

Supplementary Information

Table S1. Supplementary statistics for Experiment 1, including main effects (a) and post-hoc comparisons (b).

a. Main effects			
Identification accuracy			
Effect	Statistic		<i>p</i>
Age group × Set size	$ATS(1.90, \infty) = 1.04$		0.35
Age group × Memory duration	$ATS(1.99, \infty) = 0.05$		0.95
Age group × Set size × Memory duration	$ATS(1.89, \infty) = 1.43$		0.24
Identification response time			
Effect	Statistic		<i>p</i>
Age group × Set size	$ATS(2.00, \infty) = 0.44$		0.64
Age group × Memory duration	$ATS(1.93, \infty) = 0.80$		0.44
Age group × Set size × Memory duration	$ATS(1.86, \infty) = 0.71$		0.48
Localisation error			
Effect	Statistic		<i>p</i>
Age group × Set size	$ATS(1.96, \infty) = 1.02$		0.36
Age group × Memory duration	$ATS(1.96, \infty) = 1.93$		0.14
Age group × Set size × Memory duration	$ATS(1.98, \infty) = 2.02$		0.13
b. Post-hoc comparisons			
Identification accuracy			
Effect	Statistic	<i>z</i>	<i>p</i>
Young vs Older	$U = 7500.5$	3.69	<0.001
Middle-aged vs Older	$U = 7208.5$	2.66	0.008
Young vs Middle-aged	$U = 6711.0$	0.96	0.34
STM: 1-object vs 3 objects	$ATS(1, \infty) = 33.76$	n/a	0.001
LTM: 1-object vs 3 objects	$ATS(1, \infty) = 0.01$	n/a	0.91
Identification response time			
Effect	Statistic	<i>z</i>	<i>p</i>
Young vs Older	$U = 5265.00$	-4.01	<0.001
Middle-aged vs Older	$U = 5576.00$	-2.95	0.003
Young vs Middle-aged	$U = 6201.00$	-0.82	0.42
STM: 1-object vs 3 objects	$ATS(1, \infty) = 141.64$	n/a	0.001
LTM: 1-object vs 3 objects	$ATS(1, \infty) = 1.70$	n/a	0.19
Localisation error			

Effect	Statistic		<i>p</i>
Young vs Older	$U = 5434.0$	-3.43	< 0.001
Middle-aged vs Older	$U = 5557.0$	-3.01	0.003
Young vs Middle-aged	$U = 6303.0$	-0.47	0.64
STM: 1-object vs 3 objects	$ATS(1, \infty) = 209.26$	n/a	0.001
LTM: 1-object vs 3 objects	$ATS(1, \infty) = 40.40$	n/a	0.001