

Associations Between Exposures and Education Outcomes											
Outcome	Specific Outcome	Exposure	Age Group	Lead Author, Date	<i>r</i> with 95% CI	I ²	K	N	Indiv. Data	Eggers	Excess Signif.
Learning	Educational achievement problems	Internet use: Cyberbullying victimization	Adolescents	Gardella, 2017	0.15 [0.13, 0.17]	0%	7	7,768	✓	✗	✓
	General	Screen-based intervention: Sesame Street	Children	Mares, 2013	0.14 [0.10, 0.19]		24	10,596	✗	–	–
	General	Screen-based intervention: Education (via computer)	Children	Liao, 2008	0.22 [0.15, 0.29]		48	5,121	✗	–	–
	General	Screen-based intervention: With digital characters	Children	Schroeder, 2013	0.28 [0.18, 0.37]	0%	5	348	✓	✗	✓
	General	Screen use: General (mobile phone)	All	Kates, 2018	-0.12 [-0.19, -0.05]		8	135,131	✗	–	–
	Literacy and numeracy	Screen-based intervention: Sesame Street	Children	Mares, 2013	0.14 [0.08, 0.20]		15	7,604	✗	–	–
	Physical and social environment	Screen-based intervention: Sesame Street	Children	Mares, 2013	0.17 [0.09, 0.24]		13	7,797	✗	–	–
	School attendance problems	Internet use: Cyberbullying victimization	Adolescents	Gardella, 2017	0.20 [0.18, 0.21]	0%	9	25,242	✓	✗	✓
Literacy	Decoding	e-Books: General	Children	Zucker, 2009	0.09 [-0.10, 0.28]	0%	2	109	✓	✗	✓
	General	Screen-based intervention: Literacy	All	McArthur, 2018	0.22 [0.11, 0.33]	0%	6	294	✓	✗	✓
	General	Screen-based intervention: Education (general)	Children	Madigan, 2020	0.14 [-0.04, 0.31]	90%	7	1,228	✓	✗	✓
	General	Screen-based intervention: Literacy videos	Children	Hurwitz, 2018	0.10 [0.07, 0.13]	0%	783	24,624	✗	–	–
	General	TV programs and movies: Coviewing	Children	Madigan, 2020	0.11 [0.01, 0.20]		9	3,376	✗	–	–
	General	TV programs and movies: General	All	Adelantado-Renau, 2019	-0.12 [-0.15, -0.09]	54%	8	16,761	✓	✗	✓
	General	TV programs and movies: General	Children	Madigan, 2020	-0.15 [-0.21, -0.09]		26	12,337	✗	–	–
	General	TV programs and movies: General (in background)	Children	Madigan, 2020	-0.19 [-0.31, -0.06]	70%	5	2,792	✓	✗	✓
	Listening comprehension	Screen-based intervention: Literacy (Abracadabra; in schools)	Children	Abrami, 2015	0.09 [-0.06, 0.23]	82%	7	1,171	✗	–	–
	Phonics	Screen-based intervention: Literacy (Abracadabra; in schools)	Children	Abrami, 2015	0.09 [0.04, 0.15]	0%	19	1,238	✗	–	–
	Phonics	Screen-based intervention: Literacy (phonics; via computer)	All	McArthur, 2012	0.15 [-0.02, 0.33]	0%	4	124	✓	✗	✓
	Phonomic awareness	Screen-based intervention: Literacy (Abracadabra; in schools)	Children	Abrami, 2015	0.16 [0.11, 0.21]	0%	20	1,753	✗	–	–
	Pronunciation	Screen-based intervention: Pronunciation	All	Hassan Saleh, 2019	0.22 [NA, NA]	82%	6	302	✗	–	–
	Reading	Screen-based intervention: Reading (in schools)	All	Cheung, 2012	0.08 [0.06, 0.10]	78%	84	60,553	✗	–	–
	Reading comprehension	e-Books: General	Children	Zucker, 2009	0.23 [0.10, 0.35]	44%	7	401	✓	✗	✓
	Reading comprehension	Screen-based intervention: Literacy (Abracadabra; in schools)	Children	Abrami, 2015	0.03 [-0.03, 0.09]	0%	6	1,045	✗	–	–
	Reading fluency	Screen-based intervention: Literacy	All	Blok, 2002	0.13 [0.07, 0.18]	62%	50	1,121	✗	–	–
	Reading fluency	Screen-based intervention: Literacy (Abracadabra; in schools)	Children	Abrami, 2015	0.04 [-0.06, 0.14]	74%	6	1,725	✗	–	–
	Vocabulary knowledge	Screen-based intervention: Literacy (Abracadabra; in schools)	Children	Abrami, 2015	0.05 [-0.04, 0.14]	50%	15	1,167	✗	–	–
	Writing	Screen-based intervention: Writing feedback	Children	Graham, 2015	0.19 [0.08, 0.28]	0%	4	463	✗	–	–
Numeracy	General	Screen-based intervention: Mathematics	Children	Küçükalkan, 2019	0.29 [0.24, 0.34]	86%	31	2,290	✗	–	–
	General	Screen-based intervention: Cognitive training	All	Oldrati, 2020	0.17 [0.04, 0.30]	68%	11	693	✓	✓	✓
	General	Screen-based intervention: Dynamic geometry software	All	Chan, 2014	0.43 [0.29, 0.57]	92%	9	1,174	✓	✗	✓
	General	Screen-based intervention: Mathematics (in schools)	All	Cheung, 2013	0.08 [0.06, 0.10]	72%	73	56,891	✓	✗	✓
	General	Screen-based intervention: Mathematics (via computer in classrooms)	Children	Kroesbergen, 2003	0.29 [0.23, 0.36]	0%	11	848	✓	✓	✓
	General	TV programs and movies: General	All	Adelantado-Renau, 2019	-0.12 [-0.18, -0.07]	78%	7	14,115	✓	✗	✓
Science	General	Screen-based intervention: Science (in schools)	Children	Slavin, 2014	0.21 [0.15, 0.26]		6	2,384	✗	–	–
Note: Indiv. Data: Individual study data available for reanalysis. Eggers: <i>P</i> > 0.05 for Egger's test of asymmetry, or too few studies to analyse (<i>K</i> < 10). Excess Signif.: <i>P</i> > 0.05 for test for excess significance.											
						-0.4 -0.2 0.0 0.2 0.4 0.6 r with 95% and 99.9% CIs					