

Supplemental Materials

Supplemental Analyses

Hypothesis-driven analysis of proportion looking to high test actions.

Study 1. Infants looked longer to the high test actions ($M=0.562$, $SD=0.098$) than expected by chance, $t(19)=2.849$, 95% CI [0.516, 0.607], $d=0.90$, $p=.010$, two-tailed, one-sample t-test against $\mu=0.5$.

Study 2. Infants did not look longer to the high test actions than expected by chance ($M=0.495$, $SD=0.127$), $t(19)=-0.184$, 95% CI [0.436, 0.554], $d=0.06$, $p=.856$, two-tailed, one-sample t-test against $\mu=0.5$.

Study 3. Infants looked longer to the high test actions than expected by chance ($M=0.526$, $SD=0.052$) $t(19)=2.267$, 95% CI [0.502, 0.551], $d=0.72$, $p=.035$, two-tailed, one-sample t-test against $\mu=0.5$.

Hypothesis-driven analysis of non-parametric raw looking time.

Study 1. Infants looked longer to the high test actions ($M=16.24$ seconds, $SD=12.54$) relative to the low ($M=11.35$ seconds, $SD=7.41$), 95% CI [0.970, 6.560], $V=177$, $p=.006$, two-tailed, Wilcoxon signed rank test.

Study 2. Infants did not look longer to the high test actions ($M=11.21$ seconds, $SD=6.04$) relative to the low ($M=12.76$ seconds, $SD=8.37$), 95% CI [-5.417, 2.932], $V=93$, $p=.952$, two-tailed, Wilcoxon signed rank test.

Study 3. Infants looked longer to the high test actions ($M=12.54$ seconds, $SD=5.01$) relative to the low ($M=10.20$ seconds, $SD=3.56$), 95% CI [0.317, 3.615], $V=166$, $p=.021$, two-tailed, Wilcoxon signed rank test.

Comparing attention across Experiments 1–3.

Attention during habituation. To determine whether attention during habituation differed across the 3 experiments, a linear model was fit to the summed raw habituation times using experiment (1, 2, or 3) as a predictor, and then passed onto pairwise comparisons using Tukey confidence adjustment. This analysis revealed no pairwise differences across Experiment 1 ($M=247.89$ seconds, $SD=85.92$), Experiment 2 ($M=263.10$ seconds, $SD=106.60$), and Experiment 3 ($M=280.26$ seconds, $SD=90.26$), with all 95% confidence intervals containing 0, adjusted $ps>.400$, two-tailed, indicating that attention during habituation did not differ across experiments.

Attention during test. To determine whether overall attention during test differed across the 3 experiments, a mixed effects model was fit to looks during test including experiment (1, 2, or 3) as a fixed effect and subject identity as a random intercept, and the outputs passed onto pairwise comparisons using Tukey confidence adjustment. This analysis revealed no strong pairwise differences across Experiment 1 ($M=13.80$ seconds, $SD=10.46$), Experiment 2 ($M=11.99$ seconds, $SD=7.25$), and Experiment 3 ($M=11.37$ seconds, $SD=4.45$) with all 95% CIs containing 0, adjusted $ps>.500$, two-tailed, indicating that overall attention during test did not differ across the 3 experiments.