

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	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	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: Screen-time reduction	Liao, 2014	-0.08 [-0.17, 0.00]	0%	5	541	✓	✗	✓
	Body composition	TV programs and movies: Mealtimes	Ghobadi, 2018	0.08 [0.05, 0.10]	88%	14	64,642	✓	✗	✓
	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 mobile phone app)	Shin, 2019	0.02 [-0.05, 0.09]	0%	6	853	✓	✗	✓
Cardiometabolic health	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	✓	✗	✓
	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 (working memory)		Screen-based intervention: Education (via computer)	Takacs, 2019	0.23 [0.14, 0.32]	21	1,220	✗	-	-	
Executive Functioning (inhibition)		Screen-based intervention: Education (via computer)	Takacs, 2019	0.09 [0.02, 0.16]	15	894	✗	-	-	
Executive Functioning (cognitive flexibility)		Screen-based intervention: Education (via computer)	Takacs, 2019	0.12 [0.04, 0.22]	12	617	✗	-	-	
Executive functioning		Cognitive training	Scionti, 2019	0.18 [0.14, 0.22]	6%	58	2,670	✓	✗	✓
Diet	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	✓	✗	✓
	Visuospatial skills	Screen-based intervention: Cognitive training	Oldrati, 2020	0.23 [0.13, 0.32]	50%	14	800	✓	✓	✓
	Executive Functioning	Screen-based intervention: Cognitive training	Oldrati, 2020	0.29 [0.11, 0.47]	90%	13	571	✓	✗	✓
Eye health	Verbal skills	Screen-based intervention: Cognitive training	Oldrati, 2020	0.29 [0.15, 0.42]	86%	19	948	✓	✗	✓
	Fruit intake	Screen-based intervention: Lifestyle risk behaviour (at school)	Champion, 2019	0.03 [0.00, 0.07]	0%	3	2,739	✓	✗	✓
	Fruit and vegetable intake	Screen-based intervention: Lifestyle risk behaviour (at school)	Champion, 2019	0.04 [0.01, 0.08]	44%	6	6,034	✓	✗	✓
	Fat consumption	Screen-based intervention: Lifestyle risk behaviour (at school)	Champion, 2019	-0.03 [-0.07, 0.01]	36%	5	5,240	✓	✗	✓
	Sugary drinks & snacks	Screen-based intervention: Lifestyle risk behaviour (at school)	Champion, 2019	-0.03 [-0.05, 0.00]	0%	5	5,812	✓	✗	✓
Healthy behavior	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	✓	✗	✓
	Myopia	Screen use: General	Lanca, 2020	0.07 [-0.01, 0.15]	98%	7	31,345	✓	✗	✓
	Physical activity	Self-efficacy	Video games: Health promoting content	Zhou, 2019	0.13 [0.04, 0.22]	5	438	✗	-	-
General		Video games: Health promoting content	Zhou, 2019	0.16 [0.03, 0.28]	7	1,278	✗	-	-	
Self-efficacy		Video games: Physically active	Andrade, 2019	0.13 [-0.04, 0.30]	0%	3	133	✓	✗	✓
General		Video games: Health promoting content	Bossen, 2020	0.18 [-0.02, 0.37]	88%	7	753	✓	✗	✓
Moderate-to-vigorous intensity		Screen-based intervention: Lifestyle risk behaviour (at school)	Champion, 2019	0.18 [0.05, 0.31]	36%	6	324	✓	✗	✓
Physical health	General	Screen-based intervention: Lifestyle risk behaviour (at school)	Champion, 2019	0.09 [0.03, 0.15]	90%	12	10,408	✓	✗	✓
	General	Video games: General	Marshall, 2004	-0.10 [-0.08, -0.13]	68%	10	119,942	✗	-	-
	General	TV programs and movies: General	Marshall, 2004	-0.10 [-0.08, -0.11]	74%	39	141,505	✗	-	-
	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 mobile phone app)	Shin, 2019	0.14 [-0.05, 0.34]	82%	5	826	✓	✗	✓
Psychological health	General	Screen-based intervention: To promote health (via text message)	Shin, 2019	0.45 [0.28, 0.63]	0%	1	80	✓	✗	✓
	Muscular fitness	Video games: Health promoting content	Bossen, 2020	0.22 [-0.04, 0.49]	68%	2	161	✓	✗	✓
	Altruism	TV programs and movies: General	Mares, 2005	0.44 [0.40, 0.48]	20	856	✗	-	-	
	Enjoyment	Video games: Health promoting content	Zhou, 2019	0.20 [0.09, 0.30]	4	440	✗	-	-	
	Depression	Social Media: Instant messaging	Liu, 2019	-0.11 [-0.67, 0.45]	98%	2	804	✓	✗	✓
Risky behavior	Anxiety	Social Media: Instant messaging	Liu, 2019	-0.21 [-0.27, -0.15]	0%	2	984	✓	✗	✓
	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	✓	✗	✓
Screen time	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	✓	✗	✓
	Smoking	Screen-based intervention: Lifestyle risk behaviour (at school)	Champion, 2019	0.61 [0.45, 0.77]	100%	6	5,775	✓	✗	✓
	Alcohol consumption	Screen-based intervention: Lifestyle risk behaviour (at school)	Champion, 2019	0.52 [0.40, 0.64]	96%	4	4,085	✓	✗	✓
	Risk taking (attitude)	Screen-based intervention: Media literacy (web-based)	Vahedi, 2018	0.09 [-0.08, 0.26]	0%	3	138	✓	✗	✓
Self-perceptions	Media literacy	Screen-based intervention: Media literacy (web-based)	Vahedi, 2018	0.23 [0.07, 0.39]	0%	3	138	✓	✗	✓
	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)	Shin, 2019	-0.11 [-0.20, -0.02]	46%	6	1,148	✓	✗	✓
	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 text message)	Shin, 2019	-0.02 [-0.13, 0.09]	0%	1	322	✓	✗	✓
Sleep	Self-esteem	Video games: Physically active	Andrade, 2019	-0.14 [-0.28, 0.00]	2%	4	192	✓	✗	✓
	General	Video games: Physically active	Andrade, 2019	0.22 [0.03, 0.42]	0%	2	94	✓	✗	✓
	Duration	Computer use: General	Bartel, 2015	-0.16 [-0.20, -0.13]	40%	4	7,611	✓	✗	✓
	Bedtime	TV programs and movies: General	Bartel, 2015	0.06 [0.00, 0.12]	90%	8	11,712	✓	✗	✓
	Time to fall asleep	Internet use: General	Bartel, 2015	0.09 [-0.01, 0.20]	72%	3	1,729	✓	✗	✓
Social interactions	Bedtime	Video game console: General	Bartel, 2015	0.11 [0.05, 0.16]	68%	6	5,916	✓	✗	✓
	Bedtime	Screen use: General (mobile phone)	Bartel, 2015	0.13 [0.11, 0.16]	0%	3	5,590	✓	✗	✓
	Bedtime	Computer use: General	Bartel, 2015	0.13 [0.02, 0.25]	94%	2	5,063	✓	✗	✓
	Bedtime	Internet use: General	Bartel, 2015	0.20 [0.11, 0.29]	86%	4	3,867	✓	✗	✓
	Poor quality	Screen use: General (mobile phone at bed time)	Carter, 2016	0.20 [0.10, 0.29]	96%	7	14,778	✓	✗	✓
Sleep	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	✓	✗	✓
	Duration	Screen use: General (mobile phone)	Bartel, 2015	-0.12 [-0.18, -0.05]	94%	7	18,902	✓	✗	✓
	Duration	Internet use: General	Bartel, 2015	-0.12 [-0.21, -0.04]	92%	5	11,850	✓	✗	✓
	Duration	Video game console: General	Bartel, 2015	-0.05 [-0.10, -0.01]	28%	8	3,321</td			

Note:
Indiv. Data: Individual study data available for reanalysis.
Eggers: $P > 0.05$ for Egger's test of asymmetry, or too few studies to analyze.
Sig. P: Significant $P < 0.05$ for one-tailed significance tests.