

Title	Attention control comparisons with SLT for people with aphasia following stroke: methodological concerns raised following a systematic review
Authors	Brady, Marian C.;Godwin, Jon;Kelly, Helen;Enderby, Pam;Elders, Andrew;Campbell, Pauline
Publication date	2018-06-17
Original Citation	Brady, M. C., Godwin, J., Kelly, H., Enderby, P., Elders, A. and Campbell, P. (2018) 'Attention control comparisons with SLT for people with aphasia following stroke: methodological concerns raised following a systematic review', Clinical Rehabilitation, 32(10), pp. 1383-1395. doi:10.1177/0269215518780487
Type of publication	Article (peer-reviewed)
Link to publisher's version	10.1177/0269215518780487
Rights	© 2018, the Authors. This is an Accepted Manuscript of an article published by SAGE Publications in Clinical Rehabilitation on 17 June 2018, available online: https://journals.sagepub.com/doi/abs/10.1177/0269215518780487
Download date	2025-04-09 23:38:47
Item downloaded from	https://hdl.handle.net/10468/7337



UCC

University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

Table 1. Participant characteristics.

Study ID	N	Comparison groups	M/F	Age mean (SD) (range) years	Post-onset mean (SD) (range)	Aphasia severity mean (SD)
ACT NoW ²¹	153	SLT	40/36	71 (32–97)	Admission to randomization Median 12 (IQR 9–16) days	TOMs 1.9 (1.2) (severe N = 47) TOMs 1.9 (1.1) (severe N = 51)
David et al. ¹⁷	133 (of 155 randomized)	SLT	35/30	70 (SD 8.7)	Median 4 (range 4–266) weeks	FCP scores for N = 98 retained until post-therapy test 42.4 (20.8)
		Social support	42/26	65 (SD 10.6)	Median 5 (range 4–432) weeks	46.1 (20.1)
Elman and Bernstein-Ellis ¹⁹	24	SLT	7/5	58.3 (11.4) (38–79)	32.5 (28.7) (7–103) months	SPICA 7 mild to moderate, 7 moderate to severe
		Social support	6/6	60.7 (10.6) (47–80)	71.7 (94.2) (7–336) months	SPICA 7 mild to moderate, 7 moderate to severe
Lincoln et al. ¹⁸	18	SLT	7/5	52.83 (7.18) (39–63)	4.17 (2.76) (1–10) months	Moderate
		Social support	5/1	42.33 (16.91) (28–60)	8.83 (13.59) (1–36) months	Moderate
Rochon et al. ²⁰	5	SLT	0/3	(31–74)	(2–9 years)	BDAE 1–2, phrase length 2.5–4.0
		Social support	0/2	(32–82)	(2–4 years)	BDAE 1–2, phrase length 4
Shewan and Kertesz ²²	53	SLT	18/10	62.18 (29–82)	(2–4 weeks)	9 mild, 6 moderate, 13 severe
		Social support	14/11	66.12 (range 39–82)	(2–4 weeks)	7 mild, 5 moderate, 13 severe
Shewan and Kertesz ²²	49	SLT	14/10	65.63 (range 48–85)	(2–4 weeks)	8 mild, 3 moderate, 13 severe
		Social support	14/11	66.12 (range 39–82)	(2–4 weeks)	7 mild, 5 moderate, 13 severe
Woolf et al. ¹⁶	10	SLT	4/1	58.6 (14.38)	31.8 (14.11) months	CATs semantic score: 9.8 (0.45)
		Social support	3/2	57.8 (15.14)	35.2 (SD 33.16) months	CATs semantic score: 8.4 (0.89)
Woolf et al. ¹⁶	10	SLT	3/2	57.8 (SD 15.14)	35.2 (SD 33.16) months	CATs semantic score: 8.4 (0.89)
		Social support	3/2	57.8 (15.14)	35.2 (SD 33.16) months	CATs semantic score: 8.4 (0.89)

M: male; F: female; IQR: interquartile range; BDAE: Boston Diagnostic Aphasia Examination; CAT: Comprehensive Aphasia Test; FCP: Functional Communication Profile; SLT: speech and language therapy; SPICA: Shortened Porch Index of Communicative Abilities; TOMs: Therapy Outcome Measures.

Table 2. Delivery of SLT and social support interventions.

Trial	Intervention	Who	How	Where	When		How Much
					Frequency (weekly)	Hours (weekly)	Total duration Total dose
ACT NoW ²¹ (United Kingdom)	SLT	Therapists (n = 4) Experienced lead	I-to-I or Group	Clinic or home	3 sessions	Unclear as varied length	Up to 16 weeks (average: 22 sessions over 13 weeks)
			Face-to-face or other				
	Social support	Part-time paid trained visitors (n = 9)	I-to-I Face-to-face	Hospital and at home	Up to 3 sessions	Approx. 3 hours	Average 15 (max 41) hours sessions)
David et al. ¹⁷ (United Kingdom)	SLT	Therapist	I-to-I	SLT	2–3 sessions	Up to 2 hours	15 to 20 weeks 30 hours
	Social support	Trained 'unfamiliar volunteers'	Face-to-face	department	2–3 sessions	Up to 2 hours	15 to 20 weeks 30 hours
			I-to-I Face-to-face	SLT department			
Elman and Bernstein-Ellis ¹⁹ (United States) ^a	SLT	Therapist plus family or artist	Group	Unreported	2 sessions	5 hours	Up to 160 hours
	Social support	Various	Face-to-face	Unreported	Unreported	Min. 3 hours	4 months 52 hours
			Group Face-to-face				
Lincoln et al. ¹⁸ (United Kingdom)	SLT	Therapist	I-to-I	Rehabilitation inpatients	4 sessions	2 hours	4 weeks 8 hours
	Social support	Clinical psychologist	Face-to-face	Rehabilitation inpatients	4 sessions	2 hours	4 weeks 8 hours
			I-to-I Face-to-face				
Rochon et al. ²⁰ (Canada) ^a	SLT	Trained researcher	I-to-I	Unreported	2 sessions	2 hours	Approx. 2.5 months (estimated)
	Social support	Trained researcher	Face-to-face	Unreported	2 sessions	2 hours	22 hours (estimated)
			I-to-I Face-to-face				

(Continued)

Table 2. (Continued)

Trial	Intervention	Who	How	Where	When		How Much	
					Frequency (weekly)	Hours (weekly)	Total duration	Total dose
		Provider, training	I-to-I or Group Face-to-face or other					
Shewan and Kertesz ²² (Canada) ^a	SLT	Therapist trained in intervention	I-to-I Face-to-face	Unreported	2–3 sessions	3 hours	12 months	156 hours
	Social support	Trained nurses (mostly) No additional therapy experience	I-to-I Face-to-face	'Unstructured settings'	2–3 sessions	3 hours	12 months	156 hours
	SLT	Therapist trained in intervention	I-to-I Face-to-face	Unreported	2–3 sessions	3 hours	12 months	156 hours
Shewan and Kertesz ²² (Canada) ^a	Social support	Trained nurses (mostly) No additional therapy experience	I-to-I Face-to-face	'Unstructured settings'	2–3 sessions	3 hours	12 months	156 hours
	SLT	Trained therapists. Participants (and partners) had at least one technology training session and simple written and pictorial instructions	I-to-I Facetime via iPad	Clinic with home practice	2 sessions	2 hours	4 weeks	8 hours
Woolf et al. ¹⁶ (United Kingdom)	Social support	Trained SLT students (one to two days on supported conversation techniques and use of iPad and FaceTime)	I-to-I Facetime via iPad	Home	2 sessions	Approx. 2 hours	4 weeks	8 hours
	SLT	Therapist Training unreported	I-to-I Face-to-face	Clinic with home practice	2 sessions	2 hours	4 weeks	8 hours
Woolf et al. ¹⁶ (United Kingdom)	Social support	Trained SLT students (one to two days in supported conversation techniques and use of iPad and FaceTime)	I-to-I Facetime via iPad	Home	2 sessions	Approx. 2 hours	4 weeks	8 hours
	SLT	Therapist Training unreported	I-to-I Face-to-face	Clinic with home practice	2 sessions	2 hours	4 weeks	8 hours

2SLT: speech and language therapy; When: details (where available) of the number of sessions provided, number of hours provided weekly; How Much: details (where available) total duration of intervention period, total number of intervention hours delivered (dose).

a = informed by published and unpublished data.

Table 3. SLT versus no therapy versus social support interventions- direct and indirect comparisons.

Outcome	SLT versus no SLT			SLT versus social support			Social support versus no SLT		
	From direct comparisons			From direct comparisons			From indirect comparisons		
	Trials	n	SMD	95% CI	P value	Trials	n	SMD	95% CI
Functional communication	10	376	0.236	-0.030 to 0.503	0.083	4	247	0.113	-0.129 to 0.355
					0.36	14	623	0.123	-0.258 to 0.504
					0.527				
Receptive language									
Auditory comprehension	10	399	0.063	-0.526 to 0.653	0.834	2	23	-0.103	-5.953 to 5.748
					0.972	12	422	0.166	-2.065 to 2.397
Reading	8	253	0.634	-0.281 to 1.548	0.174	0			0.884
General	5	192	2.345	-1.139 to 5.829	0.187	1	18	-1.007	-1.387 to -0.627
					<.001	8	210	3.352	-1.684 to 8.388
					0.192				
Expressive language									
Naming	7	275	0.187	-0.418 to 0.792	0.545	3	33	0.771	-3.127 to 4.669
					0.698	10	308	-0.584	-2.555 to 1.387
Writing	8	253	0.958	0.169 to 1.747	0.017	1	18	-1.379	-1.877 to -0.881
					<.001	9	271	2.337	1.124 to 3.550
General	7	248	2.321	0.500 to 4.142	0.012	1	18	-1.379	-1.877 to -0.881
					<.001	8	266	3.700	0.946 to 6.454
					0.008				
Severity of aphasia	11	593	2.579	1.353 to 3.804	<.001	1	18	-1.173	-1.596 to -0.75
					<.001	12	611	3.752	1.802 to 5.702
					<.001				

n: number of participants; SMD: standardized mean differences; CI: confidence interval.

Table 4. Drop-out and non-adherence: direct and indirect comparisons between SLT, social support and no SLT.

SLT versus no SLT from direct evidence										
Measure	Trials	SLT			No SLT			RR	95% CI	P
		Events	Total		Events	Total				
Drop-out	13	118	476		117	445		0.98	0.64 to 1.50	0.942
Non-adherence	4	9	124		12	124		0.77	0.21 to 2.80	0.694
SLT versus social support from direct evidence										
Measure	Trials	SLT			Social support			RR	95% CI	P
		Events	Total		Events	Total				
Drop-out	5	40	213		65	200		0.65	0.46 to 0.91	0.012
Non-adherence	5	11	211		45	198		0.24	0.12 to 0.47	<.001
Social support versus no SLT from indirect evidence										
Measure	Trials	SLT		No SLT		Social support		RR	95% CI	P
		Events	Total	Events	Total	Events	Total			
Drop-out	18	158	689	117	445	65	200	1.51	0.85 to 2.69	0.155
Non-adherence	9	20	335	12	124	45	198	3.24	0.83 to 12.62	0.090

SLT: speech and language therapy; total: total number of trial participants; RR: risk ratio; CI: confidence interval.