

Reward encourages reactive, goal-directed suppression of attention: Supplementary  
materials

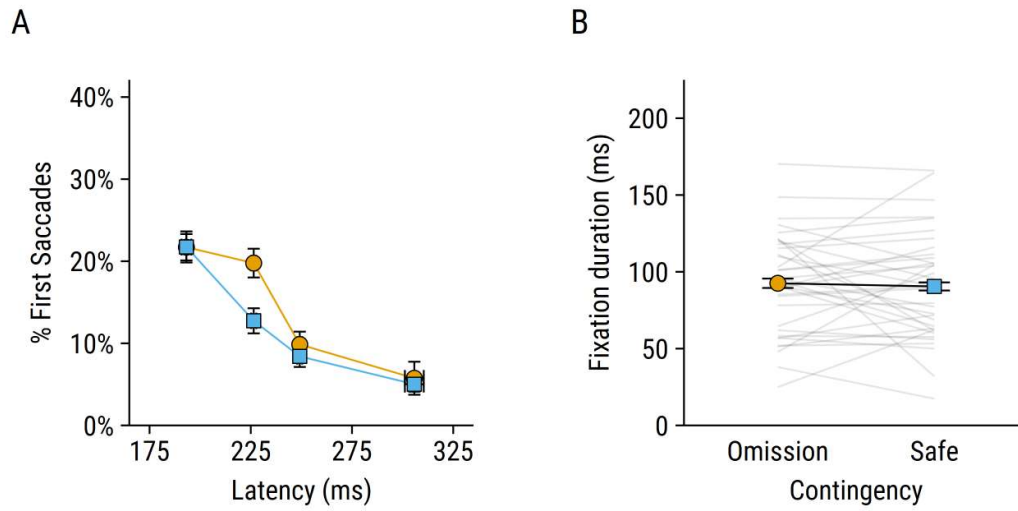
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## **Experiment 1**

### **Time course of oculomotor capture on low-choice trials**

On low-choice trials (Figure S1A), there was a significant main effect of quartile,  $F(2.57, 92.42) = 52.10, p < .001, \eta_p^2 = .591$ , with percentage of first saccades directed towards either distractor decreasing as saccade latency increased. Both the main effect of contingency,  $F(1, 36) = 3.67, p = .064, \eta_p^2 = .092$ , and quartile  $\times$  contingency interaction,  $F(2.07, 74.48) = 2.48, p = .089, \eta_p^2 = .064$ , were non-significant. Paired-samples  $t$ -tests for the fastest and slowest quartiles of saccades revealed no significant difference in the percentage of first saccades towards the low-omission versus low-safe distractor: fastest quartile,  $t(36) = 0.01, p = .990, d_z = .002, BF_{01} = 5.66$  (one-tailed:  $BF_{01} = 5.60$ ); slowest quartile,  $t(36) = 0.51, p = .614, d_z = .084, BF_{01} = 5.01$  (one-tailed:  $BF_{01} = 8.02$ ).



*Figure S1.* Supplementary results of Experiment 1. (A) Percentage of first saccades in the direction of each type of distractor (omission and safe) as a function of saccade latency on low-choice trials. (B) Fixation duration following first saccades to the omission and safe distractor on low-choice trials. Faint grey lines show individual participant performance. Error bars in all figures represent within-subjects SEM (Morey, 2008).

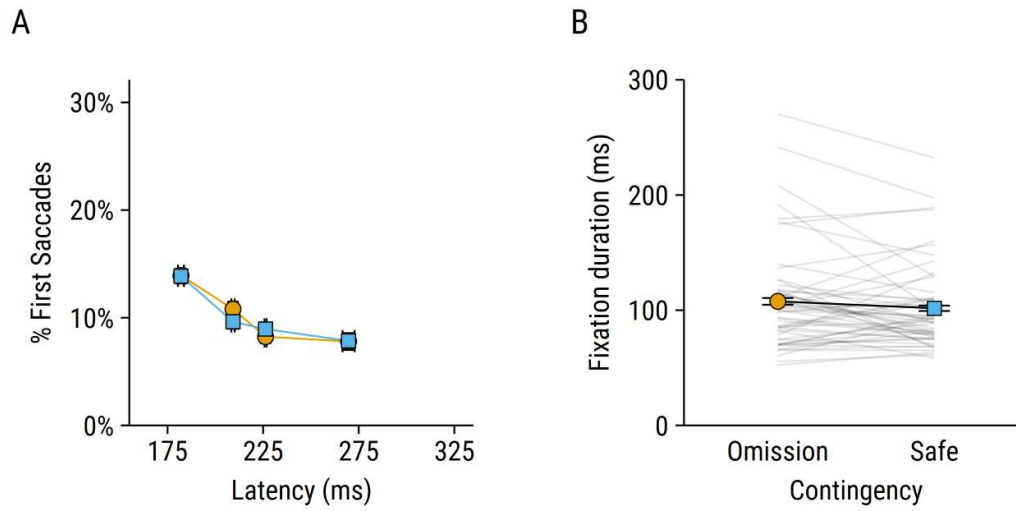
### **Low-choice fixation duration**

There was no significant difference in the duration of fixations following saccades to the omission distractor versus the safe distractor on low-choice trials (Figure S1B),  $t(34) = 0.42$ ,  $p = .680$ ,  $d_z = 0.07$ ,  $BF_{01} = 5.09$ .

## **Experiment 2**

### **Low-choice time course**

On low-choice trials (Figure S2A), there was a significant main effect of quartile,  $F(2.22, 120.02) = 52.11$ ,  $p < .001$ ,  $\eta_p^2 = .491$ , indicating that the percentage of first saccades to the distractor decreased as saccade latency increased. There was no significant main effect of contingency,  $F(1, 54) = 0.05$ ,  $p = .826$ ,  $\eta_p^2 < .001$ , and no significant contingency  $\times$  quartile interaction,  $F(2.87, 154.80) = 0.97$ ,  $p = .405$ ,  $\eta_p^2 = .018$ . Paired-samples  $t$ -tests for the fastest and slowest quartiles of saccades revealed no significant differences in the percentage of first saccades towards the low-omission versus low-safe distractor: fastest quartile,  $t(54) = 0.06$ ,  $p = .946$ ,  $d_z = .009$ ,  $BF_{01} = 6.78$  (one-tailed:  $BF_{01} = 7.16$ ); slowest quartile,  $t(54) = 0.09$ ,  $p = .927$ ,  $d_z = .012$ ,  $BF_{01} = 6.76$  (one-tailed:  $BF_{01} = 6.31$ ).



*Figure S2.* Supplementary results of Experiment 2. (A) Percentage of first saccades in the direction of each type of distractor (omission and safe) as a function of saccade latency on low-choice trials. (B) Fixation duration following first saccades to the omission and safe distractor on low-choice trials.

**Low-choice fixation duration**

There was no significant difference in the duration of fixations following saccades to the omission versus the safe distractors (Figure S2B),  $t(54) = 1.54$ ,  $p = .130$ ,  $d_z = 0.21$ ,  $BF_{01} = 2.25$ .