

SUPPLEMENTARY TABLES & SUMMARY STATISTICS

Supplementary Table 1. Objective Performance in Experiment 1

EXP 1	Single-Task (ST)	Dual-Task (DT)	Two-way ANOVA p-values		
			attention [ST vs DT]	block	attention x block
Faces	.78 ± .013	.75 ± .012	0.039	>.25	>.25
Letter	.80 ± .014	.76 ± .027	0.025	>.25	>.25
Letter + Faces	Tradeoff (TA^{actual})				
	mean±sem	p against 0	p against 1		
	.77 ± .063	<.001	0.007		

Supplementary Table 2. Mean confidence ratings for correct and incorrect trials in Experiment 1

EXP 1	ST	DT	
Faces (correct)	2.6 ± .18	2.5 ± .19	Attention: $\chi^2=3.8$, $p=.053$
Faces (incorrect)	2.1 ± .19	2.2 ± .18	Attention: $\chi^2=1.9$, $p=.171$
	Correctness: $\chi^2=174.0$, $p<.001$	Correctness: $\chi^2=112.9$, $p<.001$	Interaction: $\chi^2=4.26$, $p=.039$
	ST	DT	
Letter (correct)	2.9 ± .16	2.8 ± .16	Attention: $\chi^2=13.9$, $p<.001$
Letter (incorrect)	2.5 ± .19	2.5 ± .20	Attention: $\chi^2=.003$, $p>.25$
	Correctness: $\chi^2=182.5$, $p<.001$	Correctness: $\chi^2=120.5$, $p<.001$	Interaction: $\chi^2=4.15$, $p=.042$

Supplementary Table 3. Metacognitive accuracy in Experiment 1

EXP 1	ST	DT	Two-way ANOVA p-values		
			attention [ST vs DT]	block	attention x block
Faces	.62 ± .017	.59 ± .014	0.042	0.155	>.25
Letter	.64 ± .017	.60 ± .022	0.016	>.25	>.25
TA^{actual}					
	mean±sem	p against 0	p against 1		
Letter + Faces	.50 ± .123	0.005	0.005		

Supplementary Table 4. Objective Performance in Experiment 2

EXP 2	ST	Dual-Task Partial-Report (pDT)	Dual-Task Whole-Report (wDT)
Disks	.77 ± .012	.57 ± .020	.53 ± .011
Letter	.79 ± .016	.72 ± .027	.75 ± .020
TA^{actual}			
	mean±sem	p against 0	p against 1
Letter + Disks (whole-report)	-.04 ± .055	>.25	<.001
Letter + Disks (partial-report)	.02 ± .100	>.25	<.001

Supplementary Table 5. Mean confidence ratings for correct and incorrect trials in Experiment 2

EXP 2	ST	pDT	wDT	
Disks (correct)	2.6 ± .24	1.9 ± .16	1.8 ± .17	Attention: x²=796.9, p<.001
Disks (incorrect)	2.2 ± .24	1.8 ± .14	1.8 ± .18	Attention: x²=146.1, p<.001
	Correctness: x²=111.4, p<.001	Correctness: x²=13.6, p<.001	Correctness: x ² =1.3, p>.25	Interaction: x²=68.98, p<.001
	ST	pDT	wDT	
Letter (correct)	2.8 ± .22	2.6 ± .16	2.5 ± .17	Attention: x²=90.9, p<.001
Letter (incorrect)	2.5 ± .24	2.1 ± .16	2.2 ± .18	Attention: x²=78.0, p<.001
	Correctness: x²=83.0, p<.001	Correctness: x²=147.8, p<.001	Correctness: x²=122.2, p<.001	Interaction: x²=6.42, p=.040

Supplementary Table 6. Metacognitive accuracy in Experiment 2

EXP 2	ST	pDT	wDT	Two-way ANOVA p-values		
				attention [ST, pDT, wDT]	block	attention x block
Disks	.61 ± .013	.53 ± .010	.50 ± .011	<.001	>.25	>.25
Letters	.60 ± .015	.62 ± .019	.61 ± .018	>.25	0.2	>.25
	TA^{actual}					
	mean±sem	p against 0	p against 1			
Letters + Disks (whole-report)	.12 ± .156	>.25	<.001			
Letters + Disks (partial-report)	.61 ± .238	0.036	0.155			

Supplementary Table 7. Objective Performance in Experiment 3

EXP 3	ST	Letter & Face Dual-Task (face-DT)	Letter & Disk Dual-Task (disk-DT)	Two-way ANOVA p-values		
				stimulus [face vs disk]	attention	stimulus x attention
Blended Faces	.76 ± .014	.71 ± .030	-	<.001	<.001	<.001
Blended Disks	.75 ± .017	-	.53 ± .012			
Letter	.81 ± .016	.80 ± .020	.79 ± .019			
	TA ^{actual}					
	mean±sem	p against 1	p against 0			
Letter + Blended Faces	.76 ± .072	<.001	0.012			
Letter + Blended Disks	.08 ± .074	>.25	<.001			

Supplementary Table 8. PAS ratings in Experiment 3. We report the main effect of correctness (for each attention condition), attention (for correct and incorrect trials) and interaction in the same format as in Table 2 and 5.

EXP 3	ST	face-DT	disk-DT	
Faces (correct)	2.2 ± .09	2.0 ± .12	-	$\chi^2=63.1, p<.001$
Faces (incorrect)	1.9 ± .12	1.6 ± .09	-	$\chi^2=50.5, p<.001$
	$\chi^2=74.6, p<.001$	$\chi^2=108.1, p<.001$	-	Interaction: $\chi^2=0.40, p>.25$
	ST	face-DT	disk-DT	
Disks (correct)	2.2 ± .19	-	1.6 ± .17	$\chi^2=326.9, p<.001$
Disks (incorrect)	1.9 ± .21	-	1.5 ± .17	$\chi^2=60.1, p<.001$
	$\chi^2=90.9, p<.001$	-	$\chi^2=6.5, p=.01$	Interaction: $\chi^2=38.7, p<.001$
	ST	face-DT	disk-DT	
Letter (correct)	2.9 ± .13	2.7 ± .17	2.7 ± .17	$\chi^2=47.7, p<.001$
Letter (incorrect)	2.4 ± .14	2.3 ± .13	2.2 ± .13	$\chi^2=18.0, p<.001$
	$\chi^2=105.6, p<.001$	$\chi^2=95.5, p<.001$	$\chi^2=141.4, p<.001$	Interaction: $\chi^2=.016, p>.25$

Supplementary Table 9. Metacognitive accuracy in Experiment 3

EXP 3	ST	face-DT	disk-DT	Two-way ANOVA p-values		
				stimulus [disk vs face]	attention	stimulus x attention
Blended Faces	.58 ± .021	.59 ± .014	-	0.032	0.232	0.082
Blended Disks	.58 ± .018	-	.53 ± .008			
Letter	.63 ± .012	.61 ± .022	.62 ± .016			
	TA ^{actual}					
	mean±sem	p against 0	p against 1			
Letters + Faces (n=6)	.91 ± .320	0.031	>.25			
Letter + Disks (n=8)	.59 ± .299	0.091	0.208			