Associations Between Exposures and Health-related Outcomes

Outcome	Specific Outcome	Exposure	Lead Author, Date	*r* with 95% CI	I^2	K	N	Indiv. Data	Eggers	Excess Signif.
Aggression	Towards peers	TV programs and movies: General	Mares, 2005	0.26 [0.20, 0.33]		15	747	✖	–	–
Body composition	Body composition	Video games: Health promoting content	Bossen, 2020	-0.12 [-0.21, -0.02]	0%	2	406	✔	✖	✔
	Body composition	Video games: Physically active	Hernandez-Jimenez, 2019	-0.15 [-0.28, -0.03]	86%	19	1,347	✔	✖	✔
	Body composition	Screen-based intervention: Lifestyle risk behaviour (at school)	Champion, 2019	-0.06 [-0.21, 0.08]	30%	5	3,480	✖	–	–
	Body composition	Internet use: General	Aghasi, 2020	0.09 [0.03, 0.16]	96%	7	32,901	✔	✖	✔
	Body composition	Screen-based intervention: To promote healthy weight (obesity prevention)	Hammersley, 2016	0.10 [-0.07, 0.26]	82%	4	1,102	✔	✖	✔
	Body composition	Screen-based intervention: Screentime reduction	Liao, 2014	-0.08 [-0.17, 0.00]	0%	5	541	✔	✖	✔
	Body composition	TV programs and movies: Mealtime	Ghobadi, 2018	0.08 [0.05, 0.10]	88%	14	64,642	✔	✖	✔
	Body composition	Screen-based intervention: To promote health (via mobile phone app)	Shin, 2019	0.02 [-0.05, 0.09]	0%	6	853	✔	✖	✔
	Body composition	Screen-based intervention: To promote health (via mobile phone)	Shin, 2019	-0.02 [-0.07, 0.03]	0%	9	1,358	✔	✖	✔
	Body composition	Screen-based intervention: To promote health (via text message)	Shin, 2019	0.01 [-0.07, 0.10]	0%	3	505	✔	✖	✔
	Body composition	Computer use: General	Fang, 2019	0.22 [0.16, 0.28]	74%	2	7,984	✔	✖	✔
Cardiometabolic health	Fitness	Video games: Health promoting content	Bossen, 2020	0.16 [0.00, 0.32]	10%	2	161	✔	✖	✔
	Metabolic Syndrome	Screen use: General	de Oliveira, 2016	0.17 [0.07, 0.27]	90%	6	3,893	✔	✖	✔
Cognition	Executive Functioning (accuracy)	Screen-based intervention: Education (via computer)	Takacs, 2019	0.21 [0.12, 0.28]	58%	28	1,563	✖	–	–
	Executive Functioning (cognitive flexibility)	Screen-based intervention: Education (via computer)	Takacs, 2019	0.12 [0.04, 0.22]		12	617	✖	–	–
	Executive Functioning (inhibition)	Screen-based intervention: Education (via computer)	Takacs, 2019	0.09 [0.02, 0.16]		15	894	✖	–	–
	Executive Functioning (working memory)	Screen-based intervention: Education (via computer)	Takacs, 2019	0.23 [0.14, 0.32]		21	1,220	✖	–	–
	Executive functioning	Screen-based intervention: Cognitive training	Scionti, 2019	0.18 [0.14, 0.22]	6%	58	2,670	✔	✖	✔
	Moral reasoning and perception of out-groups	Screen-based intervention: Sesame Street	Mares, 2013	0.09 [0.06, 0.13]		17	5,837	✖	–	–
	Reducing stereotypes	TV programs and movies: General	Mares, 2005	0.22 [0.18, 0.26]		37	1,814	✖	–	–
	Cognitive functioning	Screen-based intervention: Cognitive training	Oldrati, 2020	0.26 [0.19, 0.32]	84%	68	3,540	✔	✖	✔
	Executive Functioning	Screen-based intervention: Cognitive training	Oldrati, 2020	0.29 [0.11, 0.47]	90%	13	571	✔	✖	✔
	Verbal skills	Screen-based intervention: Cognitive training	Oldrati, 2020	0.29 [0.15, 0.42]	86%	19	948	✔	✖	✔
	Visuospatial skills	Screen-based intervention: Cognitive training	Oldrati, 2020	0.23 [0.13, 0.32]	50%	14	800	✔	✔	✔
Diet	Fat consumption	Screen-based intervention: Lifestyle risk behaviour (at school)	Champion, 2019	-0.03 [-0.07, 0.01]	36%	5	5,240	✔	✖	✔
	Fruit and vegetable intake	Screen-based intervention: Lifestyle risk behaviour (at school)	Champion, 2019	0.04 [0.01, 0.08]	44%	6	6,034	✔	✖	✔
	Fruit intake	Screen-based intervention: Lifestyle risk behaviour (at school)	Champion, 2019	0.03 [0.00, 0.07]	0%	3	2,739	✔	✖	✔
	Sugary drinks & snacks	Screen-based intervention: Lifestyle risk behaviour (at school)	Champion, 2019	-0.03 [-0.05, 0.00]	0%	5	5,812	✔	✖	✔
	Unhealthy food choice	Advertising: Unhealthy food	Sadeghirad, 2016	0.11 [-0.02, 0.24]	88%	12	2,053	✖	–	–
	Healthy dietary behaviour	Screen-based intervention: To promote health (via mobile phone)	Darling, 2017	0.05 [0.00, 0.01]		8	1,886	✖	–	–
	Sugary drinks	Screen-based intervention: To promote health (via mobile phone)	Shin, 2019	-0.23 [-0.48, 0.03]	92%	3	758	✔	✖	✔
Eye health	Myopia	Screen use: General	Lanca, 2020	0.07 [-0.01, 0.15]	98%	7	31,345	✔	✖	✔
Healthy behavior	General	Video games: Health promoting content	Zhou, 2019	0.16 [0.03, 0.28]		7	1,278	✖	–	–
	Self-efficacy	Video games: Health promoting content	Zhou, 2019	0.13 [0.04, 0.22]		5	438	✖	–	–
	Self-efficacy	Video games: Physically active	Andrade, 2019	0.13 [-0.04, 0.30]	0%	3	133	✔	✖	✔
Physical activity	General	Video games: Health promoting content	Bossen, 2020	0.18 [-0.02, 0.37]	88%	7	753	✔	✖	✔
	General	Screen-based intervention: Lifestyle risk behaviour (at school)	Champion, 2019	0.09 [0.03, 0.15]	90%	12	10,408	✔	✖	✔
	Moderate-to-vigorous intensity	Screen-based intervention: Lifestyle risk behaviour (at school)	Champion, 2019	0.18 [0.05, 0.31]	36%	6	324	✔	✖	✔
	General	TV programs and movies: General	Marshall, 2004	-0.10 [-0.08, -0.11]	74%	39	141,505	✖	–	–
	General	Video games: General	Marshall, 2004	-0.10 [-0.08, -0.13]	68%	10	119,942	✖	–	–
	General	Screen-based intervention: To promote health (via mobile phone app)	Shin, 2019	0.14 [-0.05, 0.34]	82%	5	826	✔	✖	✔
	General	Screen-based intervention: To promote health (via mobile phone)	Shin, 2019	0.20 [0.01, 0.39]	86%	6	906	✔	✖	✔
	General	Screen-based intervention: To promote health (via text message)	Shin, 2019	0.45 [0.28, 0.63]	0%	1	80	✔	✖	✔
Physical health	Muscular fitness	Video games: Health promoting content	Bossen, 2020	0.22 [-0.04, 0.49]	68%	2	161	✔	✖	✔
Prosocial Behavior	Altruism	TV programs and movies: General	Mares, 2005	0.44 [0.40, 0.48]		20	856	✖	–	–
Psychological health	Enjoyment	Video games: Health promoting content	Zhou, 2019	0.20 [0.09, 0.30]		4	440	✖	–	–
	Anxiety	Social Media: Instant messaging	Liu, 2019	-0.21 [-0.27, -0.15]	0%	2	984	✔	✖	✔
	Depression	Social Media: Instant messaging	Liu, 2019	-0.11 [-0.67, 0.45]	98%	2	804	✔	✖	✔
	Satisfaction	Social Media: Instant messaging	Liu, 2019	-0.03 [-0.09, 0.03]	0%	1	1,210	✔	✖	✔
	Depression	Video games: General	Liu, 2019	0.05 [-0.01, 0.12]	0%	2	869	✔	✖	✔
	Depression	Video games: Physically active	Andrade, 2019	0.11 [-0.10, 0.32]	0%	2	88	✔	✖	✔
	Enjoyment	Video games: Physically active	Andrade, 2019	0.36 [0.02, 0.71]	0%	2	26	✔	✖	✔
	Internalizing	TV programs and movies: Scary content	Pearce, 2016	0.18 [0.14, 0.22]	68%	31	12,454	✖	–	–
	Adjustment	Screen-based intervention: Cognitive training	Oldrati, 2020	0.28 [0.11, 0.45]	84%	11	528	✔	✖	✔
Risky behavior	Alcohol consumption	Screen-based intervention: Lifestyle risk behaviour (at school)	Champion, 2019	0.52 [0.40, 0.64]	96%	4	4,085	✔	✖	✔
	Smoking	Screen-based intervention: Lifestyle risk behaviour (at school)	Champion, 2019	0.61 [0.45, 0.77]	100%	6	5,775	✔	✖	✔
	Media literacy	Screen-based intervention: Media literacy (web-based)	Vahedi, 2018	0.23 [0.07, 0.39]	0%	3	138	✔	✖	✔
	Risk taking (attitude)	Screen-based intervention: Media literacy (web-based)	Vahedi, 2018	0.09 [-0.08, 0.26]	0%	3	138	✔	✖	✔
Screen time	General	Screen-based intervention: Lifestyle risk behaviour (at school)	Champion, 2019	-0.05 [-0.08, -0.03]	0%	3	5,045	✔	✖	✔
	General	Screen-based intervention: To promote health (via mobile phone app)	Shin, 2019	-0.14 [-0.22, -0.05]	22%	5	826	✔	✖	✔
	General	Screen-based intervention: To promote health (via mobile phone)	Shin, 2019	-0.11 [-0.20, -0.02]	46%	6	1,148	✔	✖	✔
	General	Screen-based intervention: To promote health (via text message)	Shin, 2019	-0.02 [-0.13, 0.09]	0%	1	322	✔	✖	✔
Self-perceptions	General	Video games: Physically active	Andrade, 2019	0.22 [0.03, 0.42]	0%	2	94	✔	✖	✔
	Self-esteem	Video games: Physically active	Andrade, 2019	-0.14 [-0.28, 0.00]	2%	4	192	✔	✖	✔
Sleep	Bedtime	Computer use: General	Bartel, 2015	0.13 [0.02, 0.25]	94%	2	5,063	✔	✖	✔
	Bedtime	TV programs and movies: General	Bartel, 2015	0.06 [0.00, 0.12]	90%	8	11,712	✔	✖	✔
	Time to fall asleep	TV programs and movies: General	Bartel, 2015	0.03 [-0.02, 0.07]	42%	6	5,633	✔	✖	✔
	Bedtime	Video game console: General	Bartel, 2015	0.11 [0.05, 0.16]	68%	6	5,916	✔	✖	✔
	Duration	Video game console: General	Bartel, 2015	-0.05 [-0.10, -0.01]	28%	8	3,321	✔	✖	✔
	Time to fall asleep	Video game console: General	Bartel, 2015	0.03 [0.01, 0.06]	0%	8	5,945	✔	✖	✔
	Inadequate duration	Screen use: General (mobile phone at bed time)	Carter, 2016	0.21 [0.10, 0.31]	94%	7	6,849	✔	✖	✔
	Lethargy	Screen use: General (mobile phone at bed time)	Carter, 2016	0.23 [0.04, 0.43]	86%	2	1,389	✔	✖	✔
	Poor quality	Screen use: General (mobile phone at bed time)	Carter, 2016	0.20 [0.10, 0.29]	96%	7	14,778	✔	✖	✔
	Duration	Computer use: General	Bartel, 2015	-0.16 [-0.20, -0.13]	40%	4	7,611	✔	✖	✔
	Time to fall asleep	Computer use: General	Bartel, 2015	0.04 [0.01, 0.07]	0%	1	3,282	✔	✖	✔
	Bedtime	Internet use: General	Bartel, 2015	0.20 [0.11, 0.29]	86%	4	3,867	✔	✖	✔
	Duration	Internet use: General	Bartel, 2015	-0.12 [-0.21, -0.04]	92%	5	11,850	✔	✖	✔
	Time to fall asleep	Internet use: General	Bartel, 2015	0.09 [-0.01, 0.20]	72%	3	1,729	✔	✖	✔
	Duration	Screen use: General	Janssen, 2020	-0.10 [-0.17, -0.02]	88%	7	6,184	✔	✖	✔
	Bedtime	Screen use: General (mobile phone)	Bartel, 2015	0.13 [0.11, 0.16]	0%	3	5,590	✔	✖	✔
	Duration	Screen use: General (mobile phone)	Bartel, 2015	-0.12 [-0.18, -0.05]	94%	7	18,902	✔	✖	✔
	Time to fall asleep	Screen use: General (mobile phone)	Bartel, 2015	0.04 [0.01, 0.07]	0%	2	3,432	✔	✖	✔
Social interactions	General	TV programs and movies: General	Mares, 2005	0.22 [0.21, 0.29]		36	2,056	✖	–	–

Note:
Indiv. Data: Individual study data available for reanalysis.
Eggers: *P* > 0.05 for Egger's test of asymmetry, or too few studies to analyse (K < 10).
Excess Signif.: *P* > 0.05 for test for excess significance.