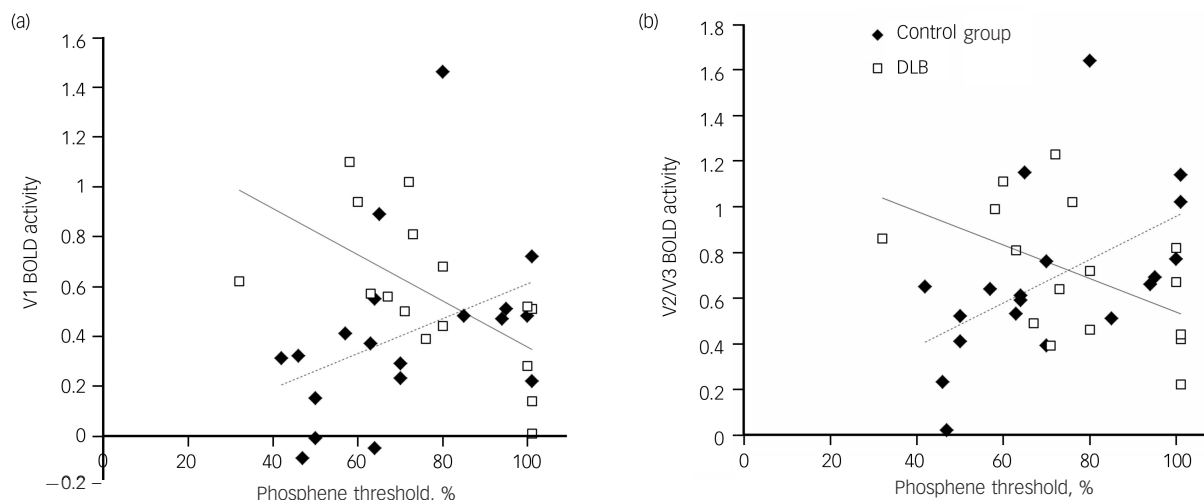# Data supplement

Table DS1 Demographic, cognitive and motor characteristics of participants included in study[a]

	Control group (n = 19)	Dementia with Lewy bodies group (n = 16)	P
Age, years: mean (s.d.)	77.6 (7.1)	81.3 (5.6)	0.10
Males:females: n	11:8	8:8	0.74
Unified Parkinson's Disease Rating Scale, motor subscale: mean (s.d.)	0.9 (1.6)	35.0 (13.5)	**<0.001**
Mini-Mental State Examination,[13] mean (s.d.)	29.0 (1.2)	18.7 (5.1)	**<0.001**
Cambridge Cognitive Examination (CAMCOG),[14] mean (s.d.)			
Total score	96.5 (3.4)	63.7 (14.4)	**<0.001**
Executive subscore	22.1 (3.4)	9.9 (4.5)	**<0.001**
Memory subscore	23.6 (2.1)	15.4 (4.4)	**<0.001**
Visual acuity, decimalised: mean (s.d.)	0.64 (0.29)	0.55 (0.26)	0.33
Visuoperceptual score, % correct: mean (s.d.)	39.8 (0.4)	30.6 (6.6)	**<0.001**
Clinician Assessment of Fluctuation,[15] mean (s.d.)	–	8.3 (4.4)	N/A
One Day Fluctuation Assessment Scale,[15] mean (s.d.)	–	6.7 (4.7)	N/A
Neuropsychiatry Inventory,[16] hallucinations subscale: median (IQR)	–	2.5 (4.5)	N/A
On cholinesterase inhibitor, n	–	11	N/A
On anti-Parkinsonian medication, n	–	4	N/A
L-dopa dose equivalent, mg:[b] mean (s.d.)	–	145.8 (72)	N/A

N/A, not applicable.
a. For comparison of data in control participants v. participants with dementia with Lewy bodies (DLB) independent student t-tests were used for continuous data and Pearson chi-squared for categorical data. Results in bold are significant.
b. Calculated equivalent L-dopa dose in those in the DLB group on dopaminergic medication.

Additional references

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15 Walker MP, Ayre GA, Cummings JL, Wesnes K, McKeith IG, O'Brien JT, et al. The Clinician Assessment of Fluctuation and the One Day Fluctuation Assessment Scale. Two methods to assess fluctuating confusion in dementia. *Br J Psychiatry* 2000; **177**: 252–6.

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Fig. DS1 Scatter plots showing phosphene threshold plotted against V1 blood oxygen level-dependent (BOLD) activity (a) and V2/V3 BOLD activity (b) in response to checkerboard stimulation in dementia with Lewy body (DLB, n = 16) and control (n = 19) groups.

Relationship between phosphene threshold and V1 BOLD activity in the control group was positive (ρ = 0.48, P = 0.04) and negative in the DLB group (ρ = −0.71, P = 0.002) and this was also the case for phosphene threshold v. V2/V3 BOLD activity (control group, ρ = 0.64, P = 0.003; DLB group, ρ = −0.57, P = 0.02). Linear fits to data (dashed – control group, solid – DLB group) are shown for illustrative purposes.