Right Brain Damage updating impairments may be caused by inefficient exploration

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Updating can be impaired following right brain damage²

- Right brain damaged (RBD) patients detect changes, but fail to update⁶.
- We suggest that this may be due to difficulties exploring alternatives⁷.

RBD and LBD patients performed an adaptive learning task⁴

PROBE task:
- Participants learn stimulus-response rules through trial feedback
- Rules change every ~40 trials
- Feedback is noisy (10% incongruent)

Patient performance was fit using a model of adaptive behaviour (PROBE⁵)

PROBE model fits suggest RBD patients explore at more time points than LBD patients...

...and use feedback less effectively at exploration onset

Problems could stem from trouble integrating feedback.

References:

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