

Table S1.

Summary of all meta-analyses conducted (excluding any sample with any non-typically-developing children).

Combination	N. of Studies	N. of indep. Samples	N. of effects	Pooled N partic.	Range mean age (years)	Estimated correlation	95% CI	τ	I^2	Leave-one-out range of variation	Trim-and-fill adjustment		
											added studies	Est. corr.	95% CI
MA - MATHS	134	195	359	883,306	5.9-49.2	-.30***	[-.32, -.27]	0.15	98%	[-.31, -.30]	0		
Math Type: arithmetic	41	64	105	10,739	6.8-45.7	-.25***	[-.27, -.22]	0.09	61%	[-.26, -.24]	0		
Math Type: basic know.	8	9	12	1,971	6.8-20.3	-.21**	[-.35, -.06]	0.22	92%	[-.24, -.14]	0		
Math Type: grade	38	57	83	38,817	9.4-29.8	-.31***	[-.35, -.26]	0.18	96%	[-.33, -.31]	10	-.26***	[-.31, -.21]
Math Type: math apply	77	98	150	841,154	5.9-49.2	-.31***	[-.34, -.28]	0.16	99%	[-.32, -.31]	0		
Gender: males	16	21	28	3,962	8.2-45.7	-.20***	[-.27, -.13]	0.14	79%	[-.22, -.19]	0		
Gender: females	16	21	28	4,482	8.1-45.7	-.29***	[-.35, -.22]	0.12	77%	[-.31, -.27]	3	-.26***	[-.32, -.19]
Age: children	109	159	294	873,784	5.9-20.4	-.31***	[-.33, -.28]	0.16	99%	[-.32, -.31]	0		
Age: adults	27	36	65	9,522	19.1-49.2	-.24***	[-.28, -.20]	0.10	75%	[-.26, -.24]	8	-.22***	[-.26, -.18]
MA - WM	21	22	47	2,521	7.1-24.8	-.18***	[-.23, -.12]	0.10	60%	[-.19, -.17]	1	-.17***	[-.23, -.12]
WM Type 1: verbal	18	19	38	2,105	7.2-24.8	-.18***	[-.25, -.12]	0.12	65%	[-.20, -.17]	2	-.16***	[-.23, -.10]
WM Type 1: spatial	7	7	9	1018	7.1-23.3	-.16***	[-.24, -.09]	0.06	33%	[-.19, -.15]	0		
WM Type 2: STM	6	6	10	569	9.5-23.3	-.13***	[-.20, -.05]	0.00	0%	[-.16, -.11]	1	-.11**	[-.18, -.04]
WM Type 2: WM	18	19	37	2,240	7.1-24.8	-.19***	[-.25, -.12]	0.12	68%	[-.20, -.17]	4	-.15***	[-.22, -.08]
TA - MATHS	40	50	87	19,669	8.2-32.4	-.22***	[-.26, -.19]	0.13	88%	[-.24, -.22]	0		
Math Type: arithmetic	6	8	13	1,311	8.2-19.1	-.12**	[-.21, -.03]	0.11	70%	[-.15, -.10]	0		
Math Type: basic know.	1	1	1	246	8.2	.02	[-.11, .14]						
Math Type: grade	14	17	28	9,923	11.6-24.5	-.23***	[-.29, -.16]	0.12	89%	[-.24, -.2]	0		
Math Type: math apply	25	30	45	10,066	9.1-32.4	-.26***	[-.30, -.21]	0.11	83%	[-.28, -.26]	0		
Gender: males	4	4	6	666	13.4	-.14***	[-.21, -.07]	0.03	13%	[-.17, -.11]	0		
Gender: females	4	4	6	468	13.4	-.22***	[-.29, -.14]	0.00	0%	[-.24, -.20]	0		
Age: children	30	37	71	15168	8.2-24.5	-.21***	[-.26, -.17]	0.12	88%	[-.23, -.21]	0		
Age: adults	11	13	16	4501	18.4-32.4	-.26***	[-.34, -.17]	0.15	87%	[-.28, -.24]	0		
GA - MATHS	12	16	38	10,910	7.6-20.4	-.19***	[-.27, -.11]	0.15	93%	[-.22, -.18]	1	-.18***	[-.25, -.10]
MA - TA	11	15	19	4,002	8.2-22.1	.46***	[.33, .57]	0.3	96%	[.46, .56]	5	.34***	[.19, .47]
MA - GA	11	13	21	3,267	7.6-22.1	.31***	[.20, .42]	0.21	93%	[.29, .36]	3	.25***	[.13, .36]
TA - WM	7	8	23	1,092	10.7-35.9	-.16**	[-.25, -.06]	0.12	74%	[-.19, -.13]	0	-.16**	[-.25, -.06]
WM Type 1: verbal	7	8	21	1,092	10.7-35.9	-.12*	[-.22, -.02]	0.11	70%	[-.15, -.09]	1	-.11*	[-.20, -.01]
WM Type 1: spatial	1	2	2	205	19.9-20.6	-.40***	[-.51, -.28]			[-.44, -.41]			
WM Type 2: STM	2	2	3	208	19.1	-.15*	[-.26, -.03]			[-.22, -.14]			
WM Type 2: WM	7	8	20	1,092	10.7-35.9	-.15**	[-.26, -.05]	0.13	75%	[-.18, -.13]	1	-.14**	[-.24, -.04]
MATHS - WM	20	21	71	2,640	7.1-24.8	.32***	[.27, .36]	0.08	54%	[.32, .34]	2	.30***	[.26, .35]

Table S2.

Summary of the moderation analyses (excluding any sample with any non-typically-developing children).

Combination	Moderator	Comparison	χ^2	<i>p</i>	<i>Beta</i>	<i>SE</i>	<i>p</i>
MA - MATHS	Math Type	basic know vs arithmetic	37.31	< .001	0.07	0.03	.007
		grade vs arithmetic			0.01	0.02	.494
		math apply vs arithmetic			-0.06	0.02	.002
		grade vs basic know			-0.06	0.03	.067
		math apply vs basic know			-0.13	0.03	< .001
		math apply vs grade			-0.07	0.01	< .001
	Gender	males vs females	3.20	.074	0.09	0.05	.075
		Age group	4.19	.041	-0.06	0.03	.040
	Dev_Group vs Adult						
	MA - WM	WM type of material	verbal vs spatial	0.39	.534	0.03	0.04
WM type of task			0.23	.630	-0.03	0.05	.566
WM vs STM							
TA - MATHS	Math Type	basic_know vs arithmetic	5.88	.118	0.00	0.09	.754
		grade vs arithmetic			-0.09	0.05	.076
		math_apply vs arithmetic			-0.12	0.05	.018
		grade vs basic_know			-0.09	0.10	.324
		math_apply vs basic_know			-0.12	0.09	.211
		math_apply vs grade			-0.03	0.03	.313
	Gender	males vs females	2.23	.136	0.08	0.05	.130
		Age group	0.95	.330	0.05	0.05	.326
	Dev_Group vs Adult						
	TA - WM	WM type of material	verbal vs spatial	12.23	< .001	0.30	0.09
WM type of task			0.62	.432	0.06	0.08	.400
WM vs STM							