2	18 (43%)	5 (28%)	16 (39%)	11 (58%)	50 (42%)
3	5 (12%)	7 (39%)	10 (24%)	4 (21%)	26 (22%)
4	3 (7%)	5 (28%)	2 (5%)	0 (0%)	10 (8%)

11. Reduced words or AMRs per breath

0	28 (67%)	8 (44%)	30 (73%)	5 (26%)	71 (59%)
1	7 (17%)	2 (11%)	5 (12%)	4 (21%)	18 (15%)
2	4 (10%)	3 (17%)	4 (10%)	6 (32%)	17 (14%)
3	3 (7%)	3 (17%)	1 (2%)	2 (11%)	9 (8%)
4	0 (0%)	2 (11%)	1 (2%)	2 (11%)	5 (4%)

12. Visible/silent groping

0	31 (74%)	7 (39%)	20 (49%)	10 (53%)	68 (57%)
1	10 (24%)	7 (39%)	15 (37%)	8 (42%)	40 (33%)
2	1 (2%)	2 (11%)	3 (7%)	0 (0%)	6 (5%)
3	0 (0%)	1 (6%)	3 (7%)	1 (5%)	5 (4%)
4	0 (0%)	1 (6%)	0 (0%)	0 (0%)	1 (1%)

13. False starts

0	13 (31%)	6 (33%)	4 (10%)	10 (53%)	33 (28%)
1	25 (60%)	7 (39%)	20 (49%)	6 (32%)	58 (48%)
2	3 (7%)	3 (17%)	14 (34%)	3 (16%)	23 (19%)
3	1 (2%)	1 (6%)	2 (5%)	0 (0%)	4 (3%)
4	0 (0%)	1 (6%)	1 (2%)	0 (0%)	2 (2%)

Total score

Median (Q1, Q3)	14 (11, 22)	26 (20, 35)	14 (10, 20)	18 (16, 21)	16 (12, 23)
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Note. 0 = feature not present; 4 = always evident or marked in severity. Total AOS Present group includes participants with or without dysarthria and aphasia.