

**Supplemental Results**

<b>Predictor</b>	<b>Estimate</b>	<b>S.E.</b>	<b><i>t</i></b>	<b>P-value</b>
Age (as covariate)	-0.035	0.087	-0.397	0.695
Sex (reference: female)	1.459	0.740	1.973	0.060
Condition (reference: <i>Barrier</i> )	0.616	0.663	0.929	0.362

**Table S1: Predictors for total duration of looking up in Study 1 (overhead barrier).** Parameters from the full model predicting duration of looking time. This model was compared to a base model that included only Sex and Age as predictors. Baseline reference for predictors indicated in table.

<b>Predictor</b>	<b>Estimate</b>	<b>S.E.</b>	<b><i>t</i></b>	<b>P-value</b>
Age (as covariate)	-0.010	0.024	-0.428	0.672
Sex (reference: female)	0.297	0.194	1.529	0.139
Condition (reference: <i>Barrier</i> )	-0.231	0.188	-1.225	0.232

**Table S2: Predictors for latency to look in Study 1 (overhead barrier).** Parameters from the full model predicting duration of looking time. This model was compared to a base model that included only Sex and Age as predictors. Baseline reference for predictors indicated in table.

<b>Predictor</b>	<b>Estimate</b>	<b>S.E.</b>	<b><i>Z</i></b>	<b>P-value</b>
Age (as covariate)	0.008	0.044	0.179	0.858
Sex (reference: female)	0.011	0.376	0.030	0.976
Condition (reference: <i>Barrier</i> )	0.008	0.334	-0.025	0.980

**Table S3: Predictors for number of looks in Study 1 (overhead barrier).** Parameters from the full model predicting number of looks. This model was compared to a base model that included only Sex and Age as predictors. Baseline reference for predictors indicated in table.

<b>Predictor</b>	<b>Estimate</b>	<b>S.E.</b>	<b><i>t</i></b>	<b>P-value</b>
Age (as covariate)	-0.439	0.653	-0.673	0.526
Sex (reference: female)	-0.485	6.614	-0.073	0.944
Condition (reference: <i>Barrier</i> )	12.742	6.522	1.954	0.099

**Table S4: Predictors for latency to approach in Study 2 (reorienting around a barrier).** Parameters from the full model predicting latency to approach. This model was compared to a base model that included only Sex and Age as predictors. Baseline reference for predictors indicated in table.

### *Supplemental Movie Captions*

**Movie S1: Overhead barrier (Study 1).** In the demonstration for the *barrier condition*, the actor first looks up for 10s (*looking phase*), and then walks away so the subject can approach the apparatus for up to one minute (*approach phase*). The procedure for the *no barrier condition* is identical, but there is no barrier blocking the actor's line of sight. Following these demonstrations are an example of a monkey following the actor's gaze in the *looking phase*, and an example of a monkey reorienting by approaching the barrier during the *approach phase*.

**Movie S2: Reorienting around a barrier (Study 2).** In the demonstration for the *barrier condition*, the actor first looks directly behind the barrier for 5s, and then walks away so the subject can approach the apparatus for up to 30s (*approach phase*). The procedure for the *no barrier condition* is identical, but the apparatus has a transparent window so that the subject can see the demonstrator's visual target from their initial position. Following these demonstrations are an example of a monkey approaching the barrier and looking behind it.