

## Experiment S1

### Replication of Experiment 1

To replicate the effects found in Experiment 1, we conducted a further Experiment 1.1, using the same method as in Experiment 1 with the only change being that we reduced the short disappearance duration from 150 ms to 0 ms. Forty students from Berlin universities participated. Fourteen were male, with a mean age of 23.25 years ( $SD = 2.77$ ). Participants received on average €7 for their participation.

### Results

Overall, we replicated the results from Experiment 1. Participants reached a similar level of accuracy: On average, 60% of the objects were hit. Again, fast objects were hit less often than slow objects (ANOVA,  $F_{1,39} = 46.17$ ,  $P < 0.001$ ) and objects that disappeared for 450 ms were hit less often than objects that did not disappear (ANOVA,  $F_{1,39} = 129.51$ ,  $P < 0.001$ ). Further, the effect of speed was larger when objects did not disappear (ANOVA,  $F_{1,39} = 5.03$ ,  $P = 0.03$ ; for means and  $SD$ s see Table S1). We also found a main effect for pattern (ANOVA,  $F_{2,78} = 3.83$ ,  $P = 0.03$ ). Longitudinally striped objects were hit more often than vertically striped ones (Contrast,  $F_{1,39} = 9.10$ ,  $P = 0.004$ ; for means and  $SD$ s see Table A1), but not reliably more often than unicolored ones (Contrast,  $F_{1,39} = 1.05$ ,  $P = 0.31$ ). We did not find an interaction between pattern and disappearance duration (ANOVA,  $F_{2,78} = 2.07$ ,  $P = 0.13$ ).

Table S1

*Means and Standard Deviations of Hit Rate by Speed, Disappearance Duration, and Pattern*

Speed	Disappearance duration					
	0 ms			450 ms		
	Pattern			Pattern		
	Long	Uni	Vert	Long	Uni	Vert
12 cm/s	0.76 (0.15)	0.74 (0.18)	0.70 (0.15)	0.58 (0.18)	0.54 (0.15)	0.56 (0.18)
16 cm/s	0.61 (0.18)	0.63 (0.15)	0.59 (0.16)	0.49 (0.14)	0.48 (0.16)	0.48 (0.15)

*Note.* Long: longitudinally striped; uni: unicolored; vert: vertically striped.