

OPEN Author Correction: Task-evoked pupil responses reflect internal belief states

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Correction to: Scientific Reports https://doi.org/10.1038/s41598-018-31985-3, published online 12 September 2018

In Figure 5b the p-value is incorrect. The correct Figure 5 appears below as Figure 1.

As such, this Article contains an error in the Results section under subheading 'Belief State Model predicts pupil responses quantitatively better than Stimulus State Model',

"For the post-feedback interval, there was a trend towards a stronger correlation for the Belief State Model than the Stimulus State Model (p = 0.074)."

should read

"For the post-feedback interval, there was no difference between the models (p = 0.326)".

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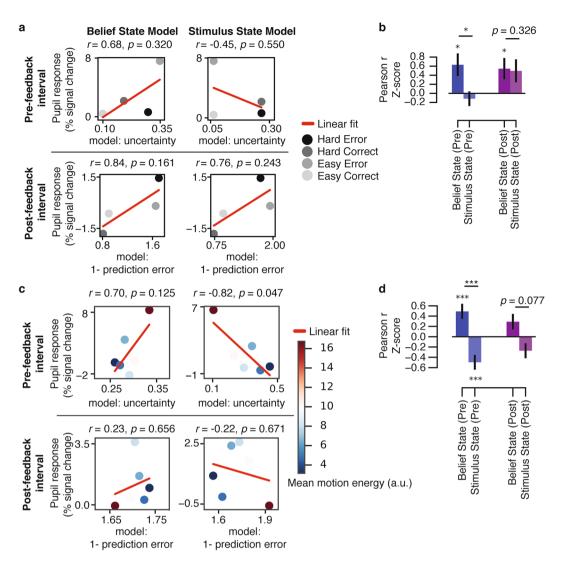


Figure 1. Model fits to pupil responses. (a) An example of the correlations (r) for a single subject. The four conditions of interest were defined by the Accuracy x Difficulty interaction. Easy and Hard conditions for the model parameters were averaged based on the coherence levels presented to each subject. (b) Group-level correlation coefficients (r) for the comparison of the model parameters and pupil responses, for the prefeedback (Pre; -0.5-0 s) and post-feedback (Post; 3-6 s) intervals. (c) An example of the correlations for a single subject using model parameters simulated with motion energy (error trials only). Pupil responses were averaged within six equal-sized bins based on the model parameter for each interval. Evidence strength is represented by mean motion energy within each bin (color bar). (d) Group-level correlation coefficients (r) for the comparison of the model parameters (using motion energy) and pupil responses, for the pre-feedback (Pre; -0.5-0 s) and post-feedback (Post; 3-6 s) intervals (error trials only). Error bars, standard error of the mean (N=15). **p < 0.01, ****p < 0.001.

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