

SUPPLEMENT 1

A standardized battery was applied at TP3. The battery of tests for dyslexia diagnosis (Bogdanowicz *et al.*, 2009) consisted of ten tests: four assessed reading, two assessed writing, three measured phonological skills, and one was a measure of rapid automatized naming. Children who achieved low (3rd sten and lower) scores in at least two reading subtests (out of four: sight word reading, pseudo-word reading, text reading and lexical decision task) were identified as readers with dyslexia (DR). There were no additional criteria related to IQ or IQ-reading discrepancy, since average or above-average IQ was an inclusion criterion in the study.

Word reading

Task: The child is asked to read aloud a list of 50 words.

Score: Number of words read correctly. Time is measured, but not controlled for.

Reliability: Cronbach's alpha = 0.94; Pearson's r for test-retest (after 2 weeks) = 0.87

Pseudoword reading

Task: The child is asked to read aloud a list of pseudowords in a strict limit of 60 seconds.

Score: Number of pseudowords read correctly in 60 seconds.

Reliability: Pearson's r for test-retest (after 2 weeks) = 0.93

Reading with lexical decision

Task: The child is asked to silently read a list of words and pseudowords and mark them as words or pseudowords.

Score: Number of items identified correctly in 60 seconds.

Reliability: Pearson's r for test-retest (after 2 weeks) = 0.79

Text reading

Task: The child is asked to silently read a story consisting of 202 words. Comprehension is measured, but not controlled for.

Score: Time in which the story was read (in seconds).

Reliability: Cronbach's alpha = 0.61; Pearson's r for test-retest (after 2 weeks) = 0.64

Text writing

Task: The child is asked to write a story consisting of 85 words and dictated by the experimenter.

Score: Number of correctly written words.

Reliability: Cronbach's alpha = 0.91; Pearson's r for test-retest (after 2 weeks) = 0.89

Word writing

Task: The child is asked to complete sentences with single words. Eighteen words are missing in the whole task.

Score: Number of correctly written words.

Reliability: Cronbach's alpha = 0.70; Pearson's r for test-retest (after 2 weeks) = 0.87

Phoneme deletion

Task: The child is asked to delete phonemes from words and answer what is left. Words and phonemes (23 in total) are given by the experimenter.

Score: Number of correctly solved items.

Reliability: Cronbach's alpha = 0.62; Pearson's r for test-retest (after 2 weeks) = 0.31

Phonological tests based on pseudowords

Task: This test consists of three parts: minimal pair discrimination, phonological awareness (phoneme and syllable identification and blending) and syllable strings repetitions – all performed on pseudoword material. The total number of phonological decisions to make in the whole test is 87.

Score: Number of correctly solved items.

Reliability: Cronbach's alpha = 0.88; Pearson's r for test-retest (after 2 weeks) = 0.90

Pseudoword repetition

Task: The child is asked to repeat pseudowords given by the experimenter. The total number of pseudowords in the test is 40.

Score: Number of correctly repeated pseudowords.

Reliability: Cronbach's alpha = 0.80; Pearson's r for test-retest (after 2 weeks) = 0.81

Rapid automatized naming

Task: The child is asked to name items on a board (48 items on each board) as quickly as possible. Five boards with 1) objects, 2) colors, 3) numbers, 4) letters, and 5) mixed colors, numbers and letters were used.

Score: Time in which all objects on the board were named (in seconds).

Reliability: Pearson's r for test-retest (after 2 weeks) = 0.64 (for digits & letters), 0.66 (for mixed), 0.90 (for objects and colors)

TABLE S1. BATTERY OF TESTS FOR DYSLEXIA DIAGNOSIS APPLIED AT TP3.

	DR	TR	AR	Main effect of group	Post hoc (t-test)
Word reading	M = 3.40 (1-6) SD = 1.55	M = 6.04 (4-10) SD = 1.57	M = 7.40 (5-10) SD = 1.89	F(2,72) = 36.69 ***	AR>DR *** TR> DR *** AR>TR *
Pseudoword reading	M = 2.72 (1-6) SD = 1.30	M = 5.36 (3-8) SD = 1.41	M = 6.20 (4-8) SD = 1.90	F(2,72) = 48.34 ***	AR> DR *** TR> DR ***
Reading with lexical decision	M = 2.36 (1-4) SD = 0.96	M = 5.76 (4-9) SD = 1.39	M = 6.84 (3-10) SD = 1.57	F(2,72) = 75.06 ***	AR> DR *** TR> DR *** AR>TR *
Text reading	M = 2.20 (1-5) SD = 1.04	M = 5.08 (4-10) SD = 1.74	M = 6.92 (2-10) SD = 1.84	F(2,71) = 56.53 ***	AR> DR *** TR> DR *** AR>TR ***
Text writing	M = 1.83 (1-5) SD = 1.24	M = 3.87 (1-7) SD = 1.75	M = 6.12 (4-10) SD = 1.74	F(2,71) = 44.16 ***	AR> DR *** TR> DR *** AR>TR ***
Word writing	M = 1.88 (1-5) SD = 1.20	M = 3.40 (1-5) SD = 1.19	M = 5.44 (1-10) SD = 2.14	F(2,72) = 32.12 ***	AR> DR *** TR> DR [§] AR>TR ***
Phoneme deletion	M = 3.08 (1-7) SD = 2.02	M = 5.16 (2-7) SD = 1.68	M = 5.96 (3-10) SD = 1.99	F(2,72) = 15.29 ***	AR> DR *** TR> DR ***
Phonological tests based on pseudowords	M = 3.28 (1-7) SD = 1.54	M = 4.68 (1-8) SD = 1.91	M = 6.20 (3-8) SD = 1.56	F(2,72) = 18.60 ***	AR> DR *** TR> DR * AR>TR*
Pseudoword repetition	M = 3.28 (1-7) SD = 1.79	M = 5.04 (1-7) SD = 2.05	M = 5.64 (2-7) SD = 1.35	F(2,72) = 12.21 ***	AR> DR *** TR> DR [§]

Note: M is presented along with (range) and SD for stens in AR, TR and DR. Statistical test used for comparisons is ANOVA. ANOVA = analysis of variance, AR = advanced readers; DR = readers with dyslexia F = f-test statistics; M = group mean; Ns = non-significant; SD = standard deviation; sten = sten scores; t-test = t-test statistic; TR = typical readers.

ns $p > 0.05$; * $p < .05$; § $p < .005$; *** $p < .001$

SUPPLEMENT 2

A large battery of behavioral tests was provided at each time point. Five tests (sight word reading, pseudoword reading, phonological awareness, rapid automatized naming, and orthographic awareness) were repeated with exactly the same procedure, items and instructions throughout the time points. Behavioral development trajectories of the TR and DR groups are provided in Table S2. Cross-sectional analysis of the DR TP3 and AR TP1 is given in Table S3. Figure 1 in the Methods sections depicts the results obtained across time points by all three groups. Additionally, at each time point, several other skills were tested (vocabulary size, short term verbal memory, grammatical skills, etc.). The results of the tests applied only once at any of the time points were compared directly between the TR and DR group in Table S4.

Sight word reading

Task: The child's task was to read aloud as many words as possible in 30 seconds. Two parallel sheets of increasing pseudoword length were provided.

Score: Number of words read correctly in 60 seconds

Pseudoword reading

Task: The child's task was to read aloud as many pseudowords as possible in 30 seconds. Two parallel sheets of increasing pseudoword length were provided.

Score: Number of pseudowords read correctly in 60 seconds

Phonological awareness

Task: Two tasks based on words were provided. In the phoneme analysis task, the child was asked to split words into phonemes. In the phoneme elision task, the child was asked to delete one phoneme from a word (both given by the experimenter) and answer what remains (e.g., "dog" without "d" is "og").

Score: combined score of phoneme analysis (1-12 items) and phoneme elision (N of items solved per minute)

Rapid automatized naming

Task: The child was asked to name all items from the 48-item sheets with colors or objects as quickly as possible.

Score: Time (in seconds) needed to name all the objects from the sheets.

Orthographic awareness

Task: Children were presented with pairs of letter strings and had to choose the one that looks most familiar to Polish (for instance, the trigraph DAG exists in Polish orthography, while DGA does not).

Score: Number of correctly solved pairs (max 30)

Letter knowledge

Task: Children were asked to name all letters of the Polish alphabet, upper and lower case. Letters were provided in mixed order.

Score: Number of correctly named letters (max 64: 32 upper & 32 lower case letters)

Receptive vocabulary

Task: Children were presented with a 4-picture sheet and were asked to show a target picture.

Score: Number of correctly identified pictures (max 88)

Short term verbal memory

Task: Children were asked to repeat a sequence of digits given by the experimenter forward and backward. The number of digits in the sequences increased.

Score: Number of correctly repeated sequences.

Productive vocabulary

Task: Children were asked to name pictures depicting nouns and verbs.

Score: Number of correctly identified pictures (max 25)

Sentence repetition

Task: Children were asked to repeat sentences with complex grammar given by the experimenter.

Score: Number of correctly repeated sentences (max 34)

Text comprehension

Task: Four short stories were read aloud by the experimenter. Children were asked to answer a few questions examining comprehension skills.

Score: Number of correctly answered questions (max 20)

Pseudoword repetition

Task: Children were asked to repeat complex pseudowords given by the experimenter

Score: Number of correctly repeated pseudowords.

Short term non-verbal memory (“Corsi blocks”)

Task: Children were asked to point to a sequence of blocks that were previously indicated by the experimenter, in both forward and backward order. The number of blocks in the sequences increased.

Score: Number of correctly pointed sequences.

Selective visual attention

Task: Children were asked to identify as many items (ducks) as possible in the limited time of 15 seconds per row. Six rows of target items and visually similar distractors were given.
 Score: Number of correctly identified targets.

TABLE S2. BEHAVIORAL TESTS REPEATED AT ALL TIME POINTS.

	DR			TR			Main effects
	TP1	TP2	TP3	TP1	TP2	TP3	
Sight word reading (WPM)	M=3.16 (0-16) SD=4.85	M=18.28 (0-39) SD=10.71	M=33.52 (3-49) SD=10.77	M=3.44 (0-19) SD=5.00	M=36.64 (12-66) SD=13.05	M=69.28 (37-107) SD=18.04	$F_G(1,48) = 53.88$ *** $F_T(1,48) = 364.35$ *** $I(1,48) = 49.56$ ***
Pseudoword reading (WPM)	M=2.72 (0-15) SD=3.40	M=15.04 (0-30) SD=8.78	M=25.36 (2-36) SD=8.44	M=3.40 (0-19) SD=5.02	M=29.16 (6-54) SD=11.36	M=42.72 (24-66) SD=9.29	$F_G(1,48) = 34.53$ *** $F_T(1,48) = 303.57$ *** $I(1,48) = 24.32$ ***
Phonological awareness (combined score)	M=4.16 (0-16) SD=5.12	M=12.16 (0-25) SD=8.01	M=17.12 (3-27) SD=6.98	M=4.88 (0-19) SD=4.99	M=17.40 (1-24) SD=6.34	M=23.88 (14-31) SD=4.53	$F_G(1,48) = 7.89$ * $F_T(1,48) = 428.89$ *** $I(1,48) = 15.32$ ***
Rapid automatized naming (time in seconds)	M=155.54 (113-268) SD=39.83	M=128.08 (95-231) SD=31.34	M=118.44 (92-175) SD=24.43	M=135.56 (97-203) SD=28.36	M=111.67 (82-166) SD=20.19	M=98.36 (83-144) SD=14.54	$F_G(1,47) = 7.38$ * $F_T(1,47) = 57.93$ *** $I(1,48) = 15.32$ ns.
Orthographic awareness (max 30)	M=15.43 (8-25) SD=3.58	M=18.08 (8-28) SD=4.91	M=21.79 (16-28) SD=26.48	M=18.25 (13-26) SD=3.49	M=22.32 (13-29) SD=4.76	M=26.48 (19-30) SD=3.15	$F_G(1,44) = 17.32$ *** $F_T(1,44) = 131.63$ *** $I(1,44) = 2.661$ ns

Note: Tests repeated at TP1, TP2 and TP3 for DR and TR. M is presented along with (range) and SD. Raw scores are reported for all measures. Repeated measures ANOVA was used to compare group results across time points. ANOVA = analysis of variance; DR = readers with dyslexia; F_G = Main effect of group, F_T = Main effect of time, I = interaction effect; M = group mean; ns = non-significant; RAN = rapid automatized naming; SD = standard deviation; TP1 = time point 1; TP2 = time point 2; TP3 = time point 3; TR = typical readers; WPM = word per minute.

ns $p > 0.05$; * $p < .05$; § $p < .005$; *** $p < .001$.

TABLE S3. COMPARISON OF THE BEHAVIORAL PERFORMANCE ACROSS TIME IN DR AND AR.

	DR TP3	AR TP1	t-test
Sight word reading (per minute)	M = 33.52 SD = 10.77	M = 37.52 SD = 16.23	t(48) = 1.026 ns.
Pseudoword reading (per minute)	M = 25.36 SD = 8.43	M = 27.92 SD = 8.96	t(48) = 1.040 ns.
Phonological awareness (combined score)	M = 17.12 SD = 6.98	M = 19.12 SD = 4.94	t(48) = 1.169 ns.
Rapid automatized naming (time in seconds)	M = 118.44 SD = 25.56	M = 118.84 SD = 26.76	t(48) = 0.055 ns.
Orthographic awareness (max 30)	M = 21.79 SD = 3.27	M = 21.76 SD = 4.66	t(47) = 0.027 ns.

Note: Behavioral performance in DR at TP3 and AR at TP1 is presented. Statistical tests used for the comparison are two-sample t-tests. AR = advanced readers; DR = readers with dyslexia; M = group mean; SD = standard deviation; t-test = t-test statistic; TP1 = time point 1; TP3 = time point 3; ns = non-significant $p > 0.05$; * $p < .05$; § $p < .005$; *** $p < .001$.

TABLE S4. BEHAVIORAL TESTS APPLIED IN ONE OF THE MEASUREMENT POINTS.

	DR	TR	t-test	direction
TP1 Receptive vocabulary	M = 75.00 SD = 6.29	M = 76.16 SD = 7.78	t(48) = 0.579 ns	ns
TP1 Short term verbal memory	M = 12.92 SD = 3.23	M = 14.64 SD = 3.96	t(48) = 1.484 ns	ns
TP1 letter knowledge	M = 28.00 SD = 20.47	M = 36.72 SD = 14.84	t(48) = 1.724 ns	ns
TP2 letter knowledge	M = 55.24 SD = 13.70	M = 62.52 SD = 2.62	t(48) = 2.609 *	TR>DR
TP2 Productive vocabulary	M = 16.24 SD = 4.20	M = 16.96 SD = 4.43	t(48) = 0.590 ns	ns
TP2 Sentence repetition	M = 26.12 SD = 6.80	M = 29.60 SD = 4.79	t(48) = 2.901 *	TR>DR
TP2 Text comprehension	M = 17.80 SD = 4.37	M = 19.00 SD = 4.09	t(48) = 1.002 ns	ns
TP2 Pseudoword repetition	M = 21.40 SD = 5.66	M = 23.08 SD = 5.22	t(48) = 1.901 ns	ns
TP3 Short term non-verbal memory	M = 12.40 SD = 2.27	M = 13.58 SD = 1.86	t(47) = 1.988 ns	ns
TP3 Selective visual attention	M = 44.48 SD = 12.65	M = 53.60 SD = 12.74	t(48) = 2.540 *	TR>DR

Note: Tests applied at TP1, TP2 or TP3 for DR and TR. Statistical tests used for the comparison are two-sample t-tests. Raw scores are reported for all measures. DR = readers with dyslexia; M = group mean; SD = standard deviation; t-test = t-test statistic; TP1 = time point 1; TP2 = time point 2; TP3 = time point 3; ns = non significant

ns $p > 0.05$; * $p < .05$; § $p < .005$; *** $p < .001$.

SUPPLEMENT 3

The analysis reported in the main body of the article includes only two out of four experimental conditions of the fMRI task. The entire language localizer task included four stimulus conditions: (1) printed real words, (2) spoken real words, (3) printed symbol strings, and (4) spoken words vocoder processed to minimize phonetic content. Conditions (3) and (4) can be considered as low-level nonlinguistic control conditions that are matched to physical characteristics to the printed linguistic stimuli (length and visual complexity on screen) and to the spoken linguistic stimuli (dynamic frequency and amplitude content). However, linguistic content has been eliminated (orthographic and phonetic, respectively). Children were asked to pay attention to the stimuli – no explicit task was given to the participants. On each trial, four different stimuli from the same condition were presented in rapid succession in a ‘tetrad’ designed to evoke strong activation with a relatively short imaging time¹.

Each visual stimulus was presented for 250 ms, followed by a 200 ms blank screen, whereas each auditory stimulus was allowed 800 ms to play out. ‘Jittered’ intertrial intervals were employed with occasional ‘null’ trials resulting in ITIs ranging from 4 to 13 s (6.25 s on average). The task was performed in two runs, each lasting 5:02. All conditions were presented in each run, with 48 trials per run were presented pseudorandomly, with no condition allowed to repeat more than three times in a row. This resulted in 24 total trials per condition, and 96 total stimuli per condition. Stimuli were presented using Presentation software (Neurobehavioral Systems, Albany, CA). Before the scanning session, children were familiarized with the task in a mock-scanner using different items.

All four experimental conditions were analyzed for the Time Point 1 of the study and described in our previous publication².

1. Malins JG, Gumkowski N, Buis B, et al. Dough, tough, cough, rough: A “fast” fMRI localizer of component processes in reading. *Neuropsychologia*. 2016;91:394-406.
2. Chyl K, Kossowski B, Dębska A, et al. Pre-reader to beginning reader: changes induced by reading acquisition in print and speech brain networks. *J Child Psychol Psychiatry*. 2018;59(1):76-87.

SUPPLEMENT 4

Artifactual volumes were identified in the ART toolbox using a scan-to-scan movement threshold of 3 mm and a rotation threshold of 0.05 radians, similarly to previous publication¹, and modeled in the design matrix (with each artifactual volume represented as a separate regressor). Participant data were excluded from the fMRI data analysis if greater than 20% of volumes in one run exceeded these motion tolerances, and in effect one TR and one DR child was excluded from the fMRI analysis. In other subjects, motion-affected volumes were modeled in the single-subject general linear model (GLM) and excluded from the analysis.

To check if the number of the excluded volumes was similar across the groups, we performed repeated measures ANOVA. There was a weak, but statistically significant effect of time on motion ($F_t(1,70) = 4.178$, $p = 0.019$). DR moved more than two other groups, but only at TP1. At TP2 the groups were similar in terms of in-scanner motion. Descriptive statistics and the results of the F tests are presented in the Table S5.

However, we would like to point out that the main result in the current study comes from the comparison between brain activity in the DR group at TP3 and the control groups from either TP1 or TP3. Therefore, even though the DR group moved more than other groups at TP1, we believe this effect has little impact on the current findings.

TABLE S5. MOTION AFFECTED VOLUMES.

	AR	DR	TR	Main effect
TP1	M = 4.2 SD = 5.3	M = 12.37 SD = 13.15	M = 7.04 SD = 10.11	$F_G(1,70) = 2.713$ ns $F_T(1,70) = 4.178$ *
TP3	M = 3.52 SD = 4.81	M = 6.79 SD = 8.51	M = 6.79 SD = 9.21	$I(1,70) = 1.639$ ns

Note: Motion affected volumes at TP1 and TP3 identified in DR, TR and AR. M is presented along with SD. Repeated measures ANOVA was used to compare group results across time points. ANOVA = analysis of variance; DR = readers with dyslexia; F_G = Main effect of group, F_T = Main effect of time, I = interaction effect; M = group mean; ns = non significant; SD = standard deviation; TP1 = time point 1; TP3 = time point 3; TR = typical readers.

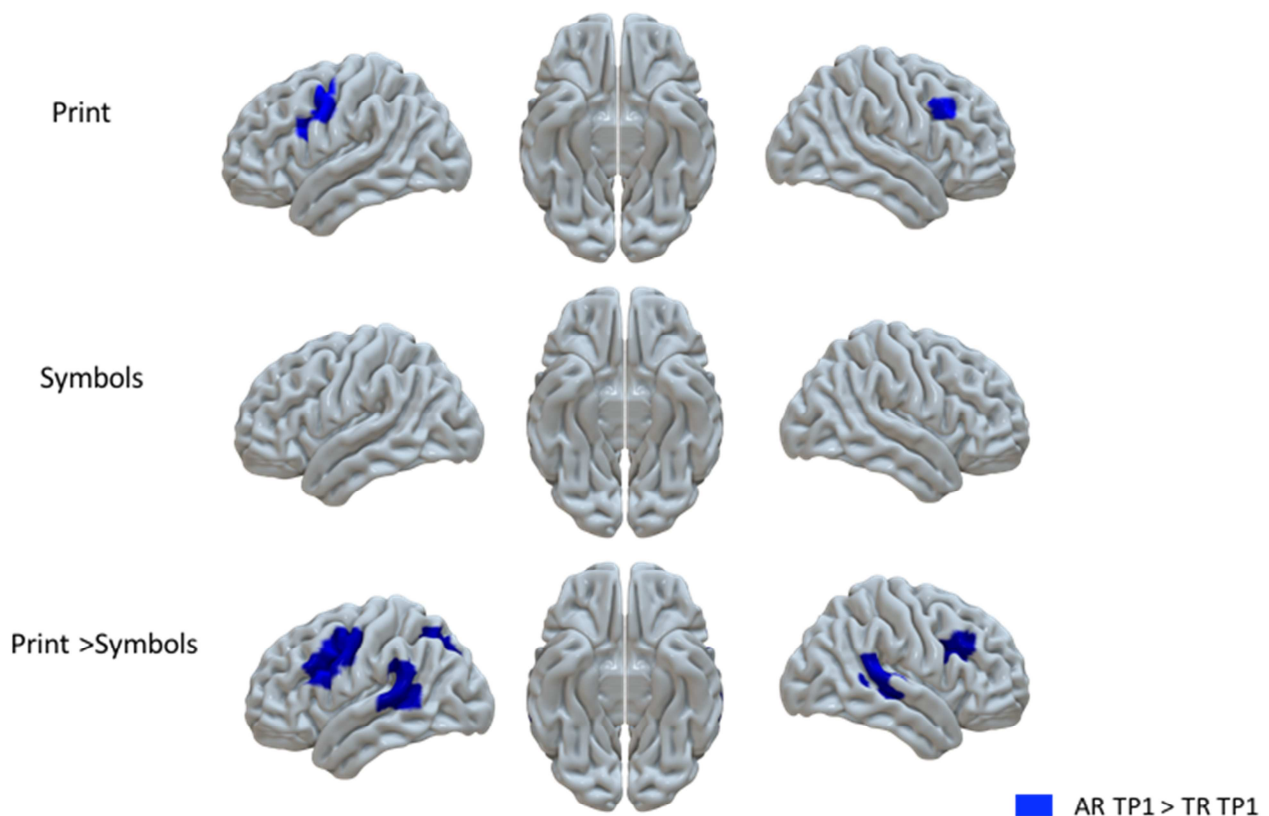
ns $p > 0.05$; * $p < .05$; § $p < .005$; *** $p < .001$.

1. Raschle NM, Zuk J, Gaab N. Functional characteristics of developmental dyslexia in left-hemispheric posterior brain regions predate reading onset. *Proc Natl Acad Sci U S A*. 2012;109(6):2156-2161.

SUPPLEMENT 5

We hypothesized that neural differences related to the reading level can be observed at each stage of reading acquisition reflecting either the emergence of a neural circuit for print or its further specialization with growing proficiency. To test that hypothesis, we compared control groups at the first stage of reading acquisition, when TR were still mostly pre-readers, by performing an additional series of two-sample t-tests. We found that AR, when reading words, consistently activated bilateral IFG and STG more strongly than their pre-reading peers, as shown in Supplementary Figure 1.

FIGURE S1. COMPARISON OF THE TWO CONTROL GROUPS AT TP1



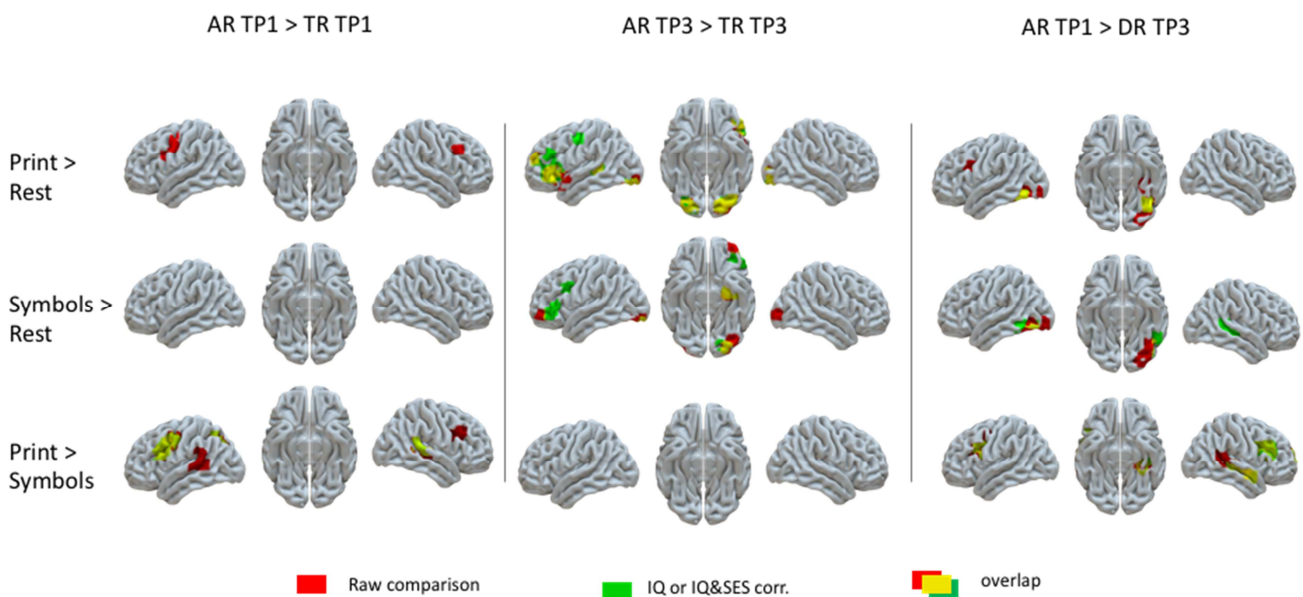
Note: Differences between the superior reading control group AR and the average reading control group TR at TP1 for word (print > rest), symbol (symbol > rest) and word-specific (print > symbols) contrasts. AR = advanced readers; DR = readers with dyslexia; TP1 = time point 1, TP3 = time point 3; TR = typical readers.

SUPPLEMENT 6

We found significant differences between AR and two other groups in IQ (DR & TR) and SES (DR). To control for these potentially confounding factors, we repeated the key analyses including comparisons between the AR and TR or DR groups, but with IQ (or IQ and SES in case of AR – DR comparison) added as a covariate to the models.

Results are presented in the Table S6 and Figure S2 below and discussed in the manuscript. Interestingly, many of the effects presented in the main paper persisted following even more restrictive analysis with IQ or IQ and SES added as a regressor to the model. However, controlling for IQ in the control groups comparisons removed group differences in bilateral IFG at TP1 for print, and limited the difference in the print specific contrast. At TP3, IQ also partially accounted for the difference between AR and TR, but at the same time additional clusters appeared in the left IFG for words and symbols. On the other hand, left vOT hypoactivation in children with dyslexia when compared to AR was still present when IQ and SES were controlled for in the analysis.

FIGURE S2. RESULTS WITH IQ OR IQ AND SES ADDED AS COVARIATES TO THE MODEL.



Note: Results of the comparisons of DR, AR and TR at TP1 and TP3 corrected for IQ (AR TP1 > TR TP1 and AR TP3 > TR TP3) or IQ and SES (AR TP1 > DR TP3) for word (print > rest), symbol (symbol > rest) and word-specific (print > symbols) contrasts. AR = advanced readers; DR = readers with dyslexia; IQ = intelligence quotient; SES = socioeconomic status; TP1 = time point 1; TP3 = time point 3; TR = typical readers.

TABLE S6. BRAIN ACTIVATION WITH IQ OR IQ AND SES ADDED AS COVARIATES TO THE MODELS.

		H	x	y	z	t	V
IQ							
PRINT > REST							
AR TP1 > TR TP1	Supplementary Motor Area	L	-4	6	56	4.14	186
AR TP3 > TR TP3	Postcentral, Precentral	L	-50	-10	50	4.19	87
	Inferior Frontal (tri, orb)	L	-48	32	-4	4.02	494
	Inferior Frontal (tri), Middle Frontal	L	-52	32	24	3.57	117
	Middle Temporal	L	-50	-38	4	3.73	79
	Lingual, Fusiform, Cerebellum (crus 1), Inferior Occipital	L	-38	-80	-18	3.67	263
	Lingual, Inferior Occipital, Calcarine	R	24	-90	-8	3.40	100
	Middle Frontal	L	-38	56	20	3.25	75
PRINT > SYMBOLS							
AR TP1 > TR TP1	Precentral, Inferior Frontal (tri, oper)	L	-50	6	42	4.88	747
	Superior Temporal	R	64	-36	14	4.30	146
	Supplementary Motor Area	L&R	-8	8	54	4.63	144
	Middle Occipital, Superior Parietal Lobule, Superior Occipital	L	-26	-64	50	3.20	85
SYMBOLS > REST							
AR TP3 > TR TP3	Fusiform, Parahippocampal	L	-32	-8	-28	4.27	115
	Inferior Frontal (tri, orb), Middle Frontal	L	-36	36	-4	4.11	71
	Inferior Frontal (tri, orb)	L	-52	42	-8	3.51	78
	Middle Frontal, Inferior Frontal (oper, tri)	L	-28	6	32	3.49	139

	Cerebellum (crus 1), Lingual	L	-18	-86	-20	2.95	60
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IQ & SES

PRINT > REST

AR TP1 > DR TP3	Fusiform Gyrus, Inferior Occipital	L	-40	-64	-12	4.46	70
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PRINT > SYMBOLS

AR TP1 > DR TP3	Inferior Frontal Gyrus (tri, oper)	R	42	26	18	4.60	628
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	Fusiform Gyrus, Inferior Temporal	L	-34	-36	-16	4.11	53
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	Medial Frontal	R	8	70	12	4.10	55
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	Inferior Frontal (tri, oper)	L	-28	6	30	4.07	230
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	Middle & Superior Temporal	R	52	-28	-2	3.98	91
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	Middle & Superior Temporal	R	56	-4	-16	3.95	67
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SYMBOLS > REST

DR TP3 > AR TP1	Inferior Temporal, Inferior Occipital	L	-54	-60	-14	3.81	127
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	Middle & Superior Temporal	R	50	-38	2	3.57	123
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Note: Results of word (print > rest), symbol (symbol > rest) and word-specific (print > symbols) contrasts are reported, including hemisphere, MNI coordinates, t-statistic and the number of voxels with correction for IQ or IQ and SES. Direct comparisons are shown for DR, TR and AR at TP1. AR = advanced readers; DR = readers with dyslexia; H = hemisphere; IQ = intelligence quotient; L = left hemisphere; MNI coordinates = Montreal Neurological Institute coordinates, x, y, z; orb = pars orbitalis; oper = pars opercularis; SES = socioeconomic status; R = right hemisphere; t = t-test statistic; TP1 = time point 1; TP3 = time point 3; TR = typical readers; tri = pars triangularis; V = number of voxels.

Results are reported at a significance level of $p < .005$ uncorrected, and an extent threshold of 50 voxels.