

Supplementary Materials for

Variability in the precision of children's spatial working memory

Table S1. Summary statistics of daily measures of spatial precision in updating.

Grade	Load	Occasion	<i>M</i>	<i>SD</i>	<i>M (ISD)</i>	<i>SD (ISD)</i>
3	2	Morning	0.58	0.43	0.78	0.27
		Noon	0.76	0.42	0.89	0.22
		Afternoon	0.63	0.44	0.78	0.26
	3	Morning	0.94	0.41	0.92	0.13
		Noon	1.11	0.39	0.97	0.10
		Afternoon	1.01	0.41	0.94	0.12
4	2	Morning	0.30	0.23	0.65	0.21
		Noon	0.43	0.30	0.76	0.24
		Afternoon	0.38	0.27	0.70	0.25
	3	Morning	0.67	0.35	0.86	0.16
		Noon	0.83	0.36	0.93	0.15
		Afternoon	0.76	0.36	0.90	0.19

**M* = mean, *SD* = standard deviation, *ISD* = intraindividual *SD*, n=110

Table S2. Descriptive statistics of spatial precision variance components at different time scales.

Grade	Load	Time scale	<i>M</i>	<i>SD</i>	<i>Median</i>	<i>Min</i>	<i>Max</i>
3	2	Day	0.037	0.058	0.001	0.000	0.192
		Occasion	0.042	0.032	0.038	0.000	0.121
		Trial	0.023	0.009	0.020	0.001	0.047
		Item	0.011	0.007	0.010	0.001	0.028
		Total	0.112	0.076	0.107	0.002	0.311
	3	Day	0.023	0.033	0.002	0.000	0.130
		Occasion	0.030	0.024	0.030	0.000	0.076
		Trial	0.020	0.008	0.018	0.006	0.036
		Item	0.014	0.005	0.014	0.005	0.024
		Total	0.087	0.046	0.085	0.019	0.219
4	2	Day	0.021	0.042	0.000	0.000	0.216
		Occasion	0.035	0.043	0.016	0.000	0.202
		Trial	0.023	0.012	0.026	0.003	0.046
		Item	0.005	0.004	0.004	0.000	0.021
		Total	0.083	0.065	0.070	0.003	0.251
	3	Day	0.023	0.036	0.007	0.000	0.157
		Occasion	0.029	0.027	0.022	0.000	0.130
		Trial	0.023	0.008	0.024	0.006	0.039
		Item	0.012	0.004	0.013	0.002	0.019
		Total	0.086	0.048	0.079	0.019	0.251

¹ *M* = mean, *SD* = standard deviation, n=34 (Grade 3), n= 49 (Grade 4).

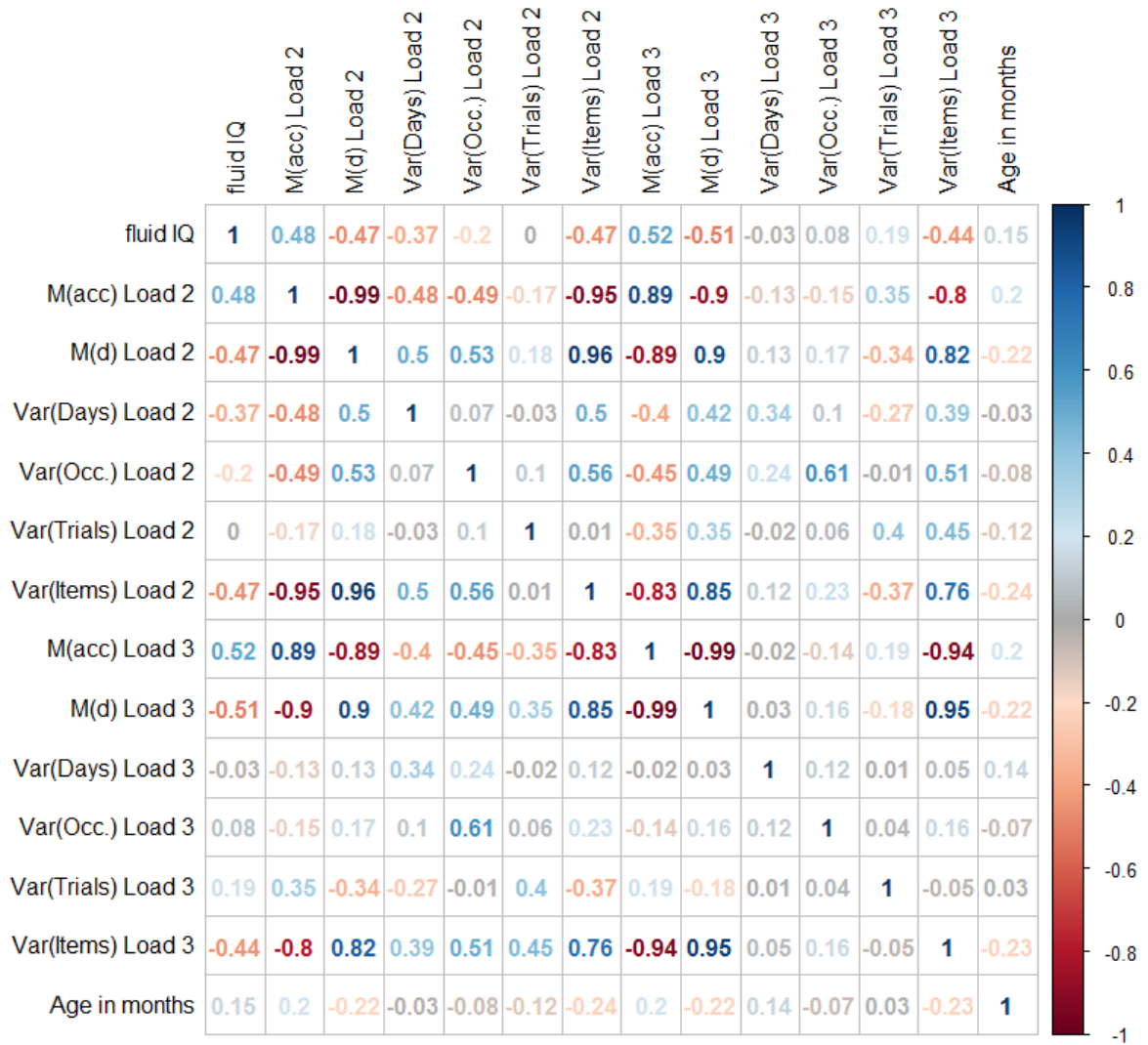


Figure S3. Correlation matrix with Pearson correlation coefficients of working memory updating components (mean accuracy, mean spatial precision, and variability of spatial precision) for the two load conditions (i.e., Load 2 and 3), fluid intelligence, and age ($n = 82$). M = mean, Var = variance component, acc = accuracy, d = spatial precision, $Occ.$ = occasion.