# Supplementary Information Text

Method

Saccade Peak Velocity Analysis: Although the targets' eccentricity was held constant (at 8°), information probability modulation could have led to slight saccade amplitude variation. Given the well-known link between peak velocity and amplitude for saccades, this could have been a confound. To alleviate this problem, we computed normalized peak velocity values (19, 20). We estimated the expected saccade velocity as a function of amplitude for each saccade, on a per-participant basis, using a square-root function proven to model the main sequence relationship accurately (79). This expected saccade velocity function was established with data from control pairs (see Fig. 1). Then, for each saccade, we computed the ratio between the measured peak velocity and its expected value given saccade amplitude. This dimensionless ratio provided a measure of amplitude-normalized peak velocity for each instructed saccade.
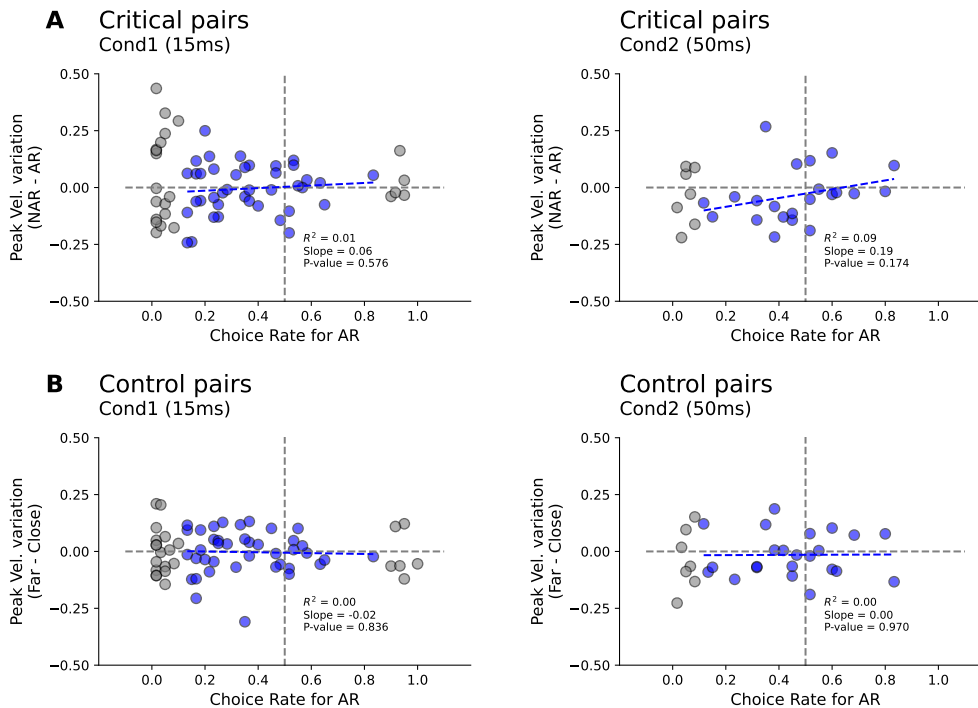
Supplementary Figure

Fig. S1. Differences in normalized saccade peak velocity. Same conventions as in Fig. 3. Mean differences between NAR and AR (Critical pairs, A) and between Far and Close (Control pairs, B) were not significantly different from zero. Additionally, these individual differences were not systematically related to participants' choice rate for AR. See the 'Method' section in the SI Appendix for the peak velocity normalization procedure.