

Supplementary material

Title : Pulsed Lighting for Adults with Dyslexia: Very Limited Impact, Confined to Individuals with Severe Reading Deficits

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Demographics			Screening test results					Reading tests results					Ocular dominance		Chosen lamp settings	
Participant	Age	Gender	ARHQ	Verbal IQ (EVIP)	Non-verbal IQ (Raven)	Phonological short-term memory	Phonemic awareness	Alouette	Pseudoword reading	Word reading	Text reading fluency	Reading Impairment Score	Ocular dominance strength	Dominant eye	Frequency	Balance
1	22	M	0.57	40	39	0.83	0.96	488	138	124	199	0	strong	left	80	20
2	21	M	0.51	40	47	0.93	0.87	560	176	130	210	0	strong	right	82	20
3	22	F	0.11	46	54	0.86	1.02	669	211	136	300	0	strong	right	90	20
4	28	M	0.23	42	56	1.03	1.15	573	138	126	255	0	strong	right	76	15
5	21	F	0.35	35	54	1.02	1.18	598	141	100	245	0	strong	right	69	15
6	21	M	0.34	33	53	0.71	0.95	484	127	130	234	0	strong	left	73	20
7	20	M	0.17	36	43	0.77	1.09	551	158	132	208	0	strong	left	81	15
8	22	F	0.29	29	47	1.05	0.87	508	131	103	188	0	strong	right	78	20
9	19	F	0.21	37	42	0.8	1.01	542	126	131	229	0	strong	right	73	20
10	23	M	0.33	43	50	0.76	0.71	520	127	124	250	0	strong	right	80	20
11	22	M	0.27	42	53	0.99	1.00	625	165	107	258	0	strong	right	80	15
12	20	F	0.14	36	38	1.22	1.08	786	217	143	299	0	strong	right	NA	NA
13	21	F	0.32	29	47	1.03	1.08	532	121	105	199	0	weak	right	83	20
14	19	F	0.43	29	47	1.06	0.82	524	148	112	237	0	none	none	83	15
15	22	M	0.41	35	49	0.78	1.00	416	100	109	190	1	strong	right	77	15
16	23	F	0.34	40	58	1.10	1.28	536	137	131	156	1	strong	right	80	20
17	19	M	0.45	33	41	0.63	1.32	517	115	94	189	1	strong	left	80	15
18	22	M	0.21	45	56	0.95	1.03	509	125	82	232	1	strong	right	80	20
19	25	F	0.43	41	52	1.00	0.86	412	113	104	178	1	strong	right	74	20
20	23	F	0.43	28	44	0.79	0.71	336	91	131	246	2	strong	left	76	20
21	20	F	0.25	43	55	0.81	0.76	500	102	94	240	2	strong	right	90	15
22	22	F	0.24	40	53	0.96	1.03	561	78	68	213	2	strong	right	87	15
23	22	F	0.54	41	47	0.61	0.57	458	96	92	175	3	strong	right	80	15
24	20	M	0.60	35	49	0.68	0.23	405	86	89	181	3	weak	right	80	20
25	20	M	0.34	37	55	0.92	0.88	407	73	83	159	3	weak	left	91	20
26	20	F	0.66	30	42	0.88	0.77	290	76	60	112	4	strong	left	83	15
27	21	F	0.66	34	46	0.80	0.49	389	84	66	143	4	strong	left	83	15
28	20	F	0.57	34	49	0.62	0.59	386	86	87	170	4	strong	left	80	20
29	19	M	0.64	36	45	0.60	0.57	310	66	60	124	4	strong	right	79	15
30	19	F	0.75	28	48	0.57	0.39	360	66	69	153	4	strong	right	84	20
31	23	F	0.59	35	52	0.69	0.40	282	85	55	133	4	strong	left	80	15
32	21	F	0.59	36	55	0.39	0.5	400	62	84	154	4	strong	left	82	15

33	21	F	0.62	38	53	0.74	0.37	375	38	85	140	4	strong	right	80	15
34	22	M	0.79	17	48	0.64	0.84	364	46	94	160	4	strong	right	95	20
35	19	F	0.62	29	42	0.96	0.59	334	54	75	126	4	strong	right	80	20
36	20	F	0.67	32	43	0.80	0.50	390	86	72	142	4	strong	right	80	15
37	24	F	0.77	35	43	0.91	0.72	385	77	81	145	4	strong	left	87	15
38	21	M	0.29	41	41	0.66	0.86	371	75	69	155	4	strong	right	80	15
39	21	F	0.54	33	43	0.69	0.43	381	67	44	118	4	strong	left	99	15
40	19	F	0.84	38	39	0.58	0.71	331	83	71	125	4	weak	left	79	15
41	20	M	0.65	36	48	0.69	0.37	254	44	51	109	4	none	none	85	15
42	27	M	0.68	37	41	0.61	0.54	385	92	71	137	4	NA	NA	89	20

14 Supplementary Table 1: Individual data for all 42 participants, including: (a) demographics data;
 15 (b) screening test results; (c) reading tests results, including the reading impairment score; (d)
 16 ocular dominance characteristics; (e) chosen settings for the pulsed light lamp. Reading tests
 17 results considered as pathological are highlighted in grey. Reading Impairment Score ranges
 18 from 0 to 4 and represents the number of reading tests outcome considered as pathological,
 19 given standardized cut-offs. The lamp settings were adjusted by means of a Bluetooth app on
 20 a phone: frequency represents the amount of flicker (in Hz); balance represents the on /off
 21 distribution of the light (in percent).