

Review Characteristics

Review characteristics and quality assessment for meta-analyses providing unique effects

First Author	Year	Design Restrictions	Regions Restrictions	Study Range Earliest - Latest	Sample Age Restriction (Age Range) ¹	Outcomes Assessed	Exposures Assessed
Abrami	202	Include: Experimental designs	None specified	2009–2019	Pre K to Grade 3	<ul style="list-style-type: none"> Literacy: Listening comprehension Literacy: Phonics Literacy: Phonemic awareness Literacy: Reading comprehension Literacy: Reading fluency Literacy: Vocabulary knowledge 	<ul style="list-style-type: none"> Intervention: Literacy (Abracadabra; in schools)
Adelant; Renau	201	Include: Cross-sectional studies	None specified	1982–2019	Children; Adolescent (5.7-18.0)	<ul style="list-style-type: none"> Learning: General Literacy: General Numeracy: General 	<ul style="list-style-type: none"> Screen use: General TV programs and movies: General Video games: General
Aghasi	202	Include: Observational	None specified	2007–2016	All (14.2-15.8)	<ul style="list-style-type: none"> Body composition 	<ul style="list-style-type: none"> Internet use: General
Andrade	201	Include: Interventions	None specified	2010–2017	Children; Adolescent	<ul style="list-style-type: none"> Healthy behavior: Self-efficacy Psychological health: Depression Psychological health: Enjoyment Self-perceptions: General Self-perceptions: Self-esteem 	<ul style="list-style-type: none"> Video games: Physically active
Arztman	202	None specified	None specified	2008–2020	K - Grade 8	<ul style="list-style-type: none"> Learning: Behavior Learning: Motivation 	<ul style="list-style-type: none"> Video games: Educational (with competition)
Aspirant	202	Include: Interventions	None specified	2013–2015	School-age Children (Primary/El	<ul style="list-style-type: none"> Learning: General 	<ul style="list-style-type: none"> Intervention: Education (via touch screen)
Baradar; Mahdavi	202	Include: Observational Exclude: Experimental	None specified	1999–2019	None specified (9.0-16.0)	<ul style="list-style-type: none"> Physical health: Lower back pain 	<ul style="list-style-type: none"> Screen use: General (excluding TV) TV programs and movies: General
Bartel	201	None	None specified	2004–2014	Adolescent (12.2-17.7)	<ul style="list-style-type: none"> Sleep: Bedtime Sleep: Duration 	<ul style="list-style-type: none"> Computer use: General Internet use: General

¹ Where provided

Review Characteristics

Review characteristics and quality assessment for meta-analyses providing unique effects

						<ul style="list-style-type: none"> Sleep: Time to fall asleep 	<ul style="list-style-type: none"> Screen use: General (mobile phone) TV programs and movies: General Video games: General
Beck Silva	202	Include: Randomised controlled trials and quasi-RCTs.	None specified	1999–2019	10 - 19 years	<ul style="list-style-type: none"> Diet: Fat consumption 	<ul style="list-style-type: none"> Intervention: Nutrition (in schools)
Benavides Varela	202	Include: Randomised controlled trials	None specified	2006–2018	Children	<ul style="list-style-type: none"> Numeracy: Mathematics 	<ul style="list-style-type: none"> Intervention: Mathematics
Blok	200	None	None specified	1990–2000	All (5.4-11.5)	<ul style="list-style-type: none"> Literacy: Reading fluency 	<ul style="list-style-type: none"> Intervention: Literacy
Bossen	202	Include: Randomised controlled trials	None specified	2011–2018	Children (10.0-15.7)	<ul style="list-style-type: none"> Body composition Cardiometabolic health: Fitness Physical activity: General Physical health: Muscular fitness 	<ul style="list-style-type: none"> Video games: Health promoting content
Boyland	201	Include: Experimental	None specified	2004–2015	Children; Adolescent (6.0-10.4)	<ul style="list-style-type: none"> Diet: Food intake 	<ul style="list-style-type: none"> Advertising: Unhealthy food
Byun	201	Include: All quantitative designs	None specified	2006–2014	School-age Children	<ul style="list-style-type: none"> Numeracy: General 	<ul style="list-style-type: none"> Video games: Numeracy
Cao	202	Include: designs with control groups	None specified	2002–2019	3-12 years (3.4-14.3)	<ul style="list-style-type: none"> Cognition: Executive functioning Cognition: Executive Functioning (cognitive flexibility) Cognition: Executive Functioning (inhibition) Cognition: Executive Functioning (working memory) 	<ul style="list-style-type: none"> Computer use: Executive functioning training
Carter	201	Include: All quantitative designs	None specified	2011–2015	Children; Adolescent (10.6-17.0)	<ul style="list-style-type: none"> Sleep: Inadequate duration Sleep: Lethargy Sleep: Poor quality 	<ul style="list-style-type: none"> Screen use: General (mobile phone at bed time)
Champic	201	Include: Randomised controlled trials	None specified	2003–2017	School-age Children (11.4-15.9)	<ul style="list-style-type: none"> Body composition Diet: Fat consumption Diet: Fruit and vegetable intake Diet: Fruit intake 	<ul style="list-style-type: none"> Intervention: Lifestyle risk behaviour (at school)

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Review Characteristics

Review characteristics and quality assessment for meta-analyses providing unique effects

						<ul style="list-style-type: none"> • Diet: Sugary drinks and snacks • Physical activity: General • Physical activity: Moderate-to-vigorous intensity • Risky behavior: Alcohol consumption • Risky behavior: Smoking • Screen time: General
Chan	201	Include: Experimental; Quasi-experimental	None specified	2002–2012	School-age Children	<ul style="list-style-type: none"> • Numeracy: General • Intervention: Dynamic geometry software
Chauhar	201	Include: pre-post designs with or without control group	None specified	2001–2016	Elementary school students	<ul style="list-style-type: none"> • Learning: General • Screen use: General (in schools)
Chen	202	Include: Experimental designs	None specified	2008–2019	None specified	<ul style="list-style-type: none"> • Learning: General • Video games: Educational (with competition)
Cheung	201	Include: Randomised controlled trials	None specified	1982–2010	School-age Children	<ul style="list-style-type: none"> • Literacy: Reading • Intervention: Reading (in schools)
Cheung	201	Include: Experimental; Quasi-experimental	None specified	1980–2010	School-age Children	<ul style="list-style-type: none"> • Numeracy: General • Intervention: Mathematics (in schools)
Cho	201	Include: experimental designs with control group	None specified	2008–2013	None specified	<ul style="list-style-type: none"> • Learning: Second language • Screen use: General (mobile phone for language learning)
Clausser	202	Include: Longitudinal; Retrospective	None specified	2004–2018	None specified	<ul style="list-style-type: none"> • Psychological health: ADHD • Psychological health: ADHD Symptoms (Inattention) • Screen use: General
Clinton	201	Include: randomised experimental designs	None specified	2011–2016	None specified	<ul style="list-style-type: none"> • Literacy: Reading performance • Screen use: Reading (vs paper)
Comeras Chueca	202	include: randomized and non-randomized controlled trials (control group with no intervention	None specified	2008–2019	Under 18 (4.5-11.6)	<ul style="list-style-type: none"> • Body composition: BMI • Cardiometabolic health: Fitness • Video games: Physically active

[†] Where provided

Review Characteristics

Review characteristics and quality assessment for meta-analyses providing unique effects

		or traditional exercise intervention) Include: randomized and non-randomized controlled with control group with no intervention or traditional exercise intervention	None specified	2010–2020	Under 18 (8.0-14.0)	<ul style="list-style-type: none"> Body composition: BMI Body composition: BMI z-score Body composition: Body fat percentage Body composition: Fat-free mass Body composition: Waist circumference 	<ul style="list-style-type: none"> Video games: Physically active
Comeras Chueca	202						
Coyne	201	None	None specified	1975–2017	Children; Adolescent	<ul style="list-style-type: none"> Prosocial Behavior: General 	<ul style="list-style-type: none"> Screen use: Prosocial content
Cushing	201	Include: All quantitative designs; Experimental	None specified	1989–2009	Children; Adolescent	<ul style="list-style-type: none"> Healthy behavior: General 	<ul style="list-style-type: none"> Intervention: Health behaviours
Darling	201	Include: Intervention	None specified	2006–2016	Children; Adolescent (8.7-16.0)	<ul style="list-style-type: none"> Body composition Diet: Healthy dietary behaviour Physical activity: General 	<ul style="list-style-type: none"> Intervention: To promote health (via mobile phone)
Eirich	202	Include: experimental or observational	None specified	1978–2021	12 or under (0.5-11.0)	<ul style="list-style-type: none"> Psychological health: Externalizing Psychological health: Internalizing 	<ul style="list-style-type: none"> Screen use: General
Fang	201	Include: Cohort; Case-control; Cross-sectional	None specified	2006–2019	Children; Adolescent	<ul style="list-style-type: none"> Body composition 	<ul style="list-style-type: none"> Computer use: General Screen use: General TV programs and movies: General
Feng	202	Include: Quantitative designs	None specified	2017–2019	1 month - 4.99 years old	<ul style="list-style-type: none"> Body composition: BMI z-score 	<ul style="list-style-type: none"> Screen use: General (meeting guidelines)
Ferguson	201	None	None specified	2005–2017	Children; Adolescent	<ul style="list-style-type: none"> Risky behavior: Sexual activity Risky behavior: Sexual activity (initiation of sex) 	<ul style="list-style-type: none"> Screen use: Sexual content
Ferguson	202	Include: Experimental, correlational, or longitudinal	None specified	2009–2013	None specified (7.8-17.5)	<ul style="list-style-type: none"> Agression: General 	<ul style="list-style-type: none"> Video games: Violent content
Folkvord	201	Include: Interventions	None specified	2007–2018	Children; Adolescent	<ul style="list-style-type: none"> Diet: Food intake (calories) 	<ul style="list-style-type: none"> Advertising: Advergaming

¹ Where provided

Review Characteristics

Review characteristics and quality assessment for meta-analyses providing unique effects

Foremar	202	Include: observational and intervention studies	None specified	2015– 2020	None specified	• Eye health: Myopia	• Screen use: General • Screen use: General (phone or tablet)
Furenes	202	Include: experimental or quasi- experimental	None specified	2002– 2019	1-8 years old	• Literacy: Reading comprehension • Literacy: Vocabulary learning	• e-Books: General
Gardella	201	Include: Cross- sectional	Include: North America	2006– 2014	Adolescent: (12.5-16.2)	• Learning: Educational achievement problems • Learning: School attendance problems	• Internet use: Cyberbullying victimization
Garzón	201	Include: Experimental with control group	None specified	NA	None specified	• Learning: General	• Intervention: Augmented reality (in schools)
Ghobadi	201	Include: Cohort; Case- control; Cross- sectional Exclude: Interventions	None specified	2009– 2014	Children; Adolescent:	• Body composition	• TV programs and movies: Mealtime
Graham	201	Include: Experimental; Quasi- experimental	None specified	2004– 2011	School- age Children (Primary/El School)	• Literacy: Writing	• Intervention: Writing feedback
Haghjoo	202	Include: observational designs	None specified	2008– 2021	10-20 years old	• Body composition: Overweight/obesity	• Screen use: General
Hammer	201	Include: Randomised controlled trials	None specified	2003– 2013	Children; Adolescent:	• Body composition	• Intervention: To promote healthy weight (obesity prevention)
Hao	202	Include: Experimental with control group	None specified	2012– 2018	preschool- college	• Learning: Second language vocabulary	• Intervention: English as foreign language
Hassan- Saleh	201	Include: Experimental; Quasi- experimental	None specified	2008– 2016	Children; Adolescent:	• Literacy: Pronunciation	• Intervention: Pronunciation
He	202	Include: Randomised controlled trials	None specified	2009– 2018	6-18 years (9.9-16.6)	• Physical activity: General	• Intervention: To promote physical activity (via mobile phone)
Hernand Jimenez	201	Include: Experimental;	None specified	2009– 2017	Children; Adolescent:	• Body composition	• Video games: Physically active

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Review Characteristics

Review characteristics and quality assessment for meta-analyses providing unique effects

		Quasi-experimental					
Hurwitz	201	None	Include: North America	1997–2018	Early childhood/primary school; School-age Children (Early Primary/Elementary)	<ul style="list-style-type: none"> Literacy: General 	<ul style="list-style-type: none"> Intervention: Literacy videos
Ivie	202	Include: Correlational studies	None specified	2012–2019	11-18 years (14.0-18.0)	<ul style="list-style-type: none"> Psychological health: Depression 	<ul style="list-style-type: none"> Social Media: General
Janssen	202	Include: Experimental; Cross-sectional; Longitudinal	None specified	2007–2019	Children	<ul style="list-style-type: none"> Sleep: Duration 	<ul style="list-style-type: none"> Screen use: General
Kates	201	None	None specified	2008–2016	School-age Children	<ul style="list-style-type: none"> Learning: General 	<ul style="list-style-type: none"> Screen use: General (mobile phone)
Kim	202	Include: experimental or quasi-experimental	None specified	2010–2018	Preschool to Grade 3 (3-9 years old)	<ul style="list-style-type: none"> Learning: Literacy and numeracy Literacy: General Numeracy: General 	<ul style="list-style-type: none"> Screen use: Educational apps
Kroesbe	200	Include: Within subject design; between subject design	None specified	1985–1999	School-age Children (Primary/Elementary) (7.0-11.3)	<ul style="list-style-type: none"> Numeracy: General 	<ul style="list-style-type: none"> Intervention: Mathematics (via computer in classrooms)
Kucukall	201	Include: Experimental	None specified	2007–2016	School-age Children (Primary/Elementary)	<ul style="list-style-type: none"> Numeracy: General 	<ul style="list-style-type: none"> Intervention: Mathematics
Lanca	202	Include: Cohort; Case-control; Cross-sectional; Intervention trials. Exclude: Case reports; Retrospective studies.	None specified	2007–2016	Children; Adolescent	<ul style="list-style-type: none"> Eye health: Myopia 	<ul style="list-style-type: none"> Screen use: General
Li	201	Include: Experimental; Quasi-experimental	None specified	1991–2005	School-age Children	<ul style="list-style-type: none"> Numeracy: General 	<ul style="list-style-type: none"> Intervention: Mathematics
Li	202	None specified	None specified	2005–2019	Infants, toddlers, and preschoolers (0-7 years)	<ul style="list-style-type: none"> Body composition: Overweight/obesity Sleep: Duration 	<ul style="list-style-type: none"> Screen use: General

[†] Where provided

Review Characteristics

Review characteristics and quality assessment for meta-analyses providing unique effects

Li	202	Include: Randomised controlled trials	None specified	2012–2020	3-18 years	<ul style="list-style-type: none"> Developmental: Gross motor (locomotor) Developmental: Gross motor (non-locomotor) Developmental: Gross motor (object control skills) 	<ul style="list-style-type: none"> Intervention: Active video games for motor skills
Li	202	Include: experimental or quasi-experimental	None specified	2014–2021	None specified	<ul style="list-style-type: none"> Learning: Computational thinking 	<ul style="list-style-type: none"> Computer use: Programming exercises
Liao	200	Include: All quantitative designs	Include: Taiwan	1990–2003	School-age Children (Primary/El	<ul style="list-style-type: none"> Learning: General 	<ul style="list-style-type: none"> Intervention: Education (via computer)
Liao	201	Include: Randomised controlled trials	None specified	1999–2012	Children; Adolescent (4.0-14.7)	<ul style="list-style-type: none"> Body composition 	<ul style="list-style-type: none"> Intervention: Screentime reduction
Liu	201	Include: Cross-sectional; Case-control; Longitudinal	None specified	2001–2014	All (10.9-18.0)	<ul style="list-style-type: none"> Psychological health: Depression 	<ul style="list-style-type: none"> Screen use: General
Liu	201	Include: All quantitative designs	None specified	2007–2014	All (13.3-16.6)	<ul style="list-style-type: none"> Psychological health: Anxiety Psychological health: Depression Psychological health: Satisfaction 	<ul style="list-style-type: none"> Social Media: Instant messaging Video games: General
Liu	202	Include: studies with control group	None specified	NA	None specified	<ul style="list-style-type: none"> Cognition: Creativity 	<ul style="list-style-type: none"> Screen use: General
Liu	202	Include: Observational	None specified	2012–2021	10-19 years	<ul style="list-style-type: none"> Psychological health: Depression 	<ul style="list-style-type: none"> Social Media: General (duration)
Lu	202	Include: Cross-sectional only	China	2014–2018	Adolescent	<ul style="list-style-type: none"> Psychological health: Negative coping style Psychological health: Positive coping style 	<ul style="list-style-type: none"> Screen use: General (mobile phone addiction)
Madigan	202	Include: Observational Exclude: Qualitative	None specified	1973–2019	Children (0.5-10.6)	<ul style="list-style-type: none"> Literacy: General 	<ul style="list-style-type: none"> Intervention: Education (general) Screen use: General Screen use: General (covieing) TV programs and movies: Covieing TV programs and movies: Educational

[†] Where provided

Review Characteristics

Review characteristics and quality assessment for meta-analyses providing unique effects

						<ul style="list-style-type: none"> • TV programs and movies: General • TV programs and movies: General (in background)
Major	202	Include: Randomised controlled trials	Low- or middle-income per World Bank	2007–2020	5-18 years	<ul style="list-style-type: none"> • Learning: General • Intervention: Literacy (Abracadabra; in schools)
Mallawa	202	Include: Cross-sectional or longitudinal	None specified	2014–2020	1-6 years & prior to school entry (1.4-5.4)	<ul style="list-style-type: none"> • Cognition: Cognitive Functioning • Cognition: Executive Functioning • Developmental: General • Developmental: Language or speech • Psychological health: Psychosocial factors • Psychological health: Self-regulation • Sleep: General • Screen use: General (mobile phone or tablet)
Mares	200	None	None specified	1969–1989	Children	<ul style="list-style-type: none"> • Aggression: Towards peers • Cognition: Reducing stereotypes • Prosocial Behavior: Altruism • Social interactions: General • TV programs and movies: General
Mares	201	Exclude: Experimental	Exclude: North America	1973–2010	Children	<ul style="list-style-type: none"> • Cognition: Moral reasoning and perception of out-groups • Learning: General • Learning: Literacy and numeracy • Learning: Physical and social environment • Intervention: Sesame Street
Marker	202	None specified	None specified	2001–15	None specified (6.0-12.2)	<ul style="list-style-type: none"> • Body composition • Video games: General
Marshall	200	None	None specified	1985–2002	Children; Adolescent	<ul style="list-style-type: none"> • Body composition • Physical activity: General • TV programs and movies: General • Video games: General
Martins	201	Include: All quantitative designs	None specified	2003–2018	All	<ul style="list-style-type: none"> • Aggression: Towards peers • Screen use: General
Martins	202	Include: Cross-over or parallel randomized	None specified	2006–2017	1-18 years	<ul style="list-style-type: none"> • Diet: Food intake (calories) • TV programs and movies: Mealtime

¹ Where provided

Review Characteristics

Review characteristics and quality assessment for meta-analyses providing unique effects

		controlled trials					
Mazeas	202	Include: Randomised controlled trials	None specified	2015–2019	None specified (10.3-17.8)	• Physical activity: General	• Intervention: To promote physical activity (via gamification)
McArthur	201	Include: Randomised controlled trials and quasi-RCTs.	None specified	1994–2009	All (6.7-16.2)	• Literacy: Phonics	• Intervention: Literacy (phonics; via computer)
McArthur	201	Include: Randomised controlled trials and quasi-RCTs.	Include: English speaking countries	1994–2015	Children; Adolescent	• Literacy: General	• Intervention: Literacy
Mei	201	Include: cross-sectional, case-control, and cohort studies	None specified	2004–2018	11-20 (13.5-16.8)	• Sleep: Duration • Sleep: Problems • Sleep: Time to fall asleep	• Screen use: General (excessive)
Merchar	201	Include: Experimental with control group	None specified	NA	K-12	• Learning: General	• Screen use: Virtual reality simulations (Educational) • Screen use: Virtual reality worlds (Educational) • Video games: Virtual reality (Educational)
Mori	201	None specified	None specified	2013–2018	<18 years (12.3-16.7)	• Psychological health: Internalizing • Risky behavior: Alcohol consumption • Risky behavior: Delinquency • Risky behavior: Drug use • Risky behavior: Sexual activity • Risky behavior: Sexual activity (contraception use) • Risky behavior: Sexual activity (multiple partners) • Risky behavior: Smoking	• Screen use: Sexting
Neitzel	202	Include: random assignment or quasi-experimental	Include: United States, Europe, Israel, Australia, and New Zealand	2004–2020	Kindergarten, Grade 6	• Literacy: Reading	• Intervention: Reading (technology supported)

¹ Where provided

Review Characteristics

Review characteristics and quality assessment for meta-analyses providing unique effects

Oldrati	202	Include: Group-control experimental design	None specified	2006–2018	School-age Children	<ul style="list-style-type: none"> • Cognition: Cognitive Functioning • Cognition: Executive Functioning • Cognition: Verbal skills • Cognition: Visuospatial skills • Numeracy: General • Psychological health: Adjustment 	<ul style="list-style-type: none"> • Intervention: Cognitive training
Paik	199	None	None specified	NA	Children; Adolescent	<ul style="list-style-type: none"> • Antisocial Behaviour: General 	<ul style="list-style-type: none"> • TV programs and movies: Violent content
Pearce	201	Include: All quantitative designs	None specified	1986–2012	Children; Adolescent	<ul style="list-style-type: none"> • Psychological health: Internalizing 	<ul style="list-style-type: none"> • TV programs and movies: Scary content
Peng	201	None	None specified	2001–2010	Children; Adolescent	<ul style="list-style-type: none"> • Cardiometabolic health: Maximum oxygen consumption • Physical activity: Energy expenditure • Physical activity: Heart rate 	<ul style="list-style-type: none"> • Video games: Physically active
Poorolaj	202	Include: Observational	None specified	1995–2018	Children; Adolescent	<ul style="list-style-type: none"> • Body composition 	<ul style="list-style-type: none"> • TV programs and movies: General • Video games: General
Powers	201	Include: Experimental or quasi-experimental designs	None specified	1985–2012	None specified	<ul style="list-style-type: none"> • Cognition: Information processing 	<ul style="list-style-type: none"> • Video games: General
Prescott	201	Include: Longitudinal	None specified	2008–2017	All (8.9-16.0)	<ul style="list-style-type: none"> • Aggression: Towards peers 	<ul style="list-style-type: none"> • Video games: Violent content
Reynard	202	None specified	None specified	2016–2020	8-14 years	<ul style="list-style-type: none"> • Psychological health: Emotion experience • Psychological health: Emotion regulation 	<ul style="list-style-type: none"> • Intervention: To improve emotional regulation • Intervention: To improve emotional regulation (via digital games)
Rodriguez Rocha	201	Include: Experimental; Quasi-experimental	None specified	1999–2018	All (4.5-15.4)	<ul style="list-style-type: none"> • Diet: Fruit and vegetable intake 	<ul style="list-style-type: none"> • Intervention: Fruit and vegetable
Sadeghi	201	Include: Randomised controlled trials	None specified	1978–2014	Children; Adolescent (3.8-11.0)	<ul style="list-style-type: none"> • Diet: Unhealthy food choice 	<ul style="list-style-type: none"> • Advertising: Unhealthy food

[†] Where provided

Review Characteristics

Review characteristics and quality assessment for meta-analyses providing unique effects

Scherer	202	Include: Experimental or quasi- experimental designs	None specified	1973– 2017	None specified (6.5-16.8)	<ul style="list-style-type: none"> • Learning: Programming skills 	<ul style="list-style-type: none"> • Intervention: Education (programming)
Schroed	201	Include: Experimental; Quasi- experimental	None specified	2001– 2009	All	<ul style="list-style-type: none"> • Learning: General 	<ul style="list-style-type: none"> • Intervention: With digital characters
Scionti	201	Include: Interventions	None specified	2009– 2019	Children (4.3-6.1)	<ul style="list-style-type: none"> • Cognition: Executive functioning 	<ul style="list-style-type: none"> • Intervention: Cognitive training
Shin	201	Include: Interventions	None specified	2013– 2018	Children; Adolescent (12.0-15.7)	<ul style="list-style-type: none"> • Body composition • Diet: Sugary drinks • Physical activity: General • Screen time: General 	<ul style="list-style-type: none"> • Intervention: To promote health (via mobile phone app) • Intervention: To promote health (via mobile phone) • Intervention: To promote health (via text message)
Slavin	201	Include: Randomised controlled trials; Quasi- experimental; Observational	None specified	2000– 2011	School- age Children (Primary/El	<ul style="list-style-type: none"> • Science: General 	<ul style="list-style-type: none"> • Intervention: Science (in schools)
Strouse	202	Include: experimental and quasi- experimental designs	None specified	1994– 2019	Average 6 years, all must be less than 8 years (0.8-6.5)	<ul style="list-style-type: none"> • Learning: General 	<ul style="list-style-type: none"> • Screen use: Video (vs face-to-face)
Takacs	201	Include: Experimental; Quasi- experimental	None specified	1980– 2014	NA	<ul style="list-style-type: none"> • Learning: General 	<ul style="list-style-type: none"> • e-Books: Narration
Takacs	201	Include: Randomised controlled trials and quasi-RCTs.	None specified	2001– 2016	Children	<ul style="list-style-type: none"> • Cognition: Executive Functioning (accuracy) • Cognition: Executive Functioning (cognitive flexibility) • Cognition: Executive Functioning (inhibition) • Cognition: Executive Functioning (working memory) 	<ul style="list-style-type: none"> • Intervention: Education (via computer)
Tekeder	201	None	None specified	2010– 2015	All	<ul style="list-style-type: none"> • Learning: General 	<ul style="list-style-type: none"> • Intervention: Augmented reality (in schools)
Tokac	201	Include: desgins with a control group	None specified	2006– 2016	PreK-12th grade	<ul style="list-style-type: none"> • Numeracy: Mathematics 	<ul style="list-style-type: none"> • Video games: Educational

¹ Where provided

Review Characteristics

Review characteristics and quality assessment for meta-analyses providing unique effects

Vahedi	201	Include: Interventions (pre-post or controlled). Exclude: Cross- sectional	None specified	2015– 2016	School- age Children (Middle/High School)	<ul style="list-style-type: none"> Risky behavior: Media literacy Risky behavior: Risk taking (attitude) 	<ul style="list-style-type: none"> Intervention: Media literacy (web-based)
Vannucc	202	Exclude: Qualitative; Case studies	None specified	2011– 2018	Adolescent (12.6-18.0)	<ul style="list-style-type: none"> Risky behavior: Risk taking (general) Risky behavior: Risk sexual behaviour Risky behavior: Substance abuse 	<ul style="list-style-type: none"> Social Media: General
Wang	202	Include: longitudinal, cohort, case- control, cross- sectional, or controlled trials	None specified	2016– 2020	<=18 years (9.5-16.8)	<ul style="list-style-type: none"> Eye health: Visual impairment 	<ul style="list-style-type: none"> Screen use: General (mobile phone)
Wouters	201	Include: experimental designs	None specified	2005– 2012	None specified	<ul style="list-style-type: none"> Learning: Motivation 	<ul style="list-style-type: none"> Video games: Educational
Wouters	201	Include: Experimental with control group	None specified	1993– 2007	None specified	<ul style="list-style-type: none"> Learning: General 	<ul style="list-style-type: none"> Video games: Educational (with instructional support)
Xie	201	Include: Experimental; Quasi- experimental; Pre-test post- test	None specified	2010– 2018	Children (1.8-5.9)	<ul style="list-style-type: none"> Learning: General 	<ul style="list-style-type: none"> Intervention: Education (via touch screen)
Xie	201	Include: experimental, quasi- experimental, or pre-post test	None specified	2010– 2018	0-5 (1.8-5.8)	<ul style="list-style-type: none"> Learning: General 	<ul style="list-style-type: none"> Screen use: Touchscreens
Yin	201	None specified	None specified	2006– 2016	None specified	<ul style="list-style-type: none"> Psychological health: General Psychological health: Positive mental health 	<ul style="list-style-type: none"> Social Media: General
Zhang	201	Include: Cohort; Case- control; Cross- sectional	None specified	2001– 2014	Children	<ul style="list-style-type: none"> Body composition 	<ul style="list-style-type: none"> TV programs and movies: General
Zhang	202	Include: longitudinal or cohort designs	None specified	2001– 2021	2-19 years (3.8-17.1)	<ul style="list-style-type: none"> Psychological health: Other mental health problems 	<ul style="list-style-type: none"> Screen use: General
Zhang	202	Include: Observational	Mainland China, Hong	2009– 2020	6-18 years (or grade	<ul style="list-style-type: none"> Body composition 	<ul style="list-style-type: none"> Screen use: General

¹ Where provided

Review Characteristics

Review characteristics and quality assessment for meta-analyses providing unique effects

		or experimental designs	Kong, Macau and Taiwan		1-12)	<ul style="list-style-type: none"> • Cardiometabolic health: Poor fitness • Cardiometabolic health: Risks • Eye health: Myopia • Physical health: Health Issues • Psychological health: Emotion problems 	
Zhou	202	Exclude: Non-empirical studies; Qualitative; Systematic reviews or meta-analyses	None specified	2009–2018	All	<ul style="list-style-type: none"> • Healthy behavior: General • Healthy behavior: Self-efficacy • Psychological health: Enjoyment 	• Video games: Health promoting content
Zou	202	Include: observational cross-sectional, case-control, or longitudinal designs	None specified	2009–2021	<20 years (11.5-17.9)	<ul style="list-style-type: none"> • Psychological health: Depression 	<ul style="list-style-type: none"> • Computer use: General • Screen use: General • Screen use: General (mobile phone) • TV programs and movies: General • Video games: General
Zucker	200	Include: Randomised controlled trials; Quasi-experimental; Observational	None specified	1997–2006	School-age Children (Primary/El	<ul style="list-style-type: none"> • Literacy: Decoding • Literacy: Reading comprehension 	• e-Books: General
de Oliveira	201	Include: Observational	None specified	2010–2014	Adolescent:	<ul style="list-style-type: none"> • Cardiometabolic health: Metabolic Syndrome 	• Screen use: General

[†] Where provided