

**Supplementary Materials: From the Corner of My Eye: The Role of Extrafoveal
Recognition Processing in Search Performance**

Inclusion of all participants and trials: Although the exclusion criteria were pre-registered in advance, the relatively high rate of exclusion of trials (experiment 1: 17.62% and 27.58%, experiment 2: 18.46% and 23.2% for the extrafoveal and search tasks, respectively) and participants (experiment 1: 3, experiment 2: 7) might still raise concerns regarding the robustness of the results. Thus, we repeated the analyses again, now without any exclusion. The total sample for this analysis is 37 for experiment 1 and 42 for experiment 2, respectively. Note that in the extrafoveal task, in trials where participants moved their eyes from the central cross they did not proceed to the report phase. Thus, these trials lack the dependent variable and therefore were not included also in the current analysis.

The results of this analysis are summarized in the table below with the last column comparing between the original and current findings (in regard to whether the effect is significant or not).

	Test	Effect	Statistic	P-value	Effect size	Original vs. current
Experiment 1 – extrafoveal task	Overall accuracy vs. chance	---	$t(36) = 17.3$	$p < .001$	$d = 2.84$	Same
	Overall accuracy	Familiarity	$F(1,36) = 27.32$	$p < .001$	$\eta_p^2 = 0.43$	Same
		Distance	$F(1,36) = 43.25$	$p < .001$	$\eta_p^2 = 0.55$	Same
		Exposure time	$F(1,36) = 1.13$	$p = .294$	$\eta_p^2 = 0.03$	Different

		Familiarity*	$F(1,36) = 51.7$	$p < .001$	$\eta_p^2 = 0.59$	Same
		Distance				
		Familiarity*	$F(1,36) = 8.97$	$p = .004$	$\eta_p^2 = 0.2$	Same
		Exposure time				
		Distance*	$F(1,36) < 0.001$	$p = .996$	$\eta_p^2 < 0.001$	Same
		Exposure time				
		Familiarity*	$F(1,36) = 5.122$	$p = .03$	$\eta_p^2 = 0.12$	Same
		Distance*				
		Exposure time				
	Accuracy for unfamiliar	Distance	$F(1,36) = 0.27$	$p = .61$	$\eta_p^2 = 0.007$	Same
		Exposure time	$F(1,36) = 2.11$	$p = .155$	$\eta_p^2 = 0.05$	Same
		Distance*	$F(1,36) = 4.28$	$p = .046$	$\eta_p^2 = 0.11$	Different
	Accuracy for familiar	Distance	$F(1,36) = 68.99$	$p < .001$	$\eta_p^2 = 0.66$	Same
		Exposure time	$F(1,36) = 7.54$	$p = .009$	$\eta_p^2 = 0.17$	Same
		Distance*	$F(1,36) = 2$	$p = .165$	$\eta_p^2 = 0.05$	Same
	Bias vs. chance	---	$t(36) = 5.26$	$p < .001$	$d = 0.51$	Same
		Distance	$F(1,36) = 0.35$	$p = .559$	$\eta_p^2 = 0.009$	Same
		Exposure time	$F(1,36) = 1.18$	$p = .284$	$\eta_p^2 = 0.032$	Same
	Bias	Distance*	$F(1,36) = 1.32$	$p = .259$	$\eta_p^2 = 0.035$	Same
		Exposure time				
		Distance*				
	D'	Distance	$F(1,36) = 25.49$	$p < .001$	$\eta_p^2 = 0.41$	Same
		Exposure time	$F(1,36) = 0.3$	$p = .585$	$\eta_p^2 = 0.008$	Same
		Distance*	$F(1,36) = 0.03$	$p = .858$	$\eta_p^2 < 0.001$	Same
		Exposure time				

Experiment 1 – search task	Mean ordinal number	---	$t(36) = -9.38$	$p < .001$	$d = 1.54$	Same
Experiment 1 – combined	Correlation with overall accuracy	---	$t(35) = -2.04$	$p = 0.025$	$r = -0.33$	Same
	Correlation with overall accuracy (3 degrees)	---	$t(35) = -1.66$	$p = 0.051$	$r = -0.27$	Same
	Correlation with overall accuracy (8 degrees)	---	$t(35) = -2.24$	$p = 0.016$	$r = -0.35$	Same
	Correlation with D'	---	$t(35) = -1.99$	$p = 0.027$	$r = -0.32$	Same
	Correlation with D' (3 degrees)	---	$t(35) = -1.58$	$p = 0.06$	$r = -0.26$	Same
	Correlation with D' (8 degrees)	---	$t(35) = -2.16$	$p = 0.019$	$r = -0.34$	Same
Experiment 2 – extrafoveal task	Open recollection accuracy	Distance	$F(1,41) = 26.1$	$p < .001$	$\eta_p^2 = 0.39$	Same
		Exposure time	$F(1,41) = 25.64$	$p < .001$	$\eta_p^2 = 0.38$	Same
		Distance* Exposure time	$F(1,41) = 0.39$	$p = .537$	$\eta_p^2 = 0.009$	Same
	Closed recollection accuracy	Distance	$F(1,41) = 12.52$	$p = .001$	$\eta_p^2 = 0.23$	Same
		Exposure time	$F(1,41) = 10.88$	$p = .002$	$\eta_p^2 = 0.21$	Same
		Distance* Exposure time	$F(1,41) = 0.85$	$p = .362$	$\eta_p^2 = 0.02$	Same
	Mean ordinal number	---	$t(41) = -12.66$	$p < .001$	$d = 1.95$	Same

Experiment 2 – combined	Correlation with closed recollection	---	$t(40) = -2.04$	$p = 0.049$	$r = -0.26$	Different
	Correlation with closed recollection (3 degrees)	---	$t(40) = -1.79$	$p = 0.04$	$r = -0.27$	Different
	Correlation with closed recollection (8 degrees)	---	$t(40) = -2.27$	$p = 0.014$	$r = -0.33$	Different
	Correlation with open recollection	---	$t(40) = -2.13$	$p = 0.02$	$r = -0.32$	Different
	Correlation with open recollection (3 degrees)	---	$t(40) = -1.5$	$p = 0.07$	$r = -0.23$	Same
	Correlation with open recollection (8 degrees)	---	$t(40) = -1.9$	$p = 0.032$	$r = -0.28$	Different

Table S1. Summary of the analysis o without the exclusion of trials and participants.

Outliers' analysis (correlations): To ensure that the pattern of correlations is not driven by outliers we examined the correlation analysis under two modifications. First, we examined the Spearman correlation, which is less vulnerable to outliers. Second, we removed from the analysis observations that had a z-score smaller or larger than 2 (either in the extrafoveal task or in the search task).

Spearman correlations:

	Test	Rho coefficient	P-value
Experiment 1	Correlation with overall accuracy	$\rho = -0.31$	$p = 0.036$
	Correlation with overall accuracy (3 degrees)	$\rho = -0.28$	$p = 0.051$
	Correlation with overall accuracy (8 degrees)	$\rho = -0.37$	$p = 0.016$
	Correlation with D'	$\rho = -0.33$	$p = 0.028$
	Correlation with D' (3 degrees)	$\rho = -0.23$	$p = 0.09$
	Correlation with D' (8 degrees)	$\rho = -0.33$	$p = 0.025$
Experiment 2	Correlation with closed recollection	$\rho = -0.21$	$p = 0.11$
	Correlation with closed recollection (3 degrees)	$\rho = -0.17$	$p = 0.16$
	Correlation with closed recollection (8 degrees)	$\rho = -0.23$	$p = 0.09$
	Correlation with open recollection	$\rho = -0.23$	$p = 0.09$
	Correlation with open recollection (3 degrees)	$\rho = -0.18$	$p = 0.14$
	Correlation with open recollection (8 degrees)	$\rho = -0.27$	$p = 0.06$

Table S2. Summary of Spearman correlation analysis

Outlier exclusion:

	Test	Statistic	Pearson coefficient	P-value
Experiment 1	Correlation with overall accuracy	$t(27) = -2.53$	$r = -0.44$	$p = 0.005$
	Correlation with overall accuracy (3 degrees)	$t(28) = -2.43$	$r = -0.42$	$p = 0.01$
	Correlation with overall accuracy (8 degrees)	$t(27) = -1.83$	$r = -0.33$	$p = 0.039$
	Correlation with D'	$t(29) = -2.1$	$r = -0.36$	$p = 0.022$
	Correlation with D' (3 degrees)	$t(27) = -2.18$	$r = -0.39$	$p = 0.019$
	Correlation with D' (8 degrees)	$t(27) = -1.95$	$r = -0.35$	$p = 0.031$
Experiment 2	Correlation with closed recollection	$t(30) = -0.35$	$r = -0.06$	$p = .361$
	Correlation with closed recollection (3 degrees)	$t(30) = -0.31$	$r = -0.06$	$p = 0.375$
	Correlation with closed recollection (8 degrees)	$t(30) = -0.33$	$r = -0.05$	$p = 0.373$
	Correlation with open recollection	$t(30) = -1.36$	$r = -0.24$	$p = 0.09$
	Correlation with open recollection (3 degrees)	$t(29) = -1.12$	$r = -0.2$	$p = 0.135$
	Correlation with open recollection (8 degrees)	$t(30) = -1.69$	$r = -0.29$	$p = 0.051$

Table S2. Summary of outlier's analysis

Correlation between familiarity with celebrities and performance:

To ensure that the correlations between the scores of the two tasks is not a by-product of how well a participant knows celebrities, we correlated the performance in each one of the tasks with the score in the final debriefing questionnaire. In experiment 1, the correlation between the score in the final questionnaire and the extrafoveal task was not significant for the overall accuracy ($r = 0.31, t(32) = 1.83, p = .076, 95\% CI = [-0.03, 0.59]$) but significant for the d-prime ($r = 0.39, t(32) = 2.4, p = .02, 95\% CI = [0.06, 0.64]$). In experiment 2, the correlation with the open recollection was significant ($r = 0.48, t(33) = 3.17, p = .003, 95\% CI = [0.18, 0.7]$), but not the correlation with the closed recollection ($r = 0.13, t(33) = 0.77, p = .44, 95\% CI = [-0.21, 0.44]$). For both experiments the correlation with the mean ordinal number of the search task was not significant (Experiment 1: $r = 0.13, t(32) = 0.72, p = .48, 95\% CI = [-0.22, 0.44]$, Experiment 2: $r = -0.11, t(33) = -0.65, p = .51, 95\% CI = [-0.43, 0.23]$). This pattern of results weakens the possibility that knowledge about celebrities is the source for the correlation between extrafoveal abilities and search performance.