Supplemental Online Content

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This supplemental material has been provided by the authors to give readers additional information about their work

eTable 1. Search strategy for PubMed

No.	Search Terms/Equations
#1	"Premature Birth"[Mesh]
#2	(((((((Premature Birth[Title/Abstract]) OR (Birth, Premature[Title/Abstract])) OR (Births, Premature[Title/Abstract])) OR (Premature Births[Title/Abstract])) OR (Preterm Birth[Title/Abstract])) OR (Birth, Preterm[Title/Abstract])) OR (Births, Preterm[Title/Abstract])) OR (Preterm Births[Title/Abstract])
#3	#1 OR #2
#4	"Gestational Age"[Mesh]
#5	((((((((((((Gestational Age[Title/Abstract]) OR (Age, Gestational[Title/Abstract])) OR (Ages, Gestational[Title/Abstract])) OR (Gestational Ages[Title/Abstract])) OR (Embryologic Age[Title/Abstract])) OR (Age, Embryologic[Title/Abstract])) OR (Ages, Embryologic[Title/Abstract])) OR (Embryologic Ages[Title/Abstract])) OR (Chronologic Fetal Maturity[Title/Abstract])) OR (Fetal Maturity, Chronologic[Title/Abstract])) OR (Fetal Age[Title/Abstract])) OR (Age, Fetal[Title/Abstract])) OR (Ages, Fetal[Title/Abstract])) OR (Fetal Ages[Title/Abstract])) OR (Maturity, Chronologic Fetal[Title/Abstract])
#6	#4 OR #5
#7	"Infant, Premature"[Mesh]
#8	(((((((((Infant, Premature[Title/Abstract]) OR (Infants, Premature[Title/Abstract])) OR (Premature Infant[Title/Abstract])) OR (Premature Infants[Title/Abstract])) OR (Preterm Infants[Title/Abstract])) OR (Infant, Preterm[Title/Abstract])) OR (Infants, Preterm[Title/Abstract])) OR (Preterm Infant[Title/Abstract])) OR (Neonatal Prematurity[Title/Abstract])) OR (Prematurity, Neonatal[Title/Abstract])
#9	#7 OR #8
#10	#3 OR #6 OR #9
#11	"Infant, Low Birth Weight"[Mesh]
#12	(((((((((Infant, Low Birth Weight[Title/Abstract]) OR (Low-Birth-Weight Infant[Title/Abstract])) OR (Infant, Low-Birth-Weight[Title/Abstract])) OR (Infants, Low-Birth-Weight[Title/Abstract])) OR (Low Birth Weight Infant[Title/Abstract])) OR (Low-Birth-Weight Infants[Title/Abstract])) OR (Low Birth Weight[Title/Abstract])) OR (Birth Weight, Low[Title/Abstract])) OR (Birth Weights, Low[Title/Abstract])) OR (Low Birth Weights[Title/Abstract])
#13	#11 OR #12
#14	"Birth Weight"[Mesh]
#15	(((((Birth Weight[Title/Abstract]) OR (Birth Weights[Title/Abstract])) OR (Weight, Birth[Title/Abstract])) OR (Weights, Birth[Title/Abstract])) OR (Birthweight[Title/Abstract])) OR (Birthweights[Title/Abstract])
#16	#14 OR #15
#17	#13 OR #16
#18	#10 OR #17
#19	"Educational Status"[Mesh]

eTable 1. Search strategy for PubMed (continued)

No.	Search Terms/Equations
#20	((((((((((((Educational Status[Title/Abstract]) OR (Achievement, Educational[Title/Abstract])) OR (Educational Achievements[Title/Abstract])) OR (Educational Achievement[Title/Abstract])) OR (Status, Educational[Title/Abstract])) OR (Education Level[Title/Abstract])) OR (Education Levels[Title/Abstract])) OR (Level, Education[Title/Abstract])) OR (Level of Education[Title/Abstract])) OR (Educational Level[Title/Abstract])) OR (Educational Levels[Title/Abstract])) OR (Level, Educational[Title/Abstract])) OR (Educational Attainment[Title/Abstract])) OR (Attainment, Educational[Title/Abstract])) OR (Educational Attainments[Title/Abstract])
#21	#19 OR #20
#22	"Academic Success"[Mesh]
#23	(((((((Academic Success[Title/Abstract]) OR (Academic Successes[Title/Abstract])) OR (Success, Academic[Title/Abstract])) OR (Successes, Academic[Title/Abstract])) OR (Academic Achievement[Title/Abstract])) OR (Academic Achievements[Title/Abstract])) OR (Achievement, Academic[Title/Abstract])) OR (Achievements, Academic[Title/Abstract])
#24	#22 OR #23
#25	"Academic Failure"[Mesh]
#26	(((Academic Failure[Title/Abstract]) OR (Academic Failures[Title/Abstract])) OR (Failure, Academic[Title/Abstract])) OR (Failures, Academic[Title/Abstract])
#27	#25 OR #26
#28	"Learning Disabilities"[Mesh]
#29	((Learning Disabilities[Title/Abstract]) OR (Disabilities, Learning[Title/Abstract])) OR (Disability, Learning[Title/Abstract])) OR (Learning Disability[Title/Abstract])) OR (Adult Learning Disabilities[Title/Abstract])) OR (Adult Learning Disability[Title/Abstract])) OR (Disabilities, Adult Learning[Title/Abstract])) OR (Disability, Adult Learning[Title/Abstract])) OR (Learning Disabilities, Adult[Title/Abstract])) OR (Learning Disability, Adult[Title/Abstract])) OR (Adult Learning Disorders[Title/Abstract])) OR (Adult Learning Disorder[Title/Abstract])) OR (Disorders, Adult Learning[Title/Abstract])) OR (Learning Disorder, Adult[Title/Abstract])) OR (Learning Disorders, Adult[Title/Abstract])) OR (Developmental Academic Disability[Title/Abstract])) OR (Academic Disabilities, Developmental[Title/Abstract])) OR (Academic Disability, Developmental[Title/Abstract])) OR (Developmental Academic Disorder[Title/Abstract])) OR (Academic Disorders, Developmental[Title/Abstract])) OR (Developmental Academic Disorders[Title/Abstract])) OR (Scholastic Skills Development Disorders[Title/Abstract])) OR (Developmental Disorders of Scholastic Skills[Title/Abstract])) OR (Academic Disorder, Developmental[Title/Abstract])) OR (Learning Disorders[Title/Abstract])) OR (Disorder, Learning[Title/Abstract])) OR

eTable 1. Search strategy for PubMed (continued)

No.	Search Terms/Equations
	(Disorders, Learning[Title/Abstract])) OR (Learning Disorder[Title/Abstract])) OR (Learning Disabilities, Child[Title/Abstract])) OR (Child Learning Disability[Title/Abstract])) OR (Disabilities, Child Learning[Title/Abstract])) OR (Disability, Child Learning[Title/Abstract])) OR (Learning Disability, Child[Title/Abstract])) OR (Child Learning Disabilities[Title/Abstract])) OR (Learning Disabilities, Adolescent[Title/Abstract])) OR (Adolescent Learning Disability[Title/Abstract])) OR (Disabilities, Adolescent Learning[Title/Abstract])) OR (Disability, Adolescent Learning[Title/Abstract])) OR (Learning Disability, Adolescent[Title/Abstract])) OR (Adolescent Learning Disabilities[Title/Abstract])) OR (Learning Disturbance[Title/Abstract])) OR (Disturbance, Learning[Title/Abstract])) OR (Disturbances, Learning[Title/Abstract])) OR (Learning Disturbances[Title/Abstract])
#30	#28 OR #29
#31	"Academic Performance"[Mesh]
#32	((((((((((((((((((((((Academic Performance[Title/Abstract]) OR (Academic Performances[Title/Abstract])) OR (Performance, Academic[Title/Abstract])) OR (Performances, Academic[Title/Abstract])) OR (Academic Test Scores[Title/Abstract])) OR (Academic Test Score[Title/Abstract])) OR (Score, Academic Test[Title/Abstract])) OR (Test Scores, Academic[Title/Abstract])) OR (Academic Test Performance[Title/Abstract])) OR (Academic Test Performances[Title/Abstract])) OR (Performance, Academic Test[Title/Abstract])) OR (Test Performance, Academic[Title/Abstract])) OR (Educational Test Scores[Title/Abstract])) OR (Educational Test Score[Title/Abstract])) OR (Score, Educational Test[Title/Abstract])) OR (Scores, Educational Test[Title/Abstract])) OR (Test Score, Educational[Title/Abstract])) OR (Test Scores, Educational[Title/Abstract])) OR (Educational Test Performance[Title/Abstract])) OR (Educational Test Performances[Title/Abstract])) OR (Performance, Educational Test[Title/Abstract])) OR (Performances, Educational Test[Title/Abstract])) OR (Test Performance, Educational[Title/Abstract])) OR (Test Performances, Educational[Title/Abstract])
#33	#31 OR #32
#34	"Educational Measurement"[Mesh]
#35	((((((((((((Educational Measurement[Title/Abstract]) OR (Measurement, Educational[Title/Abstract])) OR (Educational Measurement[Title/Abstract])) OR (Educational Measurements[Title/Abstract])) OR (Measurements, Educational[Title/Abstract])) OR (Graduate Records Examination[Title/Abstract])) OR (Examination, Graduate Records[Title/Abstract])) OR (Examinations, Graduate Records[Title/Abstract])) OR (Graduate Records Examinations[Title/Abstract])) OR (Educational Assessment[Title/Abstract])) OR (Assessments, Educational[Title/Abstract])) OR (Educational Assessments[Title/Abstract])) OR (Assessment, Educational[Title/Abstract])

eTable 1. Search strategy for PubMed (continued)

No.	Search Terms/Equations
#36	#34 OR #35
#37	"Education, Special"[Mesh]
#38	(((Education, Special[Title/Abstract]) OR (Special Education[Title/Abstract])) OR (Educations, Special[Title/Abstract])) OR (Special Educations[Title/Abstract])
#39	#37 OR #38
#40	"Student Dropouts"[Mesh]
#41	(((((((Student Dropouts[Title/Abstract]) OR (Dropouts, Student[Title/Abstract])) OR (Dropout, Student[Title/Abstract])) OR (Student Dropout[Title/Abstract])) OR (School Dropouts[Title/Abstract])) OR (Dropout, School[Title/Abstract])) OR (Dropouts, School[Title/Abstract])) OR (School Dropout[Title/Abstract])
#42	#40 OR #41
#43	"Return to School"[Mesh]
#44	(((Return to School[Title/Abstract]) OR (Return to Schools[Title/Abstract])) OR (School, Return to[Title/Abstract])) OR (Schools, Return to[Title/Abstract])
#45	#43 OR #44
#46	"Literacy"[Mesh]
#47	(Literacy[Title/Abstract]) OR (Illiteracy[Title/Abstract])
#48	#46 OR #47
#49	"Mathematics"[Mesh]
#50	(Mathematics[Title/Abstract]) OR (Mathematic[Title/Abstract]) OR (Math[Title/Abstract])
#51	#49 OR #50
#52	"Intelligence"[Mesh]
#53	((Intelligence[Title/Abstract]) OR (Intelligence quotient[Title/Abstract])) OR (IQ[Title/Abstract])
#54	#52 OR #53
#55	"Intelligence Tests"[Mesh]
#56	((((((((((Intelligence Tests[Title/Abstract]) OR (Intelligence Test[Title/Abstract])) OR (Test, Intelligence[Title/Abstract])) OR (Mental Tests[Title/Abstract])) OR (Mental Test[Title/Abstract])) OR (Test, Mental[Title/Abstract])) OR (Raven's Progressive Matrices[Title/Abstract])) OR (Raven Progressive Matrices[Title/Abstract])) OR (Ravens Progressive Matrices[Title/Abstract])) OR (Raven Test[Title/Abstract])) OR (Test, Raven[Title/Abstract])
#57	#55 OR #56
#58	"Cognition"[Mesh]
#59	(((((Cognition[Title/Abstract]) OR (Cognitions[Title/Abstract])) OR (Cognitive Function[Title/Abstract])) OR (Cognitive Functions[Title/Abstract])) OR (Function, Cognitive[Title/Abstract])) OR (Functions, Cognitive[Title/Abstract])

eTable 1. Search strategy for PubMed (continued)

No.	Search Terms/Equations
#60	#58 OR #59
#61	((((((((((school readiness[Title/Abstract]) OR (school absence[Title/Abstract])) OR (school absenteeism[Title/Abstract])) OR (education cost[Title/Abstract])) OR (educational cost[Title/Abstract])) OR (school retention[Title/Abstract])) OR (literacy[Title/Abstract])) OR (numeracy[Title/Abstract])) OR (learning outcome[Title/Abstract])) OR (school outcome[Title/Abstract])) OR (school performance[Title/Abstract])
#62	#21 OR #24 OR #27 OR #30 OR #33 OR #36 OR #39 OR #42 OR #45 OR #48 OR #51 OR #54 OR #57 OR #60 OR #61
#63	("Systematic Review"[Publication Type:NoExp] OR "Systematic Reviews as Topic"[mesh:noexp] OR "Cochrane Database Syst Rev"[Journal] OR "Evid Rep Technol Assess (Full Rep)"[jour] OR "Evid Rep Technol Assess (Summ)"[jour] OR "scoping"[TI] OR "systematic"[TI] OR ((("comprehensive analysis" [TIAB:~1] OR "comprehensive review" [TIAB:~1] OR "comprehensively reviewed" [TIAB:~1] OR "literature search" [TIAB:~1] OR "literature searches" [TIAB:~1] OR "scoping search" [TIAB:~1] OR "scoping searches" [TIAB:~1]) NOT "narrative review"[TI]) OR "pooled study" [TIAB:~1] OR "systematic search" [TIAB:~1] OR "systematic searches" [TIAB:~1] OR "systematically searched" [TIAB:~1) AND (databases[TIAB] OR "cinahl" [TIAB] OR "cochrane" [TIAB] OR "embase" [TIAB] OR "psycinfo" [TIAB] OR "pubmed" [TIAB] OR "medline" [TIAB] OR "scopus" [TIAB] OR "web science" [TIAB:~1] OR "bibliographic review" [TIAB:~1] OR "bibliographic reviews" [TIAB:~1] OR "literature review" [TIAB:~1] OR "literature reviews" [TIAB:~1]) OR (("electronic database" [TIAB:~1] OR "electronic databases" [TIAB:~1] OR "databases searched" [TIAB:~3]) AND (eligibility [TIAB] OR excluded [TIAB] OR exclusion [TIAB] OR included [TIAB] OR inclusion [TIAB])) OR ("comparative effectiveness" [TIAB:~1] AND "effectiveness review" [TIAB:~2]) OR ("critical interpretive" [TIAB:~1] AND ("interpretive review" [TIAB:~0] OR "interpretive synthesis" [TIAB:~0])) OR ("diagnostic test" [TIAB:~0] AND ("accuracy review" [TIAB] OR "accuracy reviews" [TIAB] OR "accuracy studies" [TIAB] OR "accuracy study" [TIAB]) AND (meta-analysis [TIAB] OR scoping [TIAB] OR systematic [TIAB])) OR ("evidence assessment" [TIAB] AND GRADE [TIAB]) OR ("evidence gap" [TIAB:~2] AND "gap map" [TIAB:~0]) OR "evidence mapping" [TIAB] OR "evidence review" [TIAB] OR "exploratory review" [TIAB] OR "framework synthesis" [TIAB] OR "mapping review" [TIAB:~1] OR "meta epidemiological" [TIAB] OR "meta ethnographic" [TIAB:~0] OR metaethnographic [TIAB] OR "meta ethnography" [TIAB:~0] OR metaethnography [TIAB] OR "meta interpretation" [TIAB:~1] OR "meta narrative" [TIAB:~1] OR "meta review" [TIAB:~1] OR "meta study" [TIAB:~1] OR "meta synthesis" [TIAB:~0] OR metasynthesis [TIAB] OR "meta summary" [TIAB:~1] OR "meta theory" [TIAB:~1] OR "methodological review" [TIAB:~1] OR "methodology review" [TIAB:~1] OR ("mixed

eTable 1. Search strategy for PubMed (continued)

No.	Search Terms/Equations
	methods" [TIAB:~0] AND "methods review" [TIAB:~1]) OR ("mixed methods" [TIAB:~0] AND "methods synthesis" [TIAB:~1]) OR "narrative synthesis" [TIAB:~1] OR "overview reviews" [TIAB:~4] OR ("PRISMA" [TIAB] AND (guideline [TIAB] OR guidelines [TIAB] OR preferred [TIAB] OR reporting [TIAB] OR requirements [TIAB])) OR "PRISMA-P" [TIAB:~0] OR "prognostic review" [TIAB:~1] OR "psychometric review" [TIAB:~1] OR ("qualitative evidence" [TIAB:~0] AND "evidence synthesis" [TIAB:~0]) OR ("qualitative research" [TIAB:~0] AND "research synthesis" [TIAB:~0]) OR ("rapid evidence" [TIAB:~0] AND "evidence assessment" [TIAB:~0]) OR "rapid realist" [TIAB:~0] OR "rapid review" [TIAB:~1] OR "rapid reviews" [TIAB:~1] OR "realist review" [TIAB:~1] OR ("review economic" [TIAB:~1] AND ("economic evaluation" [TIAB:~1] OR "economic evaluations" [TIAB:~1])) OR "review reviews" [TIAB:~1] OR "realist syntheses" [TIAB:~1] OR "realist synthesis" [TIAB:~1] OR "scoping review" [TIAB:~2] OR "scoping reviews" [TIAB:~2] OR "scoping studies" [TIAB:~2] OR "scoping study" [TIAB:~2] OR "systematic evidence map" [TIAB] OR "systematic mapping" [TIAB:~2] OR "systematic literature" [TIAB:~1] OR "systematic Medline" [TIAB:~2] OR "systematic PubMed" [TIAB:~2] OR "systematic review" [TIAB:~2] OR "systematic reviews" [TIAB:~2] OR "systematical review" [TIAB:~1] OR "systematical reviews" [TIAB:~2] OR "systematically identified" [TIAB:~1] OR "systematically review" [TIAB:~1] OR "systematically reviewed" [TIAB:~1] OR "systematized review" [TIAB:~1] OR "umbrella review" [TIAB:~2] OR "umbrella reviews" [TIAB:~2])
#64	#18 AND #62 AND #63

eTable 2. Search strategy for Embase

No.	Search Terms/Equations
#1	'prematurity'/exp
#2	'prematurity':ti,ab OR 'birth premature':ti,ab OR 'infant, premature':ti,ab OR 'infant, premature, diseases':ti,ab OR 'neonate, premature':ti,ab OR 'pre-mature birth':ti,ab OR 'pre-mature infant':ti,ab OR 'pre-maturity':ti,ab OR 'pre-term babies':ti,ab OR 'pre-term baby':ti,ab OR 'pre-term birth':ti,ab OR 'pre-term child':ti,ab OR 'pre-term infant':ti,ab OR 'pre-term infants':ti,ab OR 'pre-term neonate':ti,ab OR 'pre-term neonates':ti,ab OR 'pre-term newborn':ti,ab OR 'pre-term newborns':ti,ab OR 'premature':ti,ab OR 'premature babies':ti,ab OR 'premature baby':ti,ab OR 'premature birth':ti,ab OR 'premature child':ti,ab OR 'premature childbirth':ti,ab OR 'premature infant':ti,ab OR 'premature infant disease':ti,ab OR 'premature infant diseases':ti,ab OR 'premature infants':ti,ab OR 'premature neonate':ti,ab OR 'premature neonates':ti,ab OR 'premature newborn':ti,ab OR 'premature newborns':ti,ab OR 'premature syndrome':ti,ab OR 'prematuritas':ti,ab OR 'prematurities':ti,ab OR 'preterm babies':ti,ab OR 'preterm baby':ti,ab OR 'preterm birth':ti,ab OR 'preterm child':ti,ab OR 'preterm infant':ti,ab OR 'preterm infants':ti,ab OR 'preterm neonate':ti,ab OR 'preterm neonates':ti,ab OR 'preterm newborn':ti,ab OR 'preterm newborns':ti,ab
#3	#1 OR #2
#4	'gestational age'/exp
#5	'gestational age':ti,ab OR 'age, gestation':ti,ab OR 'gestation age':ti,ab OR 'gestation time':ti,ab
#6	#4 OR #5
#7	#3 OR #6
#8	'low birth weight'/exp
#9	'birth weight, low':ti,ab OR 'infant, low birth weight':ti,ab OR 'lbw baby':ti,ab OR 'lbw infant':ti,ab OR 'lbw neonate':ti,ab OR 'lbw newborn':ti,ab OR 'low birth weight infant':ti,ab OR 'low birthweight':ti,ab OR 'neonatal underweight':ti,ab OR 'low birth weight':ti,ab
#10	#8 OR #9
#11	'birth weight'/exp
#12	'birthweight':ti,ab OR 'neonatal weight':ti,ab OR 'newborn weight':ti,ab OR 'weight, birth':ti,ab OR 'birth weight':ti,ab
#13	#11 OR #12
#14	#10 OR #13
#15	#7 OR #14
#16	'outcome of education':ti,ab OR 'educational outcome':ti,ab OR 'education outcome':ti,ab
#17	'academic achievement':ti,ab OR 'academic performance':ti,ab OR 'academic test performance':ti,ab OR 'achievement, academic':ti,ab OR 'educational test performance':ti,ab OR 'school achievement':ti,ab OR 'school adjustment':ti,ab OR 'school behavior':ti,ab OR 'school behaviour':ti,ab OR 'school performance':ti,ab

eTable 2. Search strategy for Embase (continued)

No.	Search Terms/Equations
#18	'educational status':ti,ab
#19	'academic success':ti,ab OR 'educational success':ti,ab OR 'school success':ti,ab OR 'schooling success':ti,ab
#20	'disorder, learning':ti,ab OR 'impaired learning':ti,ab OR 'learning deficit':ti,ab OR 'learning difficulty':ti,ab OR 'learning disabilities':ti,ab OR 'learning disability':ti,ab OR 'learning disorders':ti,ab OR 'learning disturbance':ti,ab OR 'learning impairment':ti,ab OR 'learning problem':ti,ab OR 'specific learning disorder':ti,ab OR 'learning disorder':ti,ab
#21	'child education':ti,ab OR 'college admission test':ti,ab OR 'education service':ti,ab OR 'education, nonprofessional':ti,ab OR 'educational measurement':ti,ab OR 'intellectual training':ti,ab OR 'internship,nonmedical':ti,ab OR 'perceptorship':ti,ab OR 'preceptorship':ti,ab OR 'school admission criteria':ti,ab OR 'self-evaluation programmes':ti,ab OR 'self-evaluation programs':ti,ab OR 'training support':ti,ab OR 'education':ti,ab
#22	'nonattending students':ti,ab OR 'pupil absenteeism':ti,ab OR 'school absenteeism':ti,ab OR 'school non-attendance':ti,ab OR 'school nonattendance':ti,ab OR 'student absenteeism':ti,ab OR 'student non-attendance':ti,ab OR 'students` absenteeism':ti,ab OR 'school attendance':ti,ab
#23	'academic under-achievement':ti,ab OR 'academic under-performance':ti,ab OR 'acedemic underperformance':ti,ab OR 'educational under-achievement':ti,ab OR 'educational under-performance':ti,ab OR 'educational underachievement':ti,ab OR 'educational underperformance':ti,ab OR 'school under-achievement':ti,ab OR 'school underachievement':ti,ab OR 'school underperformance':ti,ab OR 'suboptimal academic achievement':ti,ab OR 'suboptimal academic performance':ti,ab OR 'suboptimal school performance':ti,ab OR 'academic underachievement':ti,ab
#24	'education drop out':ti,ab OR 'education dropout':ti,ab OR 'school drop out':ti,ab OR 'school drop outs':ti,ab OR 'school dropouts':ti,ab OR 'student drop out':ti,ab OR 'student drop outs':ti,ab OR 'student dropout':ti,ab OR 'student dropouts':ti,ab OR 'school dropout':ti,ab
#25	'back to school':ti,ab OR 'resumption of school':ti,ab OR 'resumption of schooling':ti,ab OR 'return to schooling':ti,ab OR 'returning to school':ti,ab OR 'school resumption':ti,ab OR 'school return':ti,ab OR 'return to school':ti,ab
#26	'educational failure':ti,ab OR 'failure in school':ti,ab OR 'school failure':ti,ab OR 'academic failure':ti,ab

eTable 2. Search strategy for Embase (continued)

No.	Search Terms/Equations
#27	'academic under-achievement':ti,ab OR 'academic under-performance':ti,ab OR 'academic underperformance':ti,ab OR 'educational under-achievement':ti,ab OR 'educational under-performance':ti,ab OR 'educational underachievement':ti,ab OR 'educational underperformance':ti,ab OR 'school under-achievement':ti,ab OR 'school underachievement':ti,ab OR 'school underperformance':ti,ab OR 'suboptimal academic achievement':ti,ab OR 'suboptimal academic performance':ti,ab OR 'suboptimal school performance':ti,ab OR 'academic underachievement':ti,ab
#28	'math disability':ti,ab OR 'mathematical disability':ti,ab OR 'mathematics disability':ti,ab OR 'mathematics disorder':ti,ab OR 'maths disability':ti,ab OR 'dyscalculia':ti,ab
#29	'i.q':ti,ab OR 'i.q.':ti,ab OR 'intellectual quotient':ti,ab OR 'intelligence coefficient':ti,ab OR 'intelligent quotient':ti,ab OR 'iq':ti,ab OR 'iq score':ti,ab OR 'quotient, intelligence':ti,ab OR 'intelligence quotient':ti,ab
#30	'intelligence measurement':ti,ab OR 'intelligence tests':ti,ab OR 'measurement, intelligence':ti,ab OR 'intelligence test':ti,ab
#31	'ability, reading':ti,ab OR 'letter learning':ti,ab OR 'reading ability':ti,ab OR 'reading capability':ti,ab OR 'reading skill':ti,ab OR 'reading skills':ti,ab OR 'literacy':ti,ab
#32	'numeric reasoning':ti,ab OR 'numeric skills':ti,ab OR 'numerical reasoning':ti,ab OR 'numerical skill':ti,ab OR 'numeracy':ti,ab
#33	'cognitive accessibility':ti,ab OR 'cognitive balance':ti,ab OR 'cognitive dissonance':ti,ab OR 'cognitive function':ti,ab OR 'cognitive structure':ti,ab OR 'cognitive symptoms':ti,ab OR 'cognitive task':ti,ab OR 'cognitive thinking':ti,ab OR 'neurobehavioural manifestations':ti,ab OR 'volition':ti,ab OR 'cognition':ti,ab
#34	'education cost':ti,ab OR 'educational cost':ti,ab OR 'school retention':ti,ab OR 'school outcome':ti,ab OR 'learning outcome':ti,ab
#35	#16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR 27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34
#36	'systematic review'/de OR 'systematic review (topic)'/de OR (('comprehensive':ti,ab,kw OR 'mapping':ti,ab,kw OR 'methodology':ti,ab,kw OR 'scoping':ti,ab,kw OR 'systematic':ti,ab,kw) AND ('search':ti,ab,kw OR 'searched':ti,ab,kw OR 'searches':ti,ab,kw OR 'studies':ti,ab,kw) AND ('cinahl':ti,ab,kw OR 'cochrane':ti,ab,kw OR 'embase':ti,ab,kw OR 'psycinfo':ti,ab,kw OR 'pubmed':ti,ab,kw OR 'medline':ti,ab,kw OR 'scopus':ti,ab,kw OR 'web of science':ti,ab,kw OR 'bibliographic review':ti,ab,kw OR 'bibliographic reviews':ti,ab,kw OR 'literature review':ti,ab,kw OR 'literature reviews':ti,ab,kw OR 'literature search':ti,ab,kw OR 'literature searches':ti,ab,kw OR 'qualitative review':ti,ab,kw OR 'qualitative reviews':ti,ab,kw OR 'quantitative review':ti,ab,kw OR 'quantitative reviews':ti,ab,kw)) OR 'comprehensive review':ti,ab,kw OR 'comprehensive reviews':ti,ab,kw OR 'comprehensive search':ti,ab,kw OR

eTable 2. Search strategy for Embase (continued)

No.	Search Terms/Equations
	'comprehensive searches':ti,ab,kw OR 'critical review':ti,ab,kw OR 'critical reviews':ti,ab,kw OR (('electronic database':ti,ab,kw OR 'electronic databases':ti,ab,kw OR databases NEAR/3 searched) AND (eligibility:ti,ab,kw OR excluded:ti,ab,kw OR exclusion:ti,ab,kw OR included:ti,ab,kw OR inclusion:ti,ab,kw)) OR 'evidence assessment':ti,ab,kw OR 'evidence review':ti,ab,kw OR 'exploratory review':ti,ab,kw OR 'framework synthesis':ti,ab,kw OR 'mapping review':ti,ab,kw OR 'meta-review':ti,ab,kw OR 'meta-synthesis':ti,ab,kw OR 'methodology review':ti,ab,kw OR 'mixed methods review':ti,ab,kw OR 'mixed methods synthesis':ti,ab,kw OR (overview NEAR/4 reviews) OR 'PRISMA':ab OR ('preferred':ti,ab,kw and reporting:ti,ab,kw) OR 'prognostic review':ti,ab,kw OR 'psychometric review':ti,ab,kw OR 'rapid evidence assessment':ti,ab,kw OR 'rapid literature review':ti,ab,kw OR 'rapid literature search':ti,ab,kw OR 'rapid realist':ti,ab,kw OR 'rapid review':ti,ab,kw OR 'rapid reviews':ti,ab,kw OR 'realist review':ti,ab,kw OR 'review of reviews':ti,ab,kw OR 'scoping review':ti,ab,kw OR 'scoping reviews':ti,ab,kw OR 'scoping study':ti,ab,kw OR 'systematic evidence map':ti,ab,kw OR 'systematic evidence mapping':ti,ab,kw OR 'systematic literature':ti,ab,kw OR 'systematic Medline':ti,ab,kw OR 'systematic PubMed':ti,ab,kw OR 'systematic review':ti,ab,kw OR 'systematic reviews':ti,ab,kw OR 'systematic search':ti,ab,kw OR 'systematic searches':ti,ab,kw OR 'systematical literature review':ti,ab,kw OR 'systematical review':ti,ab,kw OR 'systematical reviews':ti,ab,kw OR 'systematically identified':ti,ab,kw OR 'systematically review':ti,ab,kw OR 'systematically reviewed':ti,ab,kw OR 'umbrella review':ti,ab,kw OR 'umbrella reviews':ti,ab,kw OR '13616137':is OR 'Cochrane Database of Systematic Reviews'/jt
#37	#15 AND #35 AND #36

eTable 3. Search strategy for ERIC

No.	Search Terms/Equations
#1	noft (preterm birth) AND noft (review)
#2	noft(premature birth) AND noft(review)
#3	noft(gestational age) AND noft(review)
#4	noft(low birth weight) AND noft(review)
#5	noft(birth weight) AND noft(review)
#6	noft(preterm birth) AND noft(meta analysis)
#7	noft(premature birth) AND noft(meta analysis)
#8	noft(gestational age) AND noft(meta analysis)
#9	noft(low birth weight) AND noft(meta analysis)
#10	noft(birth weight) AND noft(meta analysis)

eTable 4. Search strategy for RePEc

No.	Search Terms/Equations
#1	"preterm birth" AND (education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "review"
#2	"premature birth" AND (education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "review"
#3	"gestational age" AND (education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "review"
#4	"low birth weight" AND (education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "review"
#5	"birth weight" AND (education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "review"
#6	"preterm birth" AND (education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "meta analysis"
#7	"premature birth" AND(education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "meta analysis"
#8	"gestational age" AND (education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "meta analysis"
#9	"low birth weight" AND (education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "meta analysis"
#10	"birth weight" AND (education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "meta analysis"

eTable 5. Search strategy for Google Scholar

No.	Search Terms/Equations
#1	"preterm birth" AND (education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "review"
#2	"premature birth" AND (education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "review"
#3	"gestational age" AND (education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "review"
#4	"low birth weight" AND (education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "review"
#5	"birth weight" AND (education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "review"
#6	"preterm birth" AND (education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "meta analysis"
#7	"premature birth" AND(education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "meta analysis"
#8	"gestational age" AND (education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "meta analysis"
#9	"low birth weight" AND (education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "meta analysis"
#10	"birth weight" AND (education OR academic OR learning OR literacy OR numeracy OR study OR school OR intelligence) AND "meta analysis"

eTable 6. Search strategy for EconLit

No.	Search Terms/Equations
#1	preterm birth
#2	premature birth
#3	gestational age
#4	low birth weight
#5	birth weight

eTable 7. Search strategy for WHO, UNICEF, UNESCO, OECD, and World Bank websites

No.	Search Terms/Equations
#1	preterm birth
#2	premature birth
#3	gestational age
#4	low birth weight
#5	birth weight

eTable 8. Characteristics of the included systematic reviews with meta-analyses

Author	Sources	Range	N	Country of origin of included studies	Exposure	Outcome	Age	Appraisal
Aakvik et al. (2024)	PubMed, Embase	Up to 2022	5	Finland, Norway, New Zealand	VPT/VLBW (<32 w/<1.5 kg)	IQ	22–28	NOS
Aarnoudse et al. (2009)	PubMed, PsycINFO, WOS	1998–2008	35	N/A	VPT/VLBW (<33 w/<1.5 kg)	Math, reading, spelling	5–22.3	N/A
Allotey et al. (2017)	PubMed, Embase	1980–2016	74	UK, Canada, Netherlands, Australia, USA, Germany, Sweden, New Zealand, Norway, Finland, Ireland, Switzerland, Israel, China, Spain, Estonia	VPT (<28 w), MPT (28-33+6 w), LPT (34-36+6 w)	IQ, reading, math, spelling	>2	NOS
Arpi et al. (2019)	PubMed, PsycINFO	2000-2017	13	Finland, Netherlands, New Zealand, Italy, United States	VPT/VLBW (<32 w/<1.5 kg), EPT/ELBW (<28 w/<1.0 kg), VPT/VLBW (28-32w/1.0-1.5 kg)	IQ	3–5	NOS
Bhutta et al. (2002)	MEDLINE	1980–2001	31	N/A	PTB (<37 w)	IQ	5–14	10-point
Brydges et al. (2018)	PsycInfo, WOS, PubMed	Up to 2017	60	N/A	VPT (<32 w)	IQ	4–17	10-point
Burstein et al. (2024)	MEDLINE, APA PsycInfo, EBSCO	1970–2022	161	North America, Europe, Oceania, others	PTB (<37 w)	IQ	0–7	NOS
Chan et al. (2016)	Medline, Embase, CINAHL, Cochrane Library, ERIC	1975–2013	22	USA, Europe, Belarus	LPT (34–36 w)	IQ, school completion	2–36	Rob, NOS, ISPOR
Christians et al. (2023)	WOS, Scopus, Ovid MEDLINE	Up to 2022	24	N/A	PTB/LBW (<37 w/<2.5 kg)	IQ	1–20	NOS, NHLBI
Eves et al. (2021)	PubMed, RECAP Consortium, and APIC Consortium	1978–1995	13	United Kingdom, Finland, Germany, Norway, Australia, New Zealand, Ireland	VPT (<32 w) VLBW (<1.5 kg)	IQ	mean: 24.6	NOS

eTable 8. Characteristics of the included systematic reviews with meta-analyses (continued)

Author	Sources	Range	N	Country of origin of included studies	Exposure	Outcome	Age	Appraisal
Gamarra et al. (2021)	PubMed, Google Scholar, Medline	2000–2021	16	Sweden, Norway, Finland, New Zealand, United States	MLPT (32-36 6/7 w)	IQ	16–77	NOS
Gu et al. (2017)	PubMed, Embase	1980–2016	57	USA, UK, Australia, Canada, Sweden, Finland, Netherlands, Norway, China, Spain, Germany, France, India, Ireland, Israel, Italy, South Korea, Mexico, New Zealand, Switzerland, Denmark	LBW (<2.5 kg), ELBW (<1.0 kg), VLBW (1.0–1.5 kg), MLBW (1.5–2.5 kg)	IQ	4–26	N/A
Gutiérrez et al. (2024)	WOS, Scopus, PsycINFO	2000–2019	40	North America, Europe, Asia, Oceania.	LBW or PTB	Math	4–20	NOS
Gutiérrez et al. (2024)	WOS, Scopus, PsycINFO	2010–2019	53	USA, Canada, Ireland, Italy, Australia, New Zealand, Sweden, Finland, India, others	PTB (≤ 37 w), LPT (33–36 w), VPT (28–32 w), EPT (<28 w)	Reading, spelling	5–18	NOS
Kerr et al. (2011)	Medline, Embase, PsycINFO	1980–2009	27	United Kingdom, Italy, Spain, Norway,Germany, Sweden, Israel, United States, Canada, Australia, New Zealand, China	PTB (<37 w)	IQ	4–16	N/A
Kormos et al. (2013)	PsychINFO, PubMed, Ovid, CINAHL, ProQuest, ERIC	Up to 2011	15	N/A	LBW (<2.5 kg)	IQ	>13	N/A
Kovachy et al. (2015)	PubMed, PsycINFO, ERIC, EBSCO Academic Search Premier, SCOPUS, Google Scholar	2000–2013	14	N/A	PTB (mean<32 w)	Reading	6–13	N/A
McBryde et al. (2020)	PubMed/MEDLINE, PsycINFO, CINAHL.	1980–2018	33	United States, Canada, United Kingdom, Ireland, Australia, New Zealand, India	PTB (<37 w)	Reading, math	5–18	NOS

eTable 8. Characteristics of the included systematic reviews with meta-analyses (continued)

Author	Sources	Range	N	Country of origin of included studies	Exposure	Outcome	Age	Appraisal
Radaelli et al. (2023)	PubMed, Cochrane Library, WOS	Up to 2021	5	Brazil	LBW (<2.5 kg)	IQ	0–8	STROBE
Twilhaar et al. (2018)	PubMed, WOS, PsycINFO	1990–2008	71	N/A	EPT (<28 w) VPT (28-32 w)	IQ	>5	NOS
Twilhaar et al. (2018)	PubMed, WOS, PsycINFO, ERIC	Up to 2017	17	N/A	PTB (<37 w)	Math, reading, spelling, SEN	6–18	NOS
Upadhyay et al. (2019)	PubMed, Google Scholar	Up to 2017	19	India, Pakistan, Bangladesh, Nepal, Sri Lanka	LBW (<2.5 kg)	IQ	N/A	NOS

Note: N (Number of studies included), PTB(Preterm birth), EPT (Extremely Preterm Birth), VPT (Very Preterm Birth), MPT(Moderately Preterm birth), LPT(Late Preterm birth), LBW(Low birth weight), ELBW (Extremely Low Birth Weight), VLBW (Very Low Birth Weight), MLBW (Moderately Low Birth Weight), w (Weeks), SEN (Special educational needs), NOS(Newcastle-Ottawa Scale), NHLBI (National Institutes of Health Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies), Rob (Cochrane Risk of Bias tool), ISPOR (International Society for Pharmacoeconomics and Outcomes Research checklist), STROBE (Strengthening the Reporting of Observational Studies in Epidemiology), N/A (Not Applicable).

eTable 9. Key results of the included systematic reviews with meta-analyses

Author	Participants	Results/Findings	Heterogeneity
Aakvik et al. (2024)	Total N = 1644 (595 VPT/VLBW;1049 Control)	IQ: MD (95%CI) = −14.4 (−17.1, −11.5)	N/A
Aarnoudse et al. (2009)	Mathematics(N = 2753) Reading (N = 2639) Spelling (N = 1251)	Mathematics: SMD (95%CI) = −0.60 (−0.74, −0.46) Reading: SMD (95%CI) = −0.48 (−0.60, −0.34) Spelling: SMD (95%CI) = −0.76 (−1.13, −0.40)	Mathematics: Q = 34.59, P < 0.001 Reading: Q = 26.21, P = 0.01 Spelling: Q = 80.76 , P < 0.001
Allotey et al. (2017)	Total N = 64061 (29810 PTB; 34251 TB)	General IQ: SMD (95% CI) = −0.70 (−0.73, −0.66) Non-verbal IQ: SMD (95% CI) = −0.67 (−0.73, −0.60) Verbal IQ: SMD (95% CI) = −0.53 (−0.60, −0.47) Reading: SMD (95% CI) = −0.61 (−0.74, −0.47) Math: SMD (95% CI) = −0.68 (−0.93, −0.44) Spelling: SMD (95% CI) = −0.55 (−0.71, −0.39)	General IQ: I^2 = 70.8% Non-verbal IQ: I^2 = 70.1% Verbal IQ: I^2 = 73.2% Reading: I^2 = 45.9% Math: I^2 = 86% Spelling: I^2 = 49.1%
Arpi et al. (2019)	Total N = 2527 (1322 PTB/LBW; 1205 TB)	VPT/VLBW IQ: SMD (95%CI) = −0.77 (−0.88, −0.66) EPT/ELBW IQ: SMD (95%CI) = −0.81 (−1.02, −0.62) VPT/VLBW IQ: SMD (95%CI) = −0.75 (−0.88, −0.66)	VPT/VLBW (<32 /<1500): I^2 = 0% EPT/ELBW (<28/<1000): I^2 = 0% VPT/VLBW (28–32/1000–1500): I^2 = 0%
Bhutta et al. (2002)	Total N (IQ) = 3276 (1556 PTB; 1720 TB)	PT IQ: MD (95% CI) = −10.9 (−12.5, −9.2)	Cochran's Q test: χ^2 = 33.65; P = 0.006
Brydges et al. (2018)	Total N = 12634 (6163 VPT; 5471 TB)	4-17 years old IQ: SMD (95% CI) = −0.82(−0.90, −0.74) 4-10 years old IQ: SMD (95% CI) = −0.86 (−0.99, −0.73) 11-17 years old IQ: SMD (95% CI) = −0.76 (−0.91, −0.60)	4-17: I^2 = 62.87% 4-10: I^2 = 69.62% 11-17: I^2 = 19.12%
Burstein et al. (2024)	Total N = 39799	General IQ: SMD (95% CI) = −0.57 (−0.63, −0.52) Verbal IQ: SMD (95% CI) = −0.49 (−0.56, −0.42) Non-verbal IQ: SMD (95% CI) = −0.62 (−0.70, −0.53)	General IQ: I^2 = 76.7% Verbal IQ : I^2 = 72% Non-verbal IQ: I^2 = 76.5%
Chan et al. (2016)	Total N (early childhood IQ) = 1793 Total N (adulthood IQ) = 14817 Total N (VIQ) = 286 Total N (school completion) = 33930	Early childhood IQ: RR (95% CI) = 1.38 (1.06, 1.79) Adulthood IQ: SMD (95% CI) = 0.05 (0.04, 0.07) VIQ: RR (95% CI) = 1.34 (0.83, 2.17) School completion: RR (95% CI) = 1.13 (1.11, 1.15)	Early childhood IQ: I^2 = 46% Adulthood IQ: I^2 = 0% VIQ: I^2 = 0% School completion: I^2 = 0%

eTable 9. Key results of the included systematic reviews with meta-analyses (continued)

Author	Participants	Results/Findings	Heterogeneity
Christians et al. (2023)	N/A	Severe prematurity/low birth weight IQ: males SMD (95%CI) = −0.86 (−1.19, −0.54) females SMD (95%CI) = −0.63 (−0.94, −0.32) Moderate prematurity/low birth weight IQ: males SMD (95%CI) = −0.15 (−0.32, 0.03) females SMD (95%CI) = −0.24 (−0.47, −0.02) No significant sex differences were identified for these effects.	Severe prematurity/low birth weight: I^2 = 76% Moderate prematurity/low birth weight: I^2 = 67%
Eves et al. (2021)	Total N = 2135 (1068 VPT/VLBW; 1067 TB)	VPT/VLBW IQ：SMD (95% CI) = –0.84 (–0.97, –0.71)	VPT/VLBW：I^2 = 41%
Gamarra et al. (2021)	N/A	MLPT IQ：SMD (95% CI) = 0.38 (-0.39, 1.14)	IQ: I^2 = 36%
Gu et al. (2017)	Total N = 12137 (6683 LBW; 5454 NBW)	LBW IQ: MD (95% CI) = −10.47 (−11.68, −9.26) ELBW IQ: MD (95% CI) = −13.8 (−16.09, −11.52) VLBW IQ: MD (95% CI) = −9.85 (−11.27, −8.43) MLBW IQ: MD (95% CI) = −6.83 (−8.89, −4.76)	LBW: I^2 = 79.9% ELBW: I^2 = 82.5% VLBW: I^2 = 70.6% MLBW: I^2 = 43.7%
Gutiérrez et al. (2024)	Total N = 11752 (5876 PTB, 5353 TB)	EP/ELBW Math: SMD (95% CI) = −0.89 (−1.03, −0.75) VP/VLBW Math: SMD (95% CI) = −0.45(−0.57, −0.33) LP/LBW Math: SMD (95% CI) = −0.41(−0.60, −0.23)	EP/ELBW: I^2 = 83.57% VP/VLBW: I^2 = 67.00% LP/LBW: I^2 = 72.40%
Gutiérrez et al. (2024)	Total N = 33500 (13765 PTB; 19735 TB)	General reading skills: SMD (95% CI) = −0.55 (−0.80, −0.30) Reading: SMD (95% CI) = −0.59 (−0.94, −0.23) Spelling: SMD (95% CI) = −0.72 (−0.94, −0.49)	General reading skills: I^2 = 98.98 Reading: I^2 = 99.26 Spelling: I^2 = 93.87
Kerr et al. (2011)	Total N = 7044 (3504 PTB; 3540 TB)	IQ: MD (95% CI) = −11.94 (−13.42,−10.47)	IQ: I^2 = 74.2%
Kormos et al. (2013)	Total N = 24152 (2166 LBW, 21986 NBW)	IQ: MD (95% CI) = −7.63 (−9.31,−5.95)	IQ: LBW:I^2 = 70.79%
Kovachy et al. (2015)	Total N = 4109 (2438 PTB; 1671 TB)	Decoding: SMD (95% CI) = −0.421 (−0.57,−0.27) Reading comprehension: SMD (95% CI) = −0.532 (−0.8,−0.26)	Decoding: I^2 = 67.7% Reading comprehension: I^2 = 83.7%
Radaelli et al.(2023)	Total N = 7323 (388 LBW; 352 TB)	IQ: SMD (95% CI) = −0.71 (−0.99, −0.44)	IQ: I^2 = 67%

eTable 9. Key results of the included systematic reviews with meta-analyses (continued)

Author	Participants	Results/Findings	Heterogeneity
McBryde et al. (2020)	Total N = 7323 (4006 PTB; 3317 TB)	Aggregate Reading: MD (95% CI) = -7.98 (−13.05, −2.91) Decoding: MD (95% CI) = −10.18 (−16.83, −3.53) Word Identification: MD (95% CI) = −7.44 (−9.08, −5.80) Pseudoword Decoding: MD (95% CI) = −5.37 (−27.41, 16.67) Reading Comprehension: MD (95% CI) = −7.96 (−12.15, −3.76) Aggregate Mathematics: MD (95% CI) = −12.90 (−23.38, −2.43) Mathematical Knowledge: MD (95% CI) = −9.88 (−11.68, −8.08) Calculation: MD (95% CI) = −10.57 (−15.62, −5.52) Mathematical Fluency: MD (95% CI) = −6.89 (−13.54, −0.23) Applied Problems: MD (95% CI) = −11.41 (−17.57, −5.26)	Aggregate Reading: I^2 = 92% Decoding: I^2 = 71% Word Identification: I^2 = 69% Pseudoword Decoding: I^2 = 99% Reading Comprehension: I^2 = 81% Aggregate Mathematics: I^2 = 97% Mathematical Knowledge: I^2 = 62% Calculation: I^2 = 92% Mathematical Fluency: I^2 = 72% Applied Problems: I^2 = 91%
Twilhaar et al. (2018)	Total N = 12907 (7752 EPT/VPT; 5155 TB)	EP/VP IQ: SMD (95% CI) = −0.86 (−0.94, −0.78)	IQ: I^2 = 74.13%
Twilhaar et al. (2018)	Total N = 3939 (2390 PTB;1549 TB)	Arithmetic: SMD (95% CI) = −0.71 (−0.894, −0.53) Reading: SMD (95% CI) = −0.443 (−0.641, −0.245) Spelling: SMD (95% CI) =-0.522 (-0.63, -0.415) SEN: RR (95% CI) = 2.85 (2.117, 3.837)	Arithmetic: I^2 = 81.91% Reading: I^2 = 86.27% Spelling: I^2 = 0% SEN: I^2 = 69.46%
Upadhyay et al. (2019)	Total N = 5999 (2236 LBW; 3763 NBW)	LBW(<2.5kg) IQ: MD (95% CI) = -4.56 (-6.38, -2.74) LBW(<2.0kg) IQ: MD (95% CI) = -7.23 (−9.20, −5.26)	LBW(<2.5kg): I^2 = 87.5% LBW(<2.0kg): I^2 = 8.7%

Note: PTB(Preterm birth), EPT (Extremely Preterm Birth), VPT (Very Preterm Birth), MPT(Moderately Preterm birth), LPT(Late Preterm birth), LBW(Low birth weight), ELBW (Extremely Low Birth Weight), VLBW (Very Low Birth Weight), TB (Term Birth), NBW (Normal Birth Weight), N/A (Not Applicable).

eTable 10. Characteristics of the included systematic reviews with narrative syntheses

Author	Sources	Range	N	Country	Exposure	Outcome	Age	Appraisal
Batchelor et al. (2021)	Medline, PubMed, Scopus, WOS	2000–2021	8	Australia, Canada	LBW (BW<2.5 kg)	Education	5–12 years	CASP, ATSIQAT
Esparza et al. (2020)	PubMed, Virtual Health Library	Up to 2017	54	Predominantly developed countries	Birth weight	Cognition	To adulthood	N/A
Evensen et al. (2022)	PubMed, Embase	1992–2019	58	Norway	PTB (GA<37 w) VLBW (BW<1.5 kg)	Education	To 28 years	N/A
Farajdokht et al. (2017)	PubMed, Google Scholar, Scopus, WOS	2000-2015	44	Norway, Australia, Germany, Finland, US, Denmark, Canada, Switzerland, UK, China, Japan, Brazil, India	VLBW (BW<1.5 kg)	Cognition, Education	2–35 years	N/A
Lacalle et al. (2023)	WOS, Scopus, PsycInfo, Dialnet	2012–2022	40	Predominantly Europe	PTB (GA<37 w)	Cognition	6–12 years	MMAT
Machado et al. (2014)	MEDLINE, LILACS, Cochrane Library	Up to 2012	65	Brazil, United State, Canada, European countries, others	LPT (GA 34-36 6/7 w)	Education	To 36 years	N/A
Martínez et al. (2021)	PubMed, Scielo, PsycINFO	2010-2020	16	US, Canada, Norway, Netherlands, Denmark, UK, Spain	LPT (GA 34-36 6/7 w)	Cognition Education	3–13 years	CASP
McGowan et al. (2011)	Medline, CINAHL, Embase, PsycINFO, Maternity and Infant Care, LILACS, Science Citation Index, Cochrane Database of Systematic Reviews, CENTRAL, NHS Centre for Reviews and Dissemination	1980–2010	10	US, France, England, Norway, Brazil	LPT (GA 34-36 w)	Cognition Education	1-7 years	ISPOR, Hayden
Rodrigues et al. (2006)	MEDLINE, LILACS, Excerpta Medica	1994–2004	18	N/A	VLBW (BW<1.5 kg)	Education	Mean age: 6–17 years	Custom

eTable 10. Characteristics of the included systematic reviews with narrative syntheses (continued)

Author	Sources	Range	N	Country	Exposure	Outcome	Age	Appraisal
Moreira et al. (2014)	Pubmed, MEDLINE, LILACS, IBECS, Cochrane, CINAHL, WOS, Scopus, PsycNET	2002–2012	33	US, Australia, Netherlands, France, Denmark, Sweden, Canada, England	EPT (GA<28 w) VPT (GA 28–32 w) LPT (GA 33–36 w)	Education	8–10 years	STROBE,PEDro
Murray et al. (2017)	MEDLINE, Embase, PsycINFO, ClinicalTrials.gov	Up to 2016	7	US, Chile, Italy, Spain, and Belarus	LPT (GA 34–36 w)	Cognition	1–14 years	RoBANS
Petrou et al. (2001)	MEDLINE, EMBASE, CINAHL, EconLit, NHS EED, DARE, HEED	1980–1999	20	Developed countries	PTB (GA<37w) LBW (BW<2.5 kg)	Cost	To adulthood	BMJCEE
Petrou et al. (2019)	Medline, EconLit, Web of Science, the Cochrane Library, Cumulative Index to Nursing and Allied Health Literature, Embase, Scopus	2009–2017	43	OECD countries	PTB (GA <37 w)	Cost	To adulthood	CHEERS
Saha et al. (2013)	PubMed, Embase, ECONbase, EconLit, CINAHL, NBER, LILACS, Popline, WHO, World Bank, UNICEF, DFID, Save the Children, UNFPA	1990–2011	38	Most are high income countries	PTB (GA <37 w)	Cost	To adulthood	N/A
Song IG (2023)	PubMed	2017–2022	16	Korea	PTB (GA <37 w) LBW (BW<2.5 kg)	IQ	Mostly 1.5–18 years	N/A
Tripathi et al. (2015)	PubMed, CINAHL, PsycINFO, ERIC	1990–2015	20	US, UK, Australia, Italy, Spain, Israel, Canada	LPT (GA 34-36 6/7 w)	Cognition Education	1–18 years	CASP

eTable 10. Characteristics of the included systematic reviews with narrative syntheses (continued)

Author	Sources	Range	N	Country	Exposure	Outcome	Age	Appraisal
Vieira et al. (2011)	PubMed, MEDLINE, LILACS, SciELO, PsycINFO.	2005–2010	38	N/A	EPT (GA<30 w) MPT (GA 31–34 w) BPT (GA 35–36 w) VLBW (BW<1.5 kg) ELBW (BW<1.0 kg)	Cognition Education	3–12 years	N/A
Zupancic (2006)	Medline, EconLit, Proquest, Science Citation Index, SPR abstracts, March of Dimes, CDC, AGI websites	1980–2005	43	US, UK, Australia, Finland	PTB (GA<37 w) ELBW (BW<1.0 kg) VLBW (BW<1.5 kg)	Cost	To adulthood	N/A

Note: N (Number of studies included), PTB(Preterm birth), EPT (Extremely Preterm Birth), VPT (Very Preterm Birth), MPT(Moderately Preterm birth), LPT(Late Preterm birth), LBW(Low birth weight), ELBW (Extremely Low Birth Weight), VLBW (Very Low Birth Weight), MLBW (Moderately Low Birth Weight), w (Weeks), CASP (Critical Appraisal Skills Program Checklist), ATSIQAT (Aboriginal and Torres Strait Islander Quality Appraisal Tool), MMAT (Mixed Methods Appraisal Tool), ISPOR (International Society for Pharmacoeconomics and Outcomes Research checklist), Hayden (Hayden et al.'s quality-assessment guidelines), STROBE (Strengthening the Reporting of Observational Studies in Epidemiology for observational studies), PEDro (Physiotherapy Evidence Database for experimental studies), RoBANS (Risk of Bias Assessment Tool for Nonrandomized Studies), BMJCEE (British Medical Journal checklist for economic evaluations), CHEERS (Consolidated Health Economic Evaluation Reporting Standards checklist), Custom (Custom quality assessment questionnaire), N/A (Not Applicable).

eTable 11. Key results of the included systematic reviews with narrative syntheses

Author	Outcome domains	Results/Findings
Batchelor et al. (2021)	Academic attainment	LBW: lower numeracy (Adj.OR 1.48, 95% CI 1.11–1.98) and lower reading (Adj.OR 1.24, 95% CI 0.92-1.67) scores
Esparza et al. (2020)	Cognitive function	LBW was associated with lower cognitive ability at the age of 67.9
Evensen et al. (2022)	IQ, type and length of schooling	IQ: At 5, 14 and 19 years, general IQ, verbal and performance IQ were lower in the VLBW Type and length of schooling: At 14 years, one-third of the VLBW adolescents received special educational services at school and lower scores for academic performance were reported by the adolescents themselves, their mothers and teachers Almost half of the 19-year-old VLBW participants, twice as many as the controls, were in vocational education and training instead of higher education At 26 years, fewer VLBW than control participants had completed high school and one-fifth of the VLBW participants were unemployed or received disability benefits
Farajdokht et al. (2017)	IQ, type and length of schooling, academic attainment, need for additional educational support	IQ: Multiple studies indicate that VLBW/ELBW individuals have lower IQ scores compared to NBW controls. However, four studies reported that IQ scores of VLBW children remained within the normal range Education: VLBW children perform worse in academic achievement tests (Reading, Spelling, Mathematics, Vocabulary, Arithmetic) They have lower high school graduation rates, higher grade repetition rates, greater need for special educational need, lower enrollment in postsecondary educational programs. Teachers report lower educational progress rates for VLBW children and poorer school recommendations compared to NBW peers
Lacalle et al. (2023)	IQ	PTB: General IQ mean between 83.9 (14.6 SD) and 111.1 (10.3 SD) TB: General IQ mean between 100.0 (17.0 SD) and 117.1 (16.4 SD) 9% and 39% of the PT had moderate or low cognitive functioning
Machado et al. (2014)	Type and length of schooling academic attainment	Type and length of schooling: a lower proportion of young individuals who finished college/university (OR: 0.87; 95% CI: 0.84-0.89) a lower chance of finishing high school (RR: 0.96; 95% CI: 0.95-0.97) Academic attainment: a lower frequency of good performance in regular preschool tests: adjusted (OR: 0.74; 95% CI: 0.59-0.92)

eTable 11. Key results of the included systematic reviews with narrative syntheses (continued)

Author	Outcome domains	Results/Findings
Martínez et al. (2021)	Cognitive function, academic attainment	Cognitive function: Complex and rather heterogeneous conclusions Late preterm perform below the level attained by the full-term counterparts, especially at earlier ages, in the second assessment and in some tasks and measurements late preterm seem to catch up Academic attainment: Higher risk for suboptimal academic achievement in UK Foundation Stage Profile (FSP) / Key Stage 1 (KS1) and US Total School Readiness Score (TSRS) at kindergarten year LPIs were at increased risk of neurodevelopmental disabilities, lower academic performance, higher rates of special education need
McGowan et al. (2011)	IQ, type and length of schooling, academic attainment, need for additional educational support	Neurodevelopmental disability: 3 years old General cognition (DAS-II GCA), Students t test=2.16 (P=0.033) Special education need: 2 studies, OR ranges from 1.10-2.13 Reading test score: 5 years old (OR = 1.13 [0.97–1.33]); 7 years old (OR = 1.24 [1.06–1.45]) Math test score: 5 years old (OR = 1.15 [0.98–1.34]); 7 years old (OR = 1.22 [1.04–1.43]) Teacher academic ratings of Reading: 5 years old (OR = 1.30 [1.07–1.59]); 7 years old (OR = 1.28 [1.06–1.54]) Teacher academic ratings of Math: 5 years old (OR = 1.25 [1.05–1.49]);7 years old (OR = 1.19 [0.99–1.43])
Moreira et al. (2014)	Academic attainment	Not ready to start school (4 years old): aRR = 1.04 [1.00–1.09] Retention in kindergarten (5 years old): aRR = 1.11 [1.07–1.15] Retained in the same grade in kindergarten (5 years old): aRR = 1.16 [1.10–1.29] Most studies have found an association between birth weight or prematurity and academic performance, with only one study finding no association between prematurity and school performance
Petrou et al. (2001)	Educational cost	Children who weighed < 2500 g at birth were almost 50% more likely to be enrolled in any type of special education than children who were of normal weight at birth,which resulted in an estimated incremental cost to the United States education services of £322.9 million per year at 1998 price levels In Merseyside, amongst children with LBW, special education costs incurred by 8–9 years of age were greater than the total cost of health services used throughout the follow-up period. A cost per disabled child of £42 102 at 1998 price levels was calculated during those early years of education
Rodrigues et al. (2006)	Type and length of schooling academic attainment, need for additional educational support	Academic performance:all studied comfirmed worse academic performance Special education need:61.2% of studies reported higher special education need Repetition of school years: exhibited statistically higher rates

eTable 11. Key results of the included systematic reviews with narrative syntheses (continued)

Author	Outcome domains	Results/Findings
Murray et al. (2017)	IQ	One study showed a significant MD = -1.43 (-2.70 to -0.16) While two studies showed no statistically significant difference
Petrou et al. (2019)	Educational cost	At 2006 price levels, the cost of educational services for children born extremely preterm (<25 weeks) in the UK was £5,339.2, compared to £3,623.0 for term-born children At the same price level, compared with term-born children, the incremental education costs were £3,978 for those born before 28 weeks, £1,463 for those born before 33 weeks, and £494 for those born before 37 weeks
Saha et al. (2013)	Educational cost	The total cost of preterm birth in England and Wales up to age 18 was $4.567 billion (2006 price year), including hospital inpatient and outpatient care, community healthcare, social care, and special education costs
Song IG (2023)	IQ	MLPT infants had risks of developing borderline intelligence functioning and attention problems at early school age
Tripathi et al. (2015)	Cognitive outcomes, need for additional educational support	Cognitive outcomes: 75% of 16 studies found delays in LPT children; Need for additional educational support: 4 studies identified reduced academic performance or an increased special education need
Vieira et al. (2011)	IQ, type and length of schooling, academic attainment, need for additional educational support	Cognition at preschool age: The percentage of EPT children classified as having below normal cognition at preschool age varied from 33% to 36% and from 29% to 36% for MPT children. Cognition at school age: 40% to 68% of the samples of EPT children below normal cognition Academic performance: Around 9% of their sample of 339 EPT and VLBW children needed special needs education by 5 years of age. The percentage of preschool children with learning delays or difficulties was 37% of EPT and VLBW children.LPT group had increased risk of suspension and retention in kindergarten and increased probability of being referred for special needs education at 5 years.Difficulties at school were reported by the teachers of 50% of 6-year-old EPT children38 and 13% of EPT children attended schools offering special needs education by 11 years of age
Zupancic (2006)	Educational cost	School-age period: The annual educational expenditure for LBW at ages 6–15 is approximately $1,240 per child, with a national total of about $370.8 million per year (in 1988 U.S. dollars). The school-age educational expenditure for VLBW is $4,211 per child. Kindergarten expenditures were as follows:<1,000g ($6,979),1,000–1,499g ($5,740),1,500–2,499g ($4,870), ≥2,500g (control group, $4,375) Pre-school period: Preschool educational expenditure for VLBW was $290 per child; school-age expenditure for VLBW was $4,211 per child

Note: PTB (Preterm birth), EPT (Extremely Preterm Birth), VPT (Very Preterm Birth), MPT (Moderately Preterm birth), LPT (Late Preterm birth), LBW (Low birth weight), ELBW (Extremely Low Birth Weight), VLBW (Very Low Birth Weight), TB (Term Birth), NBW (Normal Birth Weight).

eTable 12. Quality assessment of included systematic reviews using the Joanna Briggs Institute tool

Author	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Overall	Classification
Aakvik et al. (2024)	Y	Y	N	N	Y	Y	U	Y	N	Y	Y	8/11	Moderate
Aarnoudse-Moens et al. (2009)	Y	Y	Y	N	N	N	U	Y	Y	Y	Y	7/11	Moderate
Allotey et al. (2017)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	11/11	High
Arpi et al.(2019)	Y	Y	N	N	Y	Y	U	Y	Y	Y	Y	8/11	Moderate
Batchelor et al. (2021)	Y	Y	N	N	Y	Y	N	Y	N/A	Y	Y	7/11	Moderate
Bhutta et al. (2002)	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	10/11	High
Brydges et al. (2018)	Y	Y	Y	N	Y	U	U	Y	Y	Y	Y	8/11	Moderate
Burstein, Aryeh, & Geva (2024)	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	10/11	High
Chan et al. (2016)	Y	Y	Y	Y	Y	U	Y	Y	N	Y	Y	9/11	High
Christians et al. (2023)	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	8/11	Moderate
Esparza-Aguilar et al. (2020)	Y	U	N	N	N	N	U	Y	N/A	Y	Y	4/11	Low
Evensen et al. (2022)	Y	Y	Y	Y	N	N	U	Y	N/A	Y	N	6/11	Moderate
Eves et al. (2021)	Y	Y	Y	N	Y	Y	Y	Y	N	Y	Y	9/11	High
Farajdokht et al. (2017)	Y	Y	N	N	N	N	U	Y	N/A	Y	Y	5/11	Moderate
Gamarra-Oca et al. (2021)	Y	N	N	N	Y	Y	Y	Y	N	Y	Y	7/11	moderate
Gu et al. (2017)	Y	Y	N	N	N	N	U	Y	Y	Y	Y	6/11	Moderate
Gutiérrez-Ortega et al. (2024)	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	10/11	High
Gutiérrez-Ortega et al. (2024)	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	9/11	High
Kerr-Wilson et al. (2011)	Y	Y	N	Y	N	N	Y	Y	Y	Y	Y	8/11	Moderate
Kormos et al. (2013)	Y	Y	Y	N	N	N	U	Y	Y	Y	Y	7/11	Moderate
Kovachy et al. (2015)	Y	N	N	N	N	N	U	Y	Y	Y	Y	5/11	Moderate
Lacalle et al. (2023)	Y	Y	N	N	Y	U	Y	Y	N/A	Y	Y	7/11	Moderate
Machado et al. (2014)	N	N	N	N	N	N	U	Y	N/A	Y	Y	3/11	Low
Martínez-Nadal & Bosch (2021)	Y	Y	N	N	Y	N	N	Y	N/A	Y	Y	6/11	moderate

eTable 12. Quality assessment of included systematic reviews using the Joanna Briggs Institute tool (continued)

Author	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Overall	Classification
McBryde et al. (2020)	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	10/11	High
McGowan et al. (2011)	Y	Y	N	Y	Y	U	U	Y	N/A	Y	Y	7/11	Moderate
Moreira et al. (2014)	Y	Y	N	N	Y	N	U	Y	N/A	Y	Y	5/11	Moderate
Murray et al. (2017)	Y	Y	Y	Y	Y	Y	Y	Y	N/A	Y	Y	10/11	High
Petrou et al. (2001)	Y	Y	Y	Y	Y	Y	U	Y	N/A	Y	Y	9/11	High
Petrou et al. (2019)	Y	Y	Y	Y	Y	U	Y	Y	N/A	Y	Y	9/11	High
Radaelli et al.(2023)	Y	N	N	N	Y	Y	Y	N	N	Y	N	5/11	Moderate
Rodrigues et al. (2006)	Y	N	N	N	Y	U	U	Y	N/A	Y	Y	5/11	Moderate
Saha & Gerdtham (2013)	Y	Y	N	Y	N	N	U	Y	N/A	Y	Y	6/11	Moderate
Song IG (2023)	Y	U	N	N	N	N	U	N	N/A	Y	Y	3/11	Low
Tripathi & Dusing (2015)	Y	Y	Y	N	Y	U	Y	Y	N/A	Y	Y	8/11	Moderate
Twilhaar et al. (2018)	Y	Y	N	N	Y	Y	U	Y	Y	Y	Y	8/11	Moderate
Twilhaar et al. (2018)	Y	N	Y	N	Y	Y	U	Y	Y	Y	Y	8/11	Moderate
Upadhyay et al. (2019)	Y	Y	Y	N	Y	Y	U	Y	Y	Y	Y	9/11	High
Vieira & Linhares (2011)	Y	Y	N	N	N	N	U	N	N/A	Y	Y	4/11	Low
Zupancic (2006)	Y	Y	N	N	N	N	U	Y	N/A	Y	Y	5/11	Moderate

Note: Y (Yes), N (No), U (Unclear), N/A (Not Applicable). “High” (9-11), “Moderate” (5-8) or “Low” (0-4).

Q1. Is the review question clearly and explicitly stated?

Q2. Were the inclusion criteria appropriate for the review question?

Q3. Was the search strategy appropriate?

Q4. Were the sources and resources used to search for studies adequate?

Q5. Were the criteria for appraising studies appropriate?

Q6. Was critical appraisal conducted by two or more reviewers independently?

Q7. Were there methods to minimize errors in data extraction?

Q8. Were the methods used to combine studies appropriate?

Q9. Was the likelihood of publication bias assessed?

Q10. Were recommendations for policy and/or practice supported by the reported data?

Q11. Were the specific directives for new research appropriate?

eTable 13. ROBIS signaling questions for risk of bias assessment of included systematic reviews

	D1: Study Eligibility Criteria					D2: Identification & Selection					D3: Data Collection & Appraisal					D4: Synthesis & Findings					
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	3.4	3.5	4.1	4.2	4.3	4.4	4.5	4.6
McBryde et al. (2020)	Y	Y	Y	PY	PY	PN	Y	Y	PY	PY	Y	PY	Y	Y	Y	Y	NI	Y	Y	Y	Y
Lacalle et al. (2023)	Y	Y	Y	PY	PY	PN	N	PN	PN	Y	Y	PY	Y	Y	NI	Y	Y	Y	PY	N	N
Martínez et al. (2021)	Y	Y	Y	PY	PY	PN	Y	PN	PN	PN	PN	PY	Y	Y	PN	Y	NI	PY	PY	N	PY
Chan et al. (2016)	Y	Y	Y	Y	PY	Y	Y	Y	PY	Y	Y	Y	Y	Y	Y	Y	NI	Y	Y	PN	PY
Eves et al. (2021)	Y	Y	Y	Y	Y	N	Y	Y	PY	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Gutiérrez et al. (2024)	Y	Y	Y	Y	Y	PN	Y	Y	PY	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	PY
Allotey et al. (2017)	Y	Y	Y	Y	Y	PY	PY	Y	PY	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Radaelli et al. (2023)	Y	Y	Y	PN	Y	PN	N	N	PY	Y	PN	N	Y	Y	Y	Y	Y	Y	Y	N	PN
Kerr-Wilson et al. (2011)	Y	PY	Y	PY	PY	PY	PY	Y	PN	PY	PY	Y	Y	N	N	Y	NI	Y	Y	Y	PY
Twilhaar et al. (2018)	Y	PN	Y	Y	Y	PN	Y	Y	Y	PN	PY	Y	Y	Y	Y	Y	PN	Y	Y	Y	PY
Kovachy et al. (2015)	Y	Y	Y	PN	Y	PN	Y	Y	PN	Y	PN	Y	Y	N	N	Y	NI	Y	Y	Y	PY
Arpi et al.(2019)	PY	PY	Y	Y	Y	PN	Y	PN	Y	Y	PN	Y	Y	Y	Y	Y	NI	Y	Y	Y	PY
Christians et al. (2023)	Y	PN	Y	Y	Y	PN	PN	Y	PN	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	PY
Aakvik et al. (2024)	PY	PY	Y	Y	Y	PY	N	PY	N	Y	PN	PN	PN	Y	Y	PN	NI	PY	PY	PY	PY
Rodrigues et al. (2006)	Y	PY	PY	PN	PY	N	Y	PN	PY	NI	NI	PN	Y	PY	NI	Y	NI	PY	PY	N	PN
Murray et al. (2017)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	PY	PY	N	PY
Batchelor et al. (2021)	Y	Y	Y	Y	PY	N	Y	N	N	Y	Y	PN	Y	Y	Y	Y	NI	PY	PY	N	PY
Moreira et al. (2014)	Y	PY	Y	PY	Y	PN	N	N	N	N	NI	PN	Y	Y	N	Y	NI	PY	PY	N	PY
Petrou et al. (2001)	Y	PY	Y	PY	PY	Y	Y	Y	Y	PY	NI	Y	Y	Y	PY	Y	NI	PY	PY	N	PY
Gamarra et al. (2021)	Y	Y	Y	PN	PY	PN	PN	Y	PN	Y	Y	Y	Y	Y	Y	Y	NI	Y	Y	Y	PY
Petrou et al. (2019)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	PY	Y	Y	NI	Y	NI	PY	PY	N	PY
Brydges et al. (2018)	Y	Y	Y	Y	Y	N	Y	PY	PY	PN	PN	PY	Y	Y	PN	Y	NI	Y	Y	PY	PY

eTable 13. ROBIS signaling questions for risk of bias assessment of included systematic reviews (continued)

	D1: Study Eligibility Criteria					D2: Identification & Selection					D3: Data Collection & Appraisal					D4: Synthesis & Findings					
	1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	3.4	3.5	4.1	4.2	4.3	4.4	4.5	4.6
Bhutta et al. (2002)	Y	Y	Y	PY	PY	N	Y	PY	PN	PY	Y	Y	Y	Y	Y	Y	NI	Y	Y	Y	Y
AarNudse et al. (2009)	Y	Y	Y	PY	PY	N	Y	PY	PY	NI	NI	Y	Y	N	N	Y	NI	Y	Y	PY	PY
Burstein et al. (2024)	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Twilhaar et al. (2018)	Y	Y	Y	Y	Y	PN	Y	PN	Y	PN	PY	Y	Y	Y	Y	Y	NI	Y	Y	Y	Y
Kormos et al. (2013)	Y	Y	Y	Y	Y	PN	PN	PY	Y	Y	NI	Y	Y	N	N	Y	NI	Y	Y	Y	Y
Gu et al. (2017)	Y	Y	Y	Y	PY	PY	N	PY	Y	PN	PN	Y	Y	N	N	Y	NI	Y	Y	Y	Y
Gutiérrez et al. (2024)	Y	Y	Y	Y	Y	PN	Y	N	Y	PY	Y	PN	Y	Y	Y	Y	Y	Y	Y	Y	Y
Upadhyay et al. (2019)	Y	Y	Y	Y	Y	PN	PY	PY	Y	Y	PY	Y	Y	Y	Y	Y	NI	Y	Y	Y	Y
McGowan et al. (2011)	Y	Y	Y	Y	Y	PY	PY	PY	PY	Y	NI	Y	Y	Y	NI	Y	NI	PY	PY	N	PY
Tripathi et al. (2015)	Y	Y	Y	PY	Y	PN	Y	Y	Y	Y	Y	Y	Y	Y	PY	Y	NI	PY	PY	N	PN
Machado et al. (2014)	PN	PN	Y	PN	Y	PN	Y	N	Y	NI	NI	N	PY	N	N	PY	NI	PY	PY	N	PN
Farajdokht et al. (2017)	Y	Y	Y	PY	Y	PN	Y	N	Y	Y	NI	N	PY	N	N	PY	NI	PY	PY	N	N
Evensen et al. (2022)	Y	Y	Y	PY	Y	PY	PN	PY	PY	PY	NI	Y	Y	N	N	PY	NI	PY	PY	N	N
Esparza et al. (2020)	Y	NI	NI	NI	NI	N	N	N	N	NI	NI	PN	Y	N	N	PY	NI	PY	PY	PN	PN
Song IG (2023)	Y	NI	NI	NI	NI	N	N	N	PY	NI	NI	PN	PY	N	N	PY	NI	PY	PY	N	N
Vieira et al. (2011)	Y	PY	Y	PY	PY	N	N	N	PY	NI	NI	PN	PY	N	N	PY	NI	PY	PY	N	N
Saha et al. (2013)	Y	PY	Y	PY	PY	Y	Y	Y	N	PY	NI	PY	Y	N	N	PY	NI	PY	PY	N	N
Zupancic (2006)	Y	PY	Y	PY	PY	N	Y	N	PY	NI	NI	PY	Y	N	N	PY	NI	PY	PY	N	N

Note: Y (Yes), PY (Probably Yes), N (No), PN (Probably No), NI (No Information). D1 (Domain 1), D2 (Domain 2), D3 (Domain 3), D4 (Domain 4).

Domain 1: Study Eligibility Criteria

1.1 Did the review adhere to predefined objectives and eligibility criteria?

1.2 Were the eligibility criteria appropriate for the review question?

1.3 Were eligibility criteria unambiguous?

1.4 Were all restrictions in eligibility criteria based on study characteristics appropriate?

1.5 Were any restrictions in eligibility criteria based on sources of information appropriate?

Domain 2: Identification and Selection of Studies

2.1 Did the search include an appropriate range of databases/electronic sources for published and unpublished reports?

2.2 Were methods additional to database searching used to identify relevant reports?

2.3 Were the terms and structure of the search strategy likely to retrieve as many eligible studies as possible?

2.4 Were restrictions based on date, publication format, or language appropriate?

2.5 Were efforts made to minimize error in the selection of studies?

Domain 3: Data Collection and Study Appraisal

3.1 Were efforts made to minimize error in data collection?

3.2 Were sufficient study characteristics available for both review authors and readers to be able to interpret the results?

3.3 Were all relevant study results collected for use in the synthesis?

3.4 Was risk of bias (or methodological quality) formally assessed using appropriate criteria?

3.5 Were efforts made to minimize error in risk of bias assessment?

Domain 4: Synthesis and Findings

4.1 Did the synthesis include all studies that it should?

4.2 Were all predefined analyses reported or departures explained?

4.3 Was the synthesis appropriate given the nature and similarity in the research questions, study designs, and outcomes across included studies?

4.4 Was between-study variation minimal or addressed in the synthesis?

4.5 Were the findings robust, for example, as demonstrated through funnel plot or sensitivity analyses?

4.6 Were biases in primary studies minimal or addressed in the synthesis?

eTable 14. ROBIS domain judgments and overall risk of bias for included systematic reviews

	Domain 1 to Domain 4 judgement				Risk of Bias in the Review			
	D1 judgment	D2 judgment	D3 judgment	D4 judgment	A	B	C	Overall judgment
McBryde et al. (2020)	Low	High	Low	Low	Yes	Yes	Yes	Low
Lacalle et al. (2023)	Low	High	Low	High	No	Yes	Probably Yes	High
Martínez et al. (2021)	Low	High	High	Low	No	Yes	Probably Yes	High
Chan et al. (2016)	Low	Low	Low	High	Probably Yes	Yes	Probably Yes	Low
Eves et al. (2021)	Low	High	Low	Low	Probably Yes	Yes	Yes	Low
Gutiérrez et al. (2024)	Low	High	High	Low	Probably Yes	Yes	Yes	Low
Allotey et al. (2017)	Low	Low	Low	Low	Yes	Yes	Yes	Low
Radaelli et al.(2023)	High	High	High	High	Probably No	Yes	Yes	High
Kerr et al. (2011)	Low	High	High	Low	Probably No	Yes	Yes	High
Twilhaar et al. (2018)	High	High	Low	High	Yes	Yes	Yes	Low
Kovachy et al. (2015)	High	High	High	Low	Probably No	Yes	Yes	High
Arpi et al. (2019)	Low	High	High	Low	Probably No	Yes	Yes	High
Christians et al. (2023)	High	High	Low	Low	Probably Yes	Yes	Yes	Low
Aakvik et al. (2024)	Low	High	High	High	Probably No	Yes	Yes	High
Rodrigues et al. (2006)	High	High	High	High	Probably No	Yes	Yes	High
Murray et al. (2017)	Low	Low	Low	Low	No	Yes	Yes	Low
Batchelor et al. (2021)	Low	High	High	Low	Probably No	Yes	Yes	High
Moreira et al. (2014)	Low	High	High	Low	Probably No	Yes	Yes	High
Petrou et al. (2001)	Low	Low	Low	Low	Probably Yes	Yes	Yes	Low
Gamarra et al. (2021)	High	High	Low	Low	Probably Yes	Yes	Yes	Low

eTable 14. ROBIS domain judgments and overall risk of bias for included systematic reviews (continued)

	Domain 1 to Domain 4 judgement				Risk of Bias in the Review			
	D1 judgment	D2 judgment	D3 judgment	D4 judgment	A	B	C	Overall judgment
Petrou et al. (2019)	Low	Low	Low	Low	Probably Yes	Yes	Yes	Low
Brydges et al (2018)	Low	High	High	Low	Probably Yes	Yes	Yes	Low
Bhutta et al. (2002)	Low	High	Low	Low	Yes	Yes	Yes	Low
AarNudse et al. (2009)	Low	High	High	Low	Probably No	Yes	Yes	High
Burstein et al. (2024)	Low	High	Low	Low	Probably Yes	Yes	Yes	Low
Twilhaar et al. (2018)	Low	High	Low	Low	Probably Yes	Yes	Yes	Low
Kormos et al. (2013)	Low	High	High	Low	Probably No	Yes	Yes	High
Gu et al. (2017)	Low	High	High	Low	Probably No	Yes	Yes	High
Gutiérrez et al. (2024)	Low	High	High	Low	Probably Yes	Yes	Yes	Low
Upadhyay et al. (2019)	Low	High	Low	Low	Probably Yes	Yes	Yes	Low
McGowan et al. (2011)	Low	Low	Low	Low	Yes	Yes	Probably Yes	Low
Tripathi et al. (2015)	Low	High	Low	High	Probably Yes	Yes	Probably Yes	Low
Machado et al. (2014)	High	High	High	High	No	Yes	Probably Yes	High
Farajdokht et al. (2017)	Low	High	High	High	No	Yes	Probably Yes	High
Evensen et al. (2022)	Low	High	High	High	No	Probably No	Probably Yes	High
Esparza et al. (2020)	High	High	High	High	No	Yes	Probably Yes	High
Song IG (2023)	High	High	High	High	No	Probably Yes	Probably Yes	High
Vieira et al. (2011)	Low	High	High	High	No	Probably Yes	Probably Yes	High
Saha et al. (2013)	Low	High	High	High	Probably Yes	No	Yes	Low
Zupancic (2006)	Low	Low	High	High	No	Probably Yes	Probably Yes	High

Note: D1 (Domain 1: Study Eligibility Criteria), D2 (Domain 2: Identification and Selection of Studies), D3 (Domain 3: Data Collection and Study Appraisal), D4 (Domain 4: Synthesis and Findings). A

(Did the interpretation of findings address all of the concerns identified in domains 1 to 4?), B (Was the relevance of identified studies to the review's research question appropriately considered?), C (Did the reviewers avoid emphasizing results on the basis of their statistical significance?).

eTable 15. Umbrella meta-synthesis of associations between preterm birth and cognitive and educational outcomes

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.656	[-0.699, -0.614]	<0.001	286	49480	481723	90.252
Verbal IQ	-0.525	[-0.602, -0.448]	<0.001	89	9484	15006	77.203
Non-verbal IQ	-0.636	[-0.721, -0.55]	<0.001	82	7287	8396	76.777
Academic achievement-reading							
Aggregate measures of reading	-0.665	[-0.899, -0.431]	<0.001	11	2701	10341	95.114
Reading comprehension	-0.563	[-0.723, -0.402]	<0.001	18	1987	1630	82.538
Word identification	-0.512	[-0.591, -0.434]	<0.001	36	4756	3887	63.053
Pseudoword decoding	-0.808	[-1.496, -0.12]	0.021	6	1349	1106	98.427
Academic achievement-mathematics							
Aggregate measures of mathematics	-0.784	[-1.09, -0.478]	<0.001	12	1850	1927	94.123
Mathematical knowledge	-0.666	[-0.753, -0.579]	<0.001	18	2308	2022	45.357
Calculation	-0.71	[-0.915, -0.505]	<0.001	9	1229	1010	81.665
Applied math problems	-0.76	[-1.033, -0.487]	<0.001	7	925	848	88.351
Mathematical fluency	-0.593	[-0.792, -0.395]	<0.001	4	347	407	45.65
Academic achievement-spelling	-0.552	[-0.65, -0.454]	<0.001	22	3153	2887	66.403
Special educational needs	0.581	[0.403, 0.759]	<0.001	8	1539	898	73.252
School completion	-0.068	[-0.077, -0.058]	<0.001	2	33930	898603	0

eTable 16. Umbrella meta-synthesis of associations between low birth weight and cognitive and educational outcomes

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.712	[-0.758, -0.665]	<0.001	251	27102	36622	85.515
Verbal IQ	-0.591	[-0.685, -0.497]	<0.001	63	5442	5173	77.426
Non-verbal IQ	-0.723	[-0.819, -0.626]	<0.001	58	4904	3740	71.005
Academic achievement-reading							
Aggregate measures of reading	-0.69	[-0.911, -0.469]	<0.001	11	2704	10312	95.085
Reading comprehension	-0.562	[-0.715, -0.41]	<0.001	19	2057	1702	81.511
Word identification	-0.512	[-0.589, -0.435]	<0.001	39	5296	4322	65.817
Pseudoword decoding	-0.808	[-1.496, -0.12]	0.021	6	1349	1106	98.427
Academic achievement-mathematics							
Aggregate measures of mathematics	-0.729	[-0.99, -0.468]	<0.001	13	1916	1877	91.687
Mathematical knowledge	-0.682	[-0.764, -0.6]	<0.001	19	2495	2095	40.011
Calculation	-0.71	[-0.915, -0.505]	<0.001	9	1229	1010	81.665
Applied math problems	-0.76	[-1.033, -0.487]	<0.001	7	925	848	88.351
Mathematical fluency	-0.593	[-0.792, -0.395]	<0.001	4	347	407	45.65
Academic achievement-spelling	-0.555	[-0.651, -0.459]	<0.001	23	3180	2915	64.988
Special educational needs	0.578	[0.413, 0.742]	<0.001	9	1594	943	69.447

eTable 17. Umbrella meta-synthesis of associations between preterm birth or low birth weight and cognitive and educational outcomes

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.654	[-0.694, -0.614]	<0.001	314	53789	490549	89.785
Verbal IQ	-0.519	[-0.594, -0.444]	<0.001	91	9658	10994	77.086
Non-verbal IQ	-0.633	[-0.717, -0.549]	<0.001	83	7431	8559	76.609
Academic achievement-reading							
Aggregate measures of reading	-0.648	[-0.867, -0.428]	<0.001	12	2756	10386	94.63
Reading comprehension	-0.562	[-0.714, -0.41]	<0.001	19	2057	1702	81.511
Word identification	-0.512	[-0.589, -0.435]	<0.001	39	5296	4322	65.817
Pseudoword decoding	-0.808	[-1.496, -0.12]	0.021	6	1349	1106	98.427
Academic achievement-mathematics							
Aggregate measures of mathematics	-0.767	[-1.033, -0.501]	<0.001	14	2316	2278	93.552
Mathematical knowledge	-0.663	[-0.759, -0.566]	<0.001	20	2547	2169	54.503
Calculation	-0.71	[-0.915, -0.505]	<0.001	9	1229	1010	81.665
Applied math problems	-0.76	[-1.033, -0.487]	<0.001	7	925	848	88.351
Mathematical fluency	-0.593	[-0.792, -0.395]	<0.001	4	347	407	45.65
Academic achievement-spelling	-0.555	[-0.651, -0.459]	<0.001	23	3180	2915	64.988
Special educational needs	0.578	[0.413, 0.742]	<0.001	9	1594	943	69.447
School completion	-0.068	[-0.077, -0.058]	<0.001	2	33930	898603	0

eTable 18. Subgroup analysis of associations for preterm birth at <28 weeks' gestation

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.935	[-1.066, -0.804]	<0.001	26	2900	2696	76.674
Verbal IQ	-0.641	[-0.871, -0.411]	<0.001	10	637	599	62.254
Non-verbal IQ	-0.961	[-1.211, -0.712]	<0.001	8	429	368	46.192
Academic achievement-reading							
Aggregate measures of reading	-1.12	[-1.292, -0.949]	<0.001	3	585	459	41.322
Reading comprehension	-1.022	[-1.181, -0.863]	<0.001	2	390	306	0
Word identification	-0.747	[-0.972, -0.522]	<0.001	4	871	874	79.667
Pseudoword decoding	-1.618	[-3.002, -0.235]	0.022	2	398	306	98.39
Academic achievement-mathematics							
Aggregate measures of mathematics	-1.259	[-1.754, -0.763]	<0.001	4	789	611	94.682
Mathematical knowledge	-0.746	[-0.883, -0.609]	<0.001	2	418	487	0
Calculation	-1.351	[-1.585, -1.117]	<0.001	1	199	153	-
Applied math problems	-1.438	[-1.676, -1.201]	<0.001	1	198	153	-
Academic achievement-spelling	-0.579	[-0.69, -0.467]	<0.001	2	614	697	0
Special educational needs	0.736	[0.31, 1.161]	<0.001	2	366	284	78.066

eTable 19. Subgroup analysis of associations for preterm birth at <32 weeks' gestation

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.714	[-0.786, -0.643]	<0.001	121	13737	13721	86.037
Verbal IQ	-0.513	[-0.638, -0.387]	<0.001	34	4343	2543	71.585
Non-verbal IQ	-0.695	[-0.807, -0.584]	<0.001	30	2750	2112	62.308
Academic achievement-reading							
Aggregate measures of reading	-0.617	[-0.849, -0.385]	<0.001	6	997	5048	85.305
Reading comprehension	-0.459	[-0.733, -0.185]	0.001	6	520	589	78.438
Word identification	-0.533	[-0.619, -0.447]	<0.001	17	1969	1568	38.572
Pseudoword decoding	-0.747	[-1.375, -0.119]	0.019	1	39	15	-
Academic achievement-mathematics							
Aggregate measures of mathematics	-0.692	[-0.984, -0.4]	<0.001	8	677	722	77.773
Mathematical knowledge	-0.674	[-0.759, -0.588]	<0.001	13	1644	1390	24.86
Calculation	-0.612	[-0.76, -0.464]	<0.001	4	652	555	41.844
Applied math problems	-0.833	[-1.196, -0.47]	<0.001	2	280	221	74.23
Mathematical fluency	-0.621	[-0.902, -0.341]	<0.001	1	100	107	-
Academic achievement-spelling	-0.553	[-0.686, -0.42]	<0.001	16	2061	1860	73.002
Special educational needs	0.674	[0.329, 1.019]	0.0001	3	523	296	78.732

eTable 20. Subgroup analysis of associations for preterm birth at <37 weeks' gestation

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.574	[-0.636, -0.514]	<0.001	158	32881	465333	87.73
Verbal IQ	-0.483	[-0.586, -0.381]	<0.001	54	4542	6872	77.706
Non-verbal IQ	-0.564	[-0.681, -0.447]	<0.001	50	4108	5916	79.961
Academic achievement-reading							
Aggregate measures of reading	-0.156	[-0.277, -0.035]	0.0113	5	1119	4834	12.378
Reading comprehension	-0.522	[-0.709, -0.334]	<0.001	11	1077	735	69.185
Word identification	-0.393	[-0.503, -0.283]	<0.001	16	1735	1330	46.766
Pseudoword decoding	-0.281	[-0.823, 0.262]	0.31	3	912	785	95.909
Academic achievement-mathematics							
Aggregate measures of mathematics	-0.226	[-0.358, -0.095]	<0.001	3	384	594	0
Mathematical knowledge	-0.471	[-0.954, 0.013]	0.057	3	246	145	78.373
Calculation	-0.648	[-0.879, -0.417]	<0.001	4	378	302	51.921
Applied math problems	-0.506	[-0.639, -0.374]	<0.001	4	447	474	0
Mathematical fluency	-0.57	[-0.874, -0.266]	<0.001	3	247	300	63.679
Academic achievement-spelling	-0.576	[-0.747, -0.405]	<0.001	4	478	354	33.219
Special educational needs	0.41	[0.24, 0.579]	<0.001	3	650	318	37.35
School completion	-0.068	[-0.077, -0.058]	<0.001	2	33930	898603	0

eTable 21. Subgroup analysis of associations for low birth weight (<1.0 kg)

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.956	[-1.068, -0.844]	<0.001	31	2852	2948	70.856
Verbal IQ	-0.704	[-0.936, -0.472]	<0.001	8	566	533	60.476
Non-verbal IQ	-0.954	[-1.165, -0.742]	<0.001	6	334	348	35.538
Academic achievement-reading							
Aggregate measures of reading	-0.974	[-1.212, -0.736]	<0.001	5	678	577	68.171
Reading comprehension	-0.991	[-1.132, -0.851]	<0.001	4	521	385	0
Word identification	-0.663	[-0.791, -0.536]	<0.001	13	1524	1260	60.109
Pseudoword decoding	-1.347	[-2.338, -0.356]	0.008	3	437	321	97.022
Academic achievement-mathematics							
Aggregate measures of mathematics	-1.147	[-1.492, -0.802]	<0.001	6	740	622	90.824
Mathematical knowledge	-0.818	[-0.969, -0.668]	<0.001	5	415	355	0
Calculation	-0.838	[-1.174, -0.503]	<0.001	4	782	620	88.416
Applied math problems	-1.438	[-1.676, -1.201]	<0.001	1	198	153	-
Academic achievement-spelling	-0.654	[-0.853, -0.455]	<0.001	8	815	760	69.766
Special educational needs	0.925	[0.725, 1.124]	<0.001	2	400	268	0

eTable 22. Subgroup analysis of associations for low birth weight (<1.5 kg)

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.722	[-0.776, -0.668]	<0.001	118	12551	13233	70.356
Verbal IQ	-0.667	[-0.817, -0.517]	<0.001	31	2736	2121	78.613
Non-verbal IQ	-0.824	[-0.934, -0.714]	<0.001	31	2767	2114	62.496
Academic achievement-reading							
Aggregate measures of reading	-0.394	[-0.589, -0.2]	<0.001	6	936	4974	64.457
Reading comprehension	-0.513	[-0.718, -0.308]	<0.001	9	1046	712	72.887
Word identification	-0.43	[-0.525, -0.336]	<0.001	19	2757	2233	59.433
Pseudoword decoding	-0.537	[-0.841, -0.233]	<0.001	2	444	203	65.225
Academic achievement-mathematics							
Aggregate measures of mathematics	-0.456	[-0.837, -0.076]	0.019	4	252	251	73.955
Mathematical knowledge	-0.677	[-0.754, -0.601]	<0.001	11	1641	1363	0
Calculation	-0.541	[-0.772, -0.31]	<0.001	3	232	245	34.893
Applied math problems	-0.658	[-0.863, -0.454]	<0.001	5	685	611	68.8
Academic achievement-spelling	-0.512	[-0.597, -0.426]	<0.001	11	1817	1603	31.284
Special educational needs	0.471	[0.339, 0.604]	<0.001	6	1092	567	30.909

eTable 23. Subgroup analysis of associations for low birth weight (<2.5 kg)

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.631	[-0.709, -0.554]	<0.001	114	11431	20194	89.358
Verbal IQ	-0.477	[-0.588, -0.366]	<0.001	28	1992	2371	54.137
Non-verbal IQ	-0.546	[-0.706, -0.387]	<0.001	25	1803	1278	70.045
Academic achievement-reading							
Aggregate measures of reading	-0.484	[-0.945, -0.023]	0.04	3	1090	4761	93.972
Reading comprehension	-0.359	[-0.553, -0.164]	<0.001	7	490	605	49.819
Word identification	-0.464	[-0.656, -0.273]	<0.001	10	834	714	58.981
Pseudoword decoding	0.226	[0.102, 0.35]	0.001	1	468	582	-
Academic achievement-mathematics							
Aggregate measures of mathematics	-0.436	[-0.692, -0.181]	0.001	5	924	1004	72.321
Mathematical knowledge	-0.591	[-0.989, -0.192]	<0.001	3	439	377	78.818
Calculation	-0.678	[-1.258, -0.099]	0.022	2	215	145	83.272
Applied math problems	-0.514	[-0.893, -0.134]	0.009	1	42	84	-
Mathematical fluency	-0.593	[-0.792, -0.395]	<0.001	4	347	407	45.65
Academic achievement-spelling	-0.537	[-0.782, -0.293]	<0.001	6	548	552	77.575
Special educational needs	0.368	[0.121, 0.616]	0.004	1	102	108	-

eTable 24. Subgroup analysis of associations between preterm birth and cognitive and educational outcomes by age group (0–2 years)

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.45	[-0.526, -0.374]	<0.001	77	7647	16184	70.6
Verbal IQ	-0.4	[-0.52, -0.279]	<0.001	28	2351	2049	67.672
Non-verbal IQ	-0.506	[-0.647, -0.36]	<0.001	29	2399	1968	73.121

eTable 25. Subgroup analysis of associations between preterm birth and cognitive and educational outcomes by age group (3–4 years)

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.729	[-0.899, -0.559]	<0.001	21	2783	14260	90.19
Verbal IQ	-0.576	[-0.766, -0.387]	<0.001	14	775	772	58.127
Non-verbal IQ	-0.597	[-0.869, -0.325]	<0.001	13	664	674	75.307

eTable 26. Subgroup analysis of associations between preterm birth and cognitive and educational outcomes by age group (5–11 years)

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.752	[-0.811, -0.694]	<0.001	132	16708	29726	86.177
Verbal IQ	-0.635	[-0.765, -0.504]	<0.001	35	4932	5684	82.776
Non-verbal IQ	-0.757	[-0.89, -0.624]	<0.001	30	2984	4968	80.49
Academic achievement-reading							
Aggregate measures of reading	-0.779	[-1.116, -0.441]	<0.001	7	2303	9900	96.994
Reading comprehension	-0.556	[-0.787, -0.325]	<0.001	12	1303	1204	88.551
Word identification	-0.509	[-0.607, -0.411]	<0.001	25	3372	2983	68.842
Pseudoword decoding	-0.917	[-1.705, -0.129]	0.0226	5	854	803	98.393
Academic achievement-mathematics							
Aggregate measures of mathematics	-0.948	[-1.34, -0.552]	<0.001	7	1465	1515	96.079
Mathematical knowledge	-0.634	[-0.766, -0.502]	<0.001	11	1629	1444	59.458
Calculation	-0.719	[-0.952, -0.486]	<0.001	8	1048	895	83.75
Applied math problems	-0.819	[-1.116, -0.521]	<0.001	6	683	615	86.003
Mathematical fluency	-0.593	[-0.792, -0.395]	<0.001	4	347	407	45.65
Academic achievement-spelling	-0.52	[-0.622, -0.418]	<0.001	15	2489	2345	62.672
Special educational needs	0.545	[0.286, 0.804]	<0.001	5	836	541	80.189

eTable 27. Subgroup analysis of associations between preterm birth and cognitive and educational outcomes by age group (12–18 years)

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.682	[-0.78, -0.583]	<0.001	27	2770	1855	56.599
Verbal IQ	-0.56	[-0.963, -0.158]	0.006	2	461	192	84.251
Non-verbal IQ	-0.771	[-1.088, -0.454]	<0.001	3	516	246	75.949
Academic achievement-reading							
Aggregate measures of reading	-0.529	[-0.761, -0.298]	<0.001	1	138	163	-
Reading comprehension	-0.55	[-0.716, -0.384]	<0.001	2	466	248	0
Word identification	-0.526	[-0.704, -0.349]	<0.001	6	893	483	53.007
Pseudoword decoding	0.033	[-0.808, 0.875]	0.938	2	495	303	96.704
Academic achievement-mathematics							
Aggregate measures of mathematics	-0.214	[-1.057, 0.629]	0.619	2	141	150	90.579
Mathematical knowledge	-0.733	[-0.851, -0.61]	<0.001	7	679	578	0
Calculation	-0.639	[-0.879, -0.398]	<0.001	1	181	115	-
Academic achievement-spelling	-0.59	[-0.828, -0.351]	<0.001	6	625	527	74.447
Special educational needs	0.65	[0.441, 0.86]	<0.001	3	703	357	40.019

eTable 28. Subgroup analysis of associations between preterm birth and cognitive and educational outcomes by age group (>18 years)

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.648	[-0.82, -0.476]	<0.001	22	18418	418995	93.655
Verbal IQ	-0.495	[-0.794, -0.196]	0.001	5	441	927	79.284
Non-verbal IQ	-0.445	[-0.825, -0.065]	0.022	4	322	260	79.233
Academic achievement-reading							
Word identification	-0.342	[-0.526, -0.158]	0.002	1	235	228	-
Academic achievement-mathematics							
Applied math problems	-0.447	[-0.63, -0.264]	<0.001	1	242	233	-
School completion	-0.068	[-0.077, -0.058]	<0.001	2	33930	898603	0

eTable 29. Subgroup analysis of associations between low birth weight and cognitive and educational outcomes by age group (0–2 years)

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.488	[-0.571, -0.405]	<0.001	59	6001	10728	68.315
Verbal IQ	-0.373	[-0.537, -0.209]	<0.001	18	1544	1410	74.658
Non-verbal IQ	-0.582	[-0.756, -0.408]	<0.001	18	1479	1226	70.829

eTable 30. Subgroup analysis of associations between low birth weight and cognitive and educational outcomes by age group (3–4 years)

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.782	[-0.918, -0.647]	<0.001	16	1162	1345	52.345
Verbal IQ	-0.624	[-0.787, -0.461]	<0.001	9	447	445	27.817
Non-verbal IQ	-0.657	[-1.039, -0.275]	<0.001	9	452	445	78.358

eTable 31. Subgroup analysis of associations between low birth weight and cognitive and educational outcomes by age group (5–11 years)

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.78	[-0.848, -0.711]	<0.001	127	14146	16201	88.314
Verbal IQ	-0.718	[-0.869, -0.568]	<0.001	27	2444	2670	82.762
Non-verbal IQ	-0.844	[-0.977, -0.71]	<0.001	22	1970	1428	65.216
Academic achievement-reading							
Aggregate measures of reading	-0.875	[-1.204, -0.547]	<0.001	6	2251	9826	97.48
Reading comprehension	-0.556	[-0.77, -0.343]	<0.001	13	1373	1276	87.51
Word identification	-0.5	[-0.59, -0.409]	<0.001	28	3880	3389	69.16
Pseudoword decoding	-0.917	[-1.705, -0.129]	0.023	5	854	803	98.393
Academic achievement-mathematics							
Aggregate measures of mathematics	-0.832	[-1.197, -0.466]	<0.001	7	1476	1420	94.66
Mathematical knowledge	-0.673	[-0.763, -0.583]	<0.001	11	1604	1398	31.081
Calculation	-0.719	[-0.952, -0.486]	<0.001	8	1048	895	83.75
Applied math problems	-0.819	[-1.116, -0.521]	<0.001	6	683	615	86.003
Mathematical fluency	-0.593	[-0.792, -0.395]	<0.001	4	347	407	45.65
Academic achievement-spelling	-0.524	[-0.624, -0.424]	<0.001	16	2516	2373	60.453
Special educational needs	0.545	[0.286, 0.804]	<0.001	5	836	541	80.189

eTable 32. Subgroup analysis of associations between low birth weight and cognitive and educational outcomes by age group (12–18 years)

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.714	[-0.833, -0.596]	<0.001	26	3179	6195	75.243
Verbal IQ	-0.56	[-0.963, -0.158]	0.006	2	461	192	84.251
Non-verbal IQ	-0.771	[-1.088, -0.454]	<0.001	3	516	246	75.949
Academic achievement-reading							
Aggregate measures of reading	-0.529	[-0.761, -0.298]	<0.001	1	138	163	-
Reading comprehension	-0.55	[-0.716, -0.384]	<0.001	2	466	248	0
Word identification	-0.526	[-0.704, -0.349]	<0.001	6	893	483	53.007
Pseudoword decoding	0.033	[-0.808, 0.875]	0.938	2	495	303	96.704
Academic achievement-mathematics							
Aggregate measures of mathematics	-0.214	[-1.057, 0.629]	0.619	2	141	150	90.579
Mathematical knowledge	-0.668	[-0.819, -0.518]	<0.001	8	859	668	46.1
Calculation	-0.639	[-0.879, -0.398]	<0.001	1	181	115	-
Academic achievement-spelling	-0.59	[-0.828, -0.351]	<0.001	6	625	527	74.447
Special educational needs	0.65	[0.441, 0.86]	<0.001	3	703	357	40.019

eTable 33. Subgroup analysis of associations between low birth weight and cognitive and educational outcomes by age group (>18 years)

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.823	[-0.956, -0.689]	<0.001	14	1518	1262	61.554
Verbal IQ	-0.748	[-0.961, -0.534]	<0.001	3	196	194	0
Non-verbal IQ	-0.583	[-0.976, -0.189]	0.004	3	196	194	71.357
Academic achievement-reading							
Word identification	-0.342	[-0.526, -0.158]	<0.001	1	235	228	-
Academic achievement-mathematics							
Applied math problems	-0.447	[-0.63, -0.264]	<0.001	1	242	233	-

eTable 34. Subgroup analysis of associations between preterm birth or low birth weight and cognitive and educational outcomes by age group (0–2 years)

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.449	[-0.52, -0.378]	<0.001	83	8097	17043	69.337
Verbal IQ	-0.4	[-0.52, -0.279]	<0.001	28	2351	2049	67.672
Non-verbal IQ	-0.506	[-0.647, -0.365]	<0.001	29	2399	1968	73.121

eTable 35. Subgroup analysis of associations between preterm birth or low birth weight and cognitive and educational outcomes by age group (3–4 years)

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.729	[-0.899, -0.559]	<0.001	21	2783	14260	90.19
Verbal IQ	-0.576	[-0.766, -0.387]	<0.001	14	775	772	58.127
Non-verbal IQ	-0.597	[-0.869, -0.325]	<0.001	13	664	674	75.307

eTable 36. Subgroup analysis of associations between preterm birth or low birth weight and cognitive and educational outcomes by age group (5–11 years)

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.742	[-0.798, -0.686]	<0.001	145	19321	32668	86.183
Verbal IQ	-0.614	[-0.739, -0.489]	<0.001	37	5106	6691	82.703
Non-verbal IQ	-0.744	[-0.874, -0.614]	<0.001	31	3128	5131	80.252
Academic achievement-reading							
Aggregate measures of reading	-0.779	[-1.116, -0.441]	<0.001	7	2303	9900	96.994
Reading comprehension	-0.556	[-0.77, -0.343]	<0.001	13	1373	1276	87.51
Word identification	-0.5	[-0.59, -0.409]	<0.001	28	3880	3389	69.16
Pseudoword decoding	-0.917	[-1.705, -0.129]	0.023	5	854	803	98.393
Academic achievement-mathematics							
Aggregate measures of mathematics	-0.884	[-1.248, -0.519]	<0.001	8	1876	1821	95.896
Mathematical knowledge	-0.647	[-0.776, -0.517]	<0.001	12	1656	1472	57.646
Calculation	-0.719	[-0.952, -0.486]	<0.001	8	1048	895	83.75
Applied math problems	-0.819	[-1.116, -0.521]	<0.001	6	683	615	86.003
Mathematical fluency	-0.593	[-0.792, -0.395]	<0.001	4	347	407	45.65
Academic achievement-spelling	-0.524	[-0.624, -0.424]	<0.001	16	2516	2373	60.453
Special educational needs	0.545	[0.286, 0.804]	<0.001	5	836	541	80.189

eTable 37. Subgroup analysis of associations between preterm birth or low birth weight and cognitive and educational outcomes by age group (12–18 years)

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.714	[-0.833, -0.596]	<0.001	26	3179	6195	75.243
Verbal IQ	-0.56	[-0.963, -0.158]	0.006	2	461	192	84.251
Non-verbal IQ	-0.771	[-1.088, -0.454]	<0.001	3	516	246	75.949
Academic achievement-reading							
Aggregate measures of reading	-0.529	[-0.761, -0.298]	<0.001	1	138	163	-
Reading comprehension	-0.55	[-0.716, -0.384]	<0.001	2	466	248	0
Word identification	-0.526	[-0.704, -0.349]	<0.001	6	893	483	53.007
Pseudoword decoding	0.033	[-0.808, 0.875]	0.938	2	495	303	96.704
Academic achievement-mathematics							
Aggregate measures of mathematics	-0.214	[-1.057, 0.629]	0.619	2	141	150	90.579
Mathematical knowledge	-0.668	[-0.819, -0.518]	<0.001	8	859	668	46.1
Calculation	-0.639	[-0.879, -0.398]	<0.001	1	181	115	-
Academic achievement-spelling	-0.59	[-0.828, -0.351]	<0.001	6	625	527	74.447
Special educational needs	0.65	[0.441, 0.86]	<0.001	3	703	357	40.019

eTable 38. Subgroup analysis of associations between preterm birth or low birth weight and cognitive and educational outcomes by age group (>18 years)

Outcomes	eG	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
General cognitive ability							
General IQ	-0.656	[-0.821, -0.491]	<0.001	23	18643	418895	93.827
Verbal IQ	-0.494	[-0.794, -0.196]	0.001	5	441	927	79.284
Non-verbal IQ	-0.445	[-0.825, -0.065]	0.022	4	322	260	79.233
Academic achievement-reading							
Word identification	-0.342	[-0.526, -0.158]	0.002	1	235	228	-
Academic achievement-mathematics							
Applied math problems	-0.447	[-0.63, -0.264]	<0.001	1	242	233	-
School completion	-0.068	[-0.077, -0.058]	<0.001	2	33930	898603	0

eTable 39. Summary of odds ratios (OR) for special educational needs associated with preterm birth or low birth weight

Groups	OR	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
PTB	2.868	[2.075, 3.962]	<0.001	8	1539	898	73.252
LBW	2.851	[2.114, 3.844]	<0.001	9	1594	943	69.447
PTB or LBW	2.851	[2.114, 3.844]	<0.001	9	1594	943	69.447
GA<28w	3.798	[1.755, 8.218]	0.001	2	366	284	78.066
GA<32w	3.397	[1.817, 6.349]	<0.001	3	523	296	78.732
GA<37w	2.102	[1.546, 2.858]	<0.001	3	650	318	37.35
BW<1.0kg	5.352	[3.727, 7.687]	<0.001	2	400	268	0
BW<1.5kg	2.352	[1.848, 2.993]	<0.001	6	1092	567	30.909
BW<2.5kg	1.95	[1.245, 3.054]	0.004	1	102	108	-
5-11 years (PTB)	2.686	[1.68, 4.295]	<0.001	5	836	541	80.189
12-18 years (PTB)	3.252	[2.223, 4.757]	<0.001	3	703	357	40.019
5-11 years (LBW)	2.686	[1.68, 4.295]	<0.001	5	836	541	80.189
12-18 years (LBW)	3.252	[2.223, 4.757]	<0.001	3	703	357	40.019
5-11 years (PTB or LBW)	2.686	[1.68, 4.295]	<0.001	5	836	541	80.189
12-18 years (PTB or LBW)	3.252	[2.223, 4.757]	<0.001	3	703	357	40.019

eTable 40. Summary of odds ratios (OR) for school completion associated with preterm birth or low birth weight

Groups	OR	95% CI	P	N(study)	N(case)	N(control)	I^2(%)
PTB	0.884	[0.87, 0.899]	<0.001	2	33930	898603	0
GA<37w	0.884	[0.87, 0.899]	<0.001	2	33930	898603	0
>18 years (PTB)	0.884	[0.87, 0.899]	<0.001	2	33930	898603	0

eTable 41. 788 effect sizes from primary studies included in 22 systematic reviews with meta-analyses (umbrella meta-analysis dataset)

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Botting et al	1998	Aggregate measures of mathematics	MD	-7.10	-10.17	-4.03
Breslau et al	2001	Aggregate measures of mathematics	MD	-5.60	-8.95	-2.25
Breslau et al	2001	Aggregate measures of mathematics	MD	-8.30	-11.58	-5.02
Gross et al	2001	Aggregate measures of mathematics	MD	-5.00	-8.33	-1.67
Jaekel & Wolke	2014	Aggregate measures of mathematics	MD	-7.00	-10.97	-3.03
Jaekel & Wolke	2014	Aggregate measures of mathematics	MD	-2.00	-4.60	0.60
Jaekel & Wolke	2014	Aggregate measures of mathematics	MD	-11.00	-13.72	-8.28
Johnson et al	2016	Aggregate measures of mathematics	MD	-4.30	-6.19	-2.41
Johnson et al	2009	Aggregate measures of mathematics	MD	-27.30	-30.97	-23.63
Johnson et al	2011	Aggregate measures of mathematics	MD	-27.30	-30.97	-23.63
Litt et al	2005	Aggregate measures of mathematics	MD	-11.40	-17.45	-5.35
Litt et al	2005	Aggregate measures of mathematics	MD	0.41	-4.69	5.51
McNicholas et al	2014	Aggregate measures of mathematics	SMD	-0.91	-1.33	-0.50
Saavalainen et al	2008	Aggregate measures of mathematics	MD	0.32	-0.28	0.92
Simms et al	2015	Aggregate measures of mathematics	MD	-12.27	-18.05	-6.49
Simms et al	2013	Aggregate measures of mathematics	MD	-24.60	-28.20	-21.00
Taylor et al	2000	Aggregate measures of mathematics	MD	-5.10	-11.53	1.33
Taylor et al	2000	Aggregate measures of mathematics	MD	-24.30	-32.19	-16.41
Taylor et al	2002	Aggregate measures of mathematics	MD	-1.42	-1.83	-1.01
Botting et al	1998	Aggregate measures of reading	MD	-5.50	-7.86	-3.14
Bowen et al	2002	Aggregate measures of reading	MD	-12.80	-18.39	-7.21
Brumbaugh et al	2016	Aggregate measures of reading	MD	-2.10	-7.40	3.22
Gross et al	2001	Aggregate measures of reading	MD	-9.10	-11.76	-6.44
Johnson et al	2011	Aggregate measures of reading	MD	-18.30	-21.59	-15.01
Johnson et al	2016	Aggregate measures of reading	MD	-13.35	-16.47	-10.23
Johnson et al	2009	Aggregate measures of reading	MD	-18.00	-21.00	-15.00
Litt et al	2005	Aggregate measures of reading	MD	-5.92	-11.58	-0.26
Litt et al	2005	Aggregate measures of reading	MD	-1.73	-6.73	3.27
Loe et al	2012	Aggregate measures of reading	MD	-6.00	-10.38	-1.62
Lynch & Gibbs	2017	Aggregate measures of reading	MD	-0.34	-0.45	-0.23
Lynch & Gibbs	2017	Aggregate measures of reading	MD	-0.16	-0.27	-0.05
McNicholas et al	2014	Aggregate measures of reading	SMD	-0.43	-0.83	-0.03

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Taylor et al	2002	Aggregate measures of reading	MD	-0.19	-0.54	0.16
Taylor et al	2002	Aggregate measures of reading	MD	-0.89	-1.27	-0.51
Hack et al	2002	Applied math problems	MD	-6.18	-8.67	-3.69
Johnson et al	2011	Applied math problems	MD	-21.50	-24.66	-18.34
Rose et al	2011	Applied math problems	MD	-6.19	-10.67	-1.71
Short et al	2003	Applied math problems	MD	-8.40	-13.25	-3.55
Tatsuoka et al	2016	Applied math problems	MD	-18.45	-22.97	-13.93
Taylor et al	1995	Applied math problems	MD	-9.35	-13.85	-4.85
Taylor et al	2011	Applied math problems	MD	-11.02	-15.25	-6.79
Andreias et al	2010	Calculation	MD	-9.00	-12.00	-6.00
Assel et al	2003	Calculation	MD	-7.30	-12.00	-2.60
Johnson et al	2011	Calculation	MD	-22.40	-25.90	-18.90
Litt et al	2012	Calculation	MD	-11.90	-16.26	-7.54
Perricone et al	2013	Calculation	MD	-0.70	-0.96	-0.44
Short et al	2003	Calculation	MD	-12.40	-17.93	-6.87
Taylor et al	1995	Calculation	MD	-8.05	-12.23	-3.87
Taylor et al	2011	Calculation	MD	-3.06	-6.17	0.05
Taylor et al	2006	Calculation	MD	-9.90	-12.53	-7.27
Aarnoudse-Moens et al	2009	General IQ	MD	-16.5	-23.70	-9.30
Aarnoudse-Moens et al	2013	General IQ	MD	-11.7	-14.49	-8.91
Agostini et al	2014	General IQ	SMD	-0.18	-0.62	0.26
Allin et al	2007	General IQ	MD	-9.4	-12.22	-6.58
Allin et al	2008	General IQ	MD	-9.7	-14.87	-4.53
Allin et al	2008	General IQ	MD	-8.7	-13.39	-4.01
Allin et al	2011	General IQ	SMD	-0.79	-1.16	-0.43
Allin et al	2006	General IQ	MD	-6.9	-12.19	-1.61
Anderson et al	1996	General IQ	SMD	-0.47	-0.71	-0.22
Anderson et al	2011	General IQ	MD	-12.5	-15.45	-9.55
Anderson et al	2010	General IQ	SMD	-0.85	-1.06	-0.65
Anderson et al	2003	General IQ	MD	-9.4	-12.05	-6.75
APIP et al	1998	General IQ	SMD	-0.3	-0.53	-0.07
Arpón et al	2018	General IQ	SMD	0.02	-0.56	0.59
Bakeman & Brown	1980	General IQ	SMD	-0.95	-1.86	-0.05
Baldoli et al	2015	General IQ	SMD	-1.03	-1.59	-0.46

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Baron et al a	2011	General IQ	SMD	-0.73	-1.06	-0.39
Baron et al a	2012	General IQ	MD	-14.7	-17.75	-11.65
Baron et al b	2012	General IQ	SMD	-0.88	-1.21	-0.54
Baron et al b	2012	General IQ	SMD	-0.35	-0.58	-0.12
Baron et al b	2011	General IQ	SMD	-0.39	-0.66	-0.12
Bayless & Stevenson	2007	General IQ	MD	-8.7	-13.82	-3.58
Bayless et al	2008	General IQ	MD	-7.2	-11.23	-3.17
Blasco et al	2020	General IQ	SMD	-0.04	-0.4	0.33
Bode et al	2009	General IQ	SMD	-0.98	-1.26	-0.69
Bode et al	2009	General IQ	SMD	-0.42	-0.63	-0.2
Bohm	2002	General IQ	SMD	-0.77	-1.03	-0.52
Bonin	1998	General IQ	SMD	0.19	-0.28	0.66
Boo et al.	1996	General IQ	SMD	-0.29	-0.56	-0.03
Botting et al	1998	General IQ	MD	-8.1	-12.02	-4.18
Bowen et al	2002	General IQ	SMD	-0.88	-1.3	-0.46
Brecht	2015	General IQ	SMD	-0.82	-1.35	-0.3
Breeman et al	2015	General IQ	SMD	-0.98	-1.18	-0.77
Breeman et al	2015	General IQ	SMD	-0.70	-0.89	-0.51
Breeman et al	2015	General IQ	SMD	-0.97	-1.16	-0.78
Breslau et al	2001	General IQ	MD	-6	-8.93	-3.07
Breslau et al	2001	General IQ	MD	-5	-8.08	-1.92
Breslau et al	2006	General IQ	MD	-5.32	-7.29	-3.35
Brosch-Fohraheim et al	2019	General IQ	SMD	-0.58	-1.13	-0.03
Burguet et al	2000	General IQ	SMD	-0.75	-1.03	-0.46
Caldu et al	2006	General IQ	MD	-17.3	-25.44	-9.16
Campbell et al	2015	General IQ	SMD	-0.99	-1.48	-0.49
Caravale	2005	General IQ	MD	-10.2	-15.52	-4.88
Censullo	1994	General IQ	SMD	-0.87	-1.31	-0.43
Chaudhari et al	1999	General IQ	MD	-7.08	-10.11	-4.05
Chaudhari et al	2013	General IQ	MD	-19.8	-23.98	-15.62
Cheatham	2006	General IQ	SMD	0.34	-0.39	1.07
Cheatham	2006	General IQ	SMD	0.25	-0.47	0.97
Cheong et al	2013	General IQ	MD	-11.9	-15.27	-8.53
Cheong et al a	2017	General IQ	SMD	-0.6	-0.8	-0.39

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Cho et al	2022	General IQ	SMD	-1.04	-1.57	-0.50
Christian et al	2014	General IQ	MD	-6	-7.36	-4.64
Christians & Chow	2022	General IQ	MD	-4.3	-4.66	-3.94
Christians & Chow	2022	General IQ	MD	-0.8	-0.92	-0.62
Christians & Chow	2022	General IQ	MD	-4.1	-4.44	-3.76
Christians & Chow	2022	General IQ	MD	-0.4	-0.517	-0.283
Coles	1999	General IQ	SMD	0.07	-0.5	0.64
Conrad et al	2010	General IQ	SMD	-0.91	-1.32	-0.51
Constable et al	2013	General IQ	SMD	-0.54	-1.19	0.11
Cooke et al	2003	General IQ	MD	-11.1	-13.66	-8.54
Crotty et al	2012	General IQ	SMD	-1.34	-1.62	-1.05
Cserjesi et al	2012	General IQ	SMD	-0.27	-0.49	-0.06
Dall'Oglio et al	2010	General IQ	SMD	-1.62	-2.12	-1.12
Dalziel et al	2007	General IQ	SMD	-0.11	-0.41	0.19
Damm et al	2015	General IQ	SMD	-0.66	-0.83	-0.48
Darlow et al	2020	General IQ	SMD	-0.83	-1.08	-0.59
De Amorim	2013	General IQ	SMD	-1.24	-1.89	-0.61
De Kieviet et al	2014	General IQ	MD	-13.5	-21.42	-5.58
De Kieviet et al	2012	General IQ	SMD	-0.57	-0.92	-0.22
Delane	2016	General IQ	SMD	-1.21	-1.55	-0.7
DiPietro et al	1992	General IQ	SMD	-0.66	-1.26	-0.06
Do et al	2020	General IQ	SMD	-0.57	-0.95	-0.18
Do et al	2020	General IQ	SMD	-0.74	-1.12	-0.36
Dobson et al	2016	General IQ	MD	-13	-17.10	-8.90
Doyle et al	2015	General IQ	SMD	-0.71	-0.92	-0.5
Ehrenstein et al	2009	General IQ	MD	-4.11	-5.22	-3
Eickmann et al	2012	General IQ	SMD	-0.11	-0.47	0.25
Ekeus	2010	General IQ	MD	-0.29	-0.41	-0.17
Ekeus	2010	General IQ	MD	-0.21	-0.27	-0.15
Emond	2006	General IQ	SMD	-0.32	-0.63	-0.02
Esbjørn et al	2006	General IQ	SMD	-0.87	-1.14	-0.59
Esteban et al	2010	General IQ	SMD	-0.25	-0.87	0.36
Feng et al	2010	General IQ	SMD	-1.65	-2.43	-0.87
Feng et al	2010	General IQ	SMD	-1.72	-2.42	-1.01

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Feng et al	2011	General IQ	SMD	-1.28	-1.86	-0.7
Ferber et al	2011	General IQ	SMD	-0.63	-1.27	0.02
Fjortoft	2015	General IQ	SMD	-0.51	-1.03	-0.01
Fjortoft	2015	General IQ	SMD	-1.65	-2.2	-1.1
Forcada-Guex et al	2006	General IQ	SMD	0.19	-0.29	0.68
Ford et al	2016	General IQ	SMD	-0.42	-0.88	0.05
Forslund et al	1990	General IQ	SMD	-1.07	-1.59	-0.54
Foulder-Hughes et al	2003	General IQ	SMD	-0.79	-0.98	-0.61
Fox et al	1985	General IQ	SMD	-0.49	-1.09	0.11
Frye et al	2010b	General IQ	SMD	-0.45	-1.14	0.25
Gäddlin et al	2008	General IQ	SMD	-0.09	-0.6	0.42
Gäddlin et al	2008	General IQ	SMD	-0.78	-1.16	-0.4
Gasparini et al	2017	General IQ	SMD	-0.38	-0.7	-0.06
Geldof et al	2013	General IQ	SMD	-0.79	-1.18	-0.39
Geldof et al	2014	General IQ	SMD	-0.69	-0.99	-0.39
Georgsdóttir et al	2004	General IQ	SMD	-1.33	-1.81	-0.85
Goldenberg et al	1996	General IQ	SMD	-0.56	-0.87	-0.24
Gorga et al	1985	General IQ	SMD	-0.61	-1.35	0.13
Gray et al	2006	General IQ	SMD	-0.6	-0.98	-0.22
Gray et al	2015	General IQ	SMD	-0.48	-0.78	-0.18
Gray et al	2006	General IQ	SMD	-0.61	-0.89	-0.33
Greenberg et al	1988	General IQ	SMD	-0.26	-0.74	0.21
Gross et al	1992	General IQ	SMD	-0.72	-1.09	-0.36
Gross et al	1992	General IQ	SMD	-0.99	-1.37	-0.62
Grunau et al	2004	General IQ	SMD	-0.84	-1.48	-0.2
Grunau et al	1990	General IQ	SMD	-0.78	-1.38	-0.18
Grunau et al	2009	General IQ	SMD	-0.44	-0.86	-0.01
Grunau et al	2009	General IQ	SMD	-0.19	-0.58	0.19
Grunau et al	2004	General IQ	SMD	-0.85	-1.55	-0.15
Grunau et al	2002	General IQ	MD	-18	-23.27	-12.73
Grunewaldt et al	2014	General IQ	MD	-7	-17.63	3.63
Guarini et al	2014	General IQ	SMD	-0.34	-0.72	0.04
Guarini et al	2014	General IQ	SMD	-0.3	-0.73	0.13
Guarini et al	2009	General IQ	SMD	-0.26	-0.67	0.15

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Guarini et al	2016	General IQ	SMD	-0.14	-0.58	0.29
Hack et al	2002	General IQ	SMD	-0.47	-0.74	-0.2
Hack et al	2002	General IQ	SMD	-0.26	-0.51	-0.01
Hack et al	2005	General IQ	MD	-12	-15.44	-8.56
Hack et al	1992	General IQ	MD	-4.9	-7.78	-2.02
Hagmann-von Arx et al	2014	General IQ	SMD	-0.56	-1.06	-0.27
Hall et al	1995	General IQ	MD	-10.7	-14.16	-7.24
Hall et al	1995	General IQ	MD	-8.8	-11.86	-5.74
Hallin et al	2010	General IQ	MD	-12.9	-18.23	-7.57
Halsey et al	1996	General IQ	SMD	-0.89	-1.39	-0.4
Hansen et al	2004	General IQ	SMD	-0.53	-0.93	-0.14
Harvey et al	1999	General IQ	SMD	-0.81	-1.23	-0.39
Hasler et al	2020	General IQ	SMD	-0.51	-0.94	-0.09
Heinonen	2017	General IQ	MD	-3.71	-6.71	-0.72
Heinonen et al	2018	General IQ	SMD	-0.98	-1.37	-0.59
Heinonen et al	2015	General IQ	SMD	0.78	-0.39	1.95
Hellgren et al	2009	General IQ	SMD	-0.66	-1.04	-0.28
Hoff et al	2004	General IQ	MD	-12.4	-15.72	-9.08
Hoff et al	2006	General IQ	MD	-10.9	-14.15	-7.65
Holsti et al	2016	General IQ	SMD	-1.39	-1.68	-1.11
Howe et al	2011	General IQ	SMD	-1.27	-1.53	-1.01
Huang et al	2012	General IQ	SMD	-0.72	-1.36	-0.08
Huang et al	2012	General IQ	SMD	-0.44	-1.04	0.16
Huang et al	2013	General IQ	SMD	-0.02	-0.14	0.11
Huang et al	2013	General IQ	SMD	-0.01	-0.11	0.1
Hughes et al	1999	General IQ	MD	-6.43	-9.37	-3.49
Hunt et al	2004	General IQ	SMD	-0.54	-0.8	-0.28
Hutchinson et al	2013	General IQ	MD	-12.5	-15.45	-9.55
Johnson et al	2005	General IQ	SMD	-0.41	-0.7	-0.13
Johnson et al	2009	General IQ	SMD	-1.31	-1.54	-1.09
Juneja et al	2005	General IQ	MD	-10.5	-16.07	-4.93
Kallankari	2015	General IQ	SMD	-0.71	-1.16	-0.26
Kesler et al	2008	General IQ	SMD	-1.61	-2.5	-0.72
Kesler et al	2008	General IQ	SMD	-0.43	-1.24	0.38

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Kilbride et al	2004	General IQ	MD	-10	-16.38	-3.62
Kissgen	2021	General IQ	SMD	0.22	-0.38	0.82
Kitchen et al	1980	General IQ	MD	-10.05	-15.37	-4.73
Kitchen et al	1986	General IQ	SMD	-0.79	-1.18	-0.4
Klein et al	1989	General IQ	MD	-6	-11.17	-0.83
Kontis et al	2009	General IQ	MD	-7.47	-12.39	-2.55
Kozhemiako et al	2020	General IQ	SMD	-0.74	-1.39	-0.09
Kozhemiako et al	2020	General IQ	SMD	-0.95	-1.5	-0.4
Kroll et al	2017	General IQ	SMD	-0.68	-0.97	-0.38
Künz et al	2019	General IQ	SMD	-0.99	-1.41	-0.58
Lærum et al	2019	General IQ	SMD	-0.94	-1.32	-0.57
Landry et al	1988	General IQ	SMD	-0.71	-1.28	-0.13
Landry et al	1997	General IQ	SMD	-1.89	-2.49	-1.28
Landry et al	1997	General IQ	SMD	-0.75	-1.26	-0.24
Largo et al	1989	General IQ	SMD	-0.53	-0.91	-0.16
Largo et al	1989	General IQ	SMD	-0.36	-0.72	-0.01
Larroque et al	2008	General IQ	SMD	-0.67	-0.78	-0.56
Lax et al	2013	General IQ	SMD	-1.15	-1.72	-0.59
Lefebvre et al	2005	General IQ	SMD	-1.08	-1.5	-0.66
Leijon et al	2015	General IQ	SMD	-1.21	-1.63	-0.78
Lejeune et al	2019	General IQ	SMD	-0.31	-1.15	0.54
Levy-Shiff et al	1994	General IQ	MD	-9	-11.97	-6.03
Lind et al	2015	General IQ	SMD	-0.75	-1.1	-0.4
Lind et al	2011	General IQ	SMD	-0.77	-1.03	-0.51
Linhares et al	2005	General IQ	SMD	-0.55	-0.79	-0.31
Linsell et al	2018	General IQ	SMD	-1.22	-1.54	-0.89
Litt et al	1995	General IQ	SMD	-0.62	-1.32	0.07
Litt et al	2012	General IQ	MD	-9.3	-12.99	-5.61
Lloyd et al	1988	General IQ	MD	-7.4	-13.25	-1.55
Loe et al	2012	General IQ	SMD	-0.81	-1.2	-0.41
Løhaugen et al	2011	General IQ	MD	-22	-30.35	-13.65
Løhaugen et al	2010	General IQ	MD	-13	-17.25	-8.75
Lowe et al	2010	General IQ	SMD	-0.61	-1.03	-0.2
Lundequist et al	2015	General IQ	SMD	-0.85	-1.36	-0.35

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Lundequist et al	2015	General IQ	SMD	0.02	-0.35	0.38
Lundequist et al	2015	General IQ	SMD	-0.67	-0.98	-0.35
Lundequist et al	2013	General IQ	MD	-6.6	-9.89	-3.31
Luoma et al	1998	General IQ	SMD	-0.62	-1.04	-0.2
Luu et al	2011	General IQ	SMD	-0.86	-1.08	-0.65
Madzmauswe et al	2015	General IQ	SMD	-0.91	-1.12	-0.7
Magill-Evans et al	2002	General IQ	SMD	-0.26	-0.86	0.34
Magill-Evans et al	1999	General IQ	SMD	-0.48	-0.87	-0.09
Mangin et al	2017	General IQ	MD	-10.06	-14.16	-5.96
Månsson & Stjernqvist	2014	General IQ	SMD	-0.78	-0.99	-0.58
Marlow et al	1989	General IQ	SMD	-0.61	-1	-0.22
Marlow et al	2005	General IQ	MD	-23.6	-26.64	-20.56
Martel et al	2007	General IQ	SMD	-0.4	-0.6	-0.21
Martel et al	2007	General IQ	SMD	-0.41	-0.61	-0.21
Martinez-Cruz et al	2006	General IQ	SMD	-0.71	-1.1	-0.32
McDonald et al	1989	General IQ	SMD	-0.68	-1.38	0.01
McGrath & Sullivan	2002	General IQ	SMD	-0.79	-1.18	-0.4
McNicholas et al	2014	General IQ	SMD	-0.95	-1.37	-0.54
Méio et al	2004	General IQ	MD	-9.48	-14.26	-4.71
Modi et al	2013	General IQ	MD	-5.5	-8.78	-2.22
Molloy et al	2014	General IQ	SMD	-0.74	-0.95	-0.53
Morsing et al	2011	General IQ	SMD	-1.81	-2.63	-0.98
Morsing et al	2011	General IQ	SMD	-1.77	-2.55	-1
Mu et al	2008	General IQ	SMD	-1.13	-1.46	-0.8
Mulder et al	2011	General IQ	SMD	-1.16	-1.69	-0.64
Mullen et al	2011	General IQ	MD	-10.24	-16.74	-3.74
Munck et al	2010	General IQ	SMD	-0.77	-1.09	-0.45
Munck et al	2012	General IQ	MD	-12.4	-16.21	-8.59
Murray et al	2014	General IQ	SMD	-0.75	-1.03	-0.47
Nadeau et al	2001	General IQ	SMD	-0.7	-1.1	-0.3
Nair et al	2014	General IQ	MD	-2.68	-4.52	-0.84
Narberhaus et al	2007	General IQ	MD	-22.2	-32.1	-12.3
Narberhaus et al	2007	General IQ	MD	-0.9	-9.62	7.82
Narberhaus et al	2007	General IQ	MD	-13.1	-21.01	-5.19

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Narberhaus et al	2007	General IQ	MD	-10.4	-17.29	-3.51
Nepomnyaschy	2010	General IQ	MD	-1.4	-2.42	-0.38
Neri et al	2020	General IQ	SMD	-0.47	-0.98	0.03
Neri et al	2020	General IQ	SMD	-0.13	-0.56	0.31
Newsham	2007	General IQ	SMD	-0.97	-1.46	-0.47
Ni et al	2011	General IQ	MD	-3.8	-9.58	1.98
Nomura et al	2009	General IQ	SMD	-0.24	-0.37	-0.12
Northam et al	2011	General IQ	MD	-17.4	-25.01	-9.79
Northam et al	2012	General IQ	SMD	-0.94	-1.36	-0.53
Nosarti et al	2007	General IQ	SMD	-0.59	-0.94	-0.23
Nurcombe et al	1984	General IQ	SMD	-0.56	-1	-0.12
O'Connor et al	1984	General IQ	SMD	-0.19	-0.98	0.61
Ohls et al	2016	General IQ	SMD	-1.52	-2.26	-0.77
Oliveira	2011	General IQ	SMD	-1.28	-1.92	-0.65
Orchinik	2011	General IQ	SMD	-0.86	-1.12	-0.6
Ortiz-Mantilla et al	2008	General IQ	SMD	-1.04	-1.57	-0.52
Pérez-López et al	2013	General IQ	SMD	-0.76	-1.31	-0.22
Peterson et al	2000	General IQ	MD	-23.5	-32.60	-14.40
Pihko et al	2017	General IQ	MD	-7	-13.44	-0.56
Poehlmann et al	2001	General IQ	SMD	-0.57	-1.19	0.05
Poehlmann et al	2001	General IQ	SMD	-0.36	-0.97	0.25
Pogribna et al	2014	General IQ	SMD	-0.44	-1.09	0.21
Portnoy et al	1988	General IQ	SMD	-0.33	-1.47	0.81
Portnoy et al	1988	General IQ	SMD	-0.71	-1.66	0.24
Potharst et al	2012	General IQ	SMD	-0.73	-1.02	-0.44
Potharst et al	2011	General IQ	SMD	-0.76	-1.05	-0.47
Poulsen et al	2013	General IQ	MD	-0.2	-0.3	-0.1
Pritchard et al	2014	General IQ	SMD	-0.69	-0.96	-0.41
Pyhala et al	2011	General IQ	MD	-8.4	-12.14	-4.66
Reuner et al	2015	General IQ	SMD	-0.07	-0.62	0.48
Reuner et al	2015	General IQ	SMD	0.02	-0.51	0.54
Ribiczey et al	2010	General IQ	SMD	-0.58	-1.07	-0.10
Ribiczey et al	2010	General IQ	SMD	-0.59	-0.86	-0.31
Rickards et al	2001	General IQ	MD	-8.8	-13.73	-3.87

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Ritter et al	2003	General IQ	SMD	-0.98	-1.41	-0.56
Ritter et al	2014	General IQ	SMD	-0.92	-1.55	-0.29
Ritter et al	2014	General IQ	SMD	-0.78	-1.4	-0.16
Roberts et al	2011	General IQ	SMD	-0.79	-1.07	-0.51
Roberts et al	2011	General IQ	SMD	-0.73	-0.93	-0.53
Roberts et al	2010	General IQ	SMD	-0.85	-1.04	-0.66
Robertson	1990	General IQ	SMD	-0.71	-1.19	-0.24
Roldán-Tapia	2013	General IQ	SMD	-2.47	-3.07	-1.87
Romeo et al	2016	General IQ	SMD	-0.53	-1	-0.06
Romeo et al	2016	General IQ	SMD	-0.05	-0.51	0.42
Rose et al	1985	General IQ	SMD	-0.64	-1.21	-0.08
Rose et al	1991	General IQ	SMD	-0.7	-1.28	-0.12
Rose et al	1996	General IQ	MD	-9.3	-15.47	-3.13
Rose et al	1991	General IQ	SMD	-0.76	-1.29	-0.22
Rose et al	2005	General IQ	SMD	-0.35	-0.68	-0.02
Ross	1985	General IQ	SMD	-0.62	-1.04	-0.21
Ruiz et al	2018	General IQ	SMD	-0.52	-0.77	-0.27
Saavalainen et al	2007	General IQ	MD	-4	-9.29	1.29
Saigal et al	2000	General IQ	SMD	-0.76	-1.01	-0.51
Saigal et al	2000	General IQ	MD	-13	-16.81	-9.19
Saigal et al	1991	General IQ	SMD	-0.9	-1.15	-0.64
Sajaniemi et al	1998	General IQ	SMD	-1.31	-1.65	-0.97
Salvatori et al	2015	General IQ	SMD	-0.27	-0.85	0.31
Samuelsson et al	2006	General IQ	MD	-10.5	-15.91	-5.09
Sanchez et al	2019	General IQ	SMD	-0.6	-0.84	-0.35
Sansavini et al	2014	General IQ	SMD	-1.13	-1.94	-0.32
Sansavini et al	1996	General IQ	SMD	-0.52	-0.95	-0.09
Sayeur et al	2015	General IQ	SMD	-0.08	-0.96	0.79
Scher et al	1996	General IQ	SMD	-0.18	-0.88	0.51
Scheurer et al	2018	General IQ	SMD	-0.52	-1.04	0.01
Schneider et al	2014	General IQ	SMD	-0.46	-0.9	-0.02
Schneider et al	2014	General IQ	SMD	0.11	-0.28	0.49
Schneider et al	2017	General IQ	MD	-5.5	-10.80	-0.20
Schonhaut et al	2012	General IQ	SMD	-0.26	-0.51	-0.01

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Schothorst et al	2007	General IQ	MD	-7.73	-16.13	0.67
Sejer et al	2019	General IQ	SMD	-0.25	-0.54	0.04
Serenius et al	2016	General IQ	SMD	-1.27	-1.42	-1.11
Shim et al	2014	General IQ	SMD	-0.61	-1.24	0.01
Short et al	2003	General IQ	SMD	-1.06	-1.33	-0.8
Sidhu et al	2010	General IQ	MD	-9.59	-14.49	-4.69
Simms et al	2015	General IQ	SMD	-0.36	-0.65	-0.07
Simões et al	2017	General IQ	SMD	-0.77	-1.33	-0.21
Skranes et al	2012	General IQ	MD	-17	-24.79	-9.21
Smith et al	1990	General IQ	MD	-12.44	-18.83	-6.05
Smith et al	2011	General IQ	SMD	-0.88	-1.26	-0.49
Snyder	2007	General IQ	SMD	-0.16	-0.47	0.16
Sølsnes et al	2016	General IQ	MD	-9	-13.17	-4.83
Sølsnes et al	2015	General IQ	SMD	-0.76	-1.15	-0.38
Sommerfelt et al	1993	General IQ	MD	-11	-16.29	-5.71
Sommerfelt et al	1995	General IQ	MD	-7	-10.14	-3.86
Sørensen et al	1997	General IQ	MD	-4.8	-7.09	-2.51
Soria-Pastor et al	2009	General IQ	MD	-16.1	-24.9	-7.3
Stålnacke et all	2015	General IQ	SMD	-0.29	-0.56	-0.01
Stave et al	1980	General IQ	SMD	-0.63	-1.17	-0.09
Stjernqvist et al	1999	General IQ	MD	-16.7	-22.04	-11.36
Stolt et al	2014	General IQ	SMD	-0.79	-1.03	-0.55
Strahle et al	2019	General IQ	SMD	-0.59	-1.05	-0.12
Sun et al	2009	General IQ	SMD	0.11	-0.28	0.51
Tandon et al	2000	General IQ	MD	-10.4	-17.03	-3.77
Tandon et al	2000	General IQ	MD	-11	-15.59	-6.41
Taylor et al	2000	General IQ	MD	-9.44	-14.97	-3.91
Taylor et al	2000	General IQ	MD	-22.75	-29.15	-16.35
Taylor et al	2000	General IQ	SMD	-1.12	-1.53	-0.72
Taylor et al	2011	General IQ	SMD	-0.99	-1.26	-0.73
Taylor et al	2004	General IQ	MD	-11	-16.94	-5.06
Teplin et al	1991	General IQ	MD	-12.4	-19.86	-4.94
Tinelli et al	2015	General IQ	SMD	-0.52	-1.06	0.01
Tofail et al	2012	General IQ	MD	-3.4	-5.45	-1.35

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Toome et al	2013	General IQ	SMD	-0.54	-0.77	-0.31
Van Baar et al	2006	General IQ	MD	-10	-16.98	-3.02
Van Baar et al	2009	General IQ	SMD	-0.21	-0.39	-0.03
Van Braeckel	2008	General IQ	SMD	-1.17	-1.59	-0.74
Van Hus et al	2014	General IQ	MD	-11.3	-15.82	-6.78
Van Veen et al	2019	General IQ	SMD	-0.19	-0.65	0.27
VICSG et al	1997	General IQ	SMD	-0.73	-0.93	-0.54
Voigt et al	2012	General IQ	SMD	-0.53	-0.9	-0.16
Voigt et al	2012	General IQ	SMD	-0.97	-1.39	-0.56
Walker et al	2018	General IQ	SMD	-1.51	-2.11	-0.9
Walker et al	2018	General IQ	SMD	-0.99	-1.46	-0.53
Wang et al	2014	General IQ	SMD	-1.35	-1.81	-1.25
Watt et al	1985	General IQ	SMD	-0.6	-1.43	0.23
Wehrle et al	2016	General IQ	SMD	-0.72	-1.17	-0.28
Whitfield et al	1997	General IQ	MD	-12.9	-17.37	-8.43
Williamson et al	2014	General IQ	SMD	-0.35	-0.82	0.12
Witt et al	2018	General IQ	SMD	0.19	-0.27	0.65
Wolfe et al	2015	General IQ	SMD	-0.77	-1.43	-0.11
Wolke and Meyer	1999	General IQ	MD	-14.9	-17.4	-12.4
Wolke et al	1994	General IQ	SMD	-0.48	-0.68	-0.28
Woodward et al	2012	General IQ	SMD	-0.87	-1.15	-0.59
Woodward et al	2009	General IQ	MD	-10.84	-16.68	-5
Woodward et al	2009	General IQ	MD	-9.05	-13.34	-4.76
Woodward et al	2009	General IQ	MD	-9.79	-13.69	-5.89
Woythaler et al	2011	General IQ	SMD	-0.6	-0.7	-0.5
Woythaler et al	2011	General IQ	SMD	-0.2	-0.27	-0.14
Yu et al	2013	General IQ	SMD	-0.48	-0.94	-0.02
Yu et al	2013	General IQ	SMD	-0.4	-0.84	0.04
Zelkowitz et al	1995	General IQ	SMD	-0.77	-1.17	-0.37
Zuccarini et al	2017	General IQ	SMD	-1.41	-2.39	-0.43
Zuccarini et al	2017	General IQ	SMD	-0.79	-1.7	0.12
Zuccarino et al	1983	General IQ	SMD	0.13	-0.99	1.25
Zuccarino et al	1983	General IQ	SMD	-0.26	-1.27	0.75
Chaudhary et al	2013	General IQ	MD	-1	-5.13	3.13

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Chaudhary et al	2013	General IQ	MD	-8	-13.42	-2.58
Chaudhary et al	2013	General IQ	MD	-9	-16.04	-1.96
Chaudhary et al	2013	General IQ	MD	-6	-11.43	-0.57
de Jong et al	2015	General IQ	SMD	-1.71	-2.31	-1.11
Gucuyener et al	2011	General IQ	SMD	-0.45	-0.69	-0.22
Romeo et al	2010	General IQ	SMD	0.06	-0.3	0.41
Ross et al	1992	General IQ	MD	3.4	-2.43	9.23
Subasinghe et al	2006	General IQ	MD	0.3	-9.45	10.05
Taylor & Jakobson	2010	General IQ	SMD	-0.48	-1.09	0.13
Vohr et al	1989	General IQ	SMD	-0.73	-1.48	0.01
Vohr et al	1989	General IQ	SMD	-0.17	-0.84	0.5
Eide	2007	General IQ	SMD	-0.11	-0.15	-0.07
Talge et al	2010	General IQ	MD	-1.31	-4.29	1.67
Morsan et al	2018	General IQ	SMD	-0.04	-0.85	0.77
Morsan et al	2018	General IQ	SMD	0.35	-0.22	0.93
Morsan et al	2018	General IQ	SMD	0.18	-0.34	0.7
Sansavini et al	2011	General IQ	SMD	-0.34	-1.29	0.61
Sansavini et al	2011	General IQ	SMD	0.11	-0.81	1.03
Louthrenoo et al	2001	General IQ	MD	-2.2	-7.52	3.12
Louthrenoo et al	2001	General IQ	MD	-0.96	-6.45	4.53
Hoque et al	2012	General IQ	MD	-2.93	-8.6	2.74
Sobotková et al	1986	General IQ	SMD	-0.85	-1.66	-0.03
Chaudhari et al	1991	General IQ	SMD	-0.28	-0.76	0.2
Chaudhari et al	1991	General IQ	SMD	-0.41	-0.95	0.14
Clark & Woodward	2015	Mathematical fluency	SMD	-0.66	-0.94	-0.38
Pritchard et al	2009	Mathematical fluency	MD	-15.02	-20.33	-9.71
Rose et al	2011	Mathematical fluency	MD	-3.30	-8.73	2.13
Woodward et al	2017	Mathematical fluency	MD	-10.10	-14.54	-5.66
Aarnoudse-Moens et al	2011	Mathematical knowledge	MD	-8.60	-11.92	-5.28
Anderson et al	2003	Mathematical knowledge	MD	-8.80	-11.30	-6.30
Botting et al	1997	Mathematical knowledge	SMD	-0.64	-0.90	-0.38
Bowen et al	2002	Mathematical knowledge	MD	-13.70	-18.35	-9.05
Brumbaugh et al	2016	Mathematical knowledge	MD	-0.60	-5.92	4.72
Chaudhari et al	2004	Mathematical knowledge	MD	-5.10	-9.19	-1.01

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Cheong et al	2013	Mathematical knowledge	SMD	-0.74	-0.98	-0.49
Cheong et al b	2017	Mathematical knowledge	MD	-9.10	-12.81	-5.39
Cheong et al b	2017	Mathematical knowledge	MD	-15.70	-19.37	-12.03
Esbjørn et al	2006	Mathematical knowledge	MD	-1.50	-2.25	-0.75
Grunau et al	2002	Mathematical knowledge	MD	-9.60	-14.12	-5.08
Grunau et al	2004	Mathematical knowledge	MD	-14.94	-21.31	-8.57
Hallin et al	2010	Mathematical knowledge	MD	-2.90	-4.46	-1.34
Hutchinson et al	2013	Mathematical knowledge	MD	-9.10	-12.34	-5.86
Kilbride et al	2004	Mathematical knowledge	MD	-7.00	-14.78	0.78
Rickards et al	2001	Mathematical knowledge	MD	-6.90	-11.74	-2.06
Saigal et al	2000	Mathematical knowledge	MD	-17.00	-21.79	-12.21
Saigal et al	1991	Mathematical knowledge	SMD	-0.76	-1.01	-0.51
Tandon et al	2000	Mathematical knowledge	MD	-12.30	-19.11	-5.49
Tandon et al	2000	Mathematical knowledge	MD	-15.00	-21.80	-8.20
Taylor et al	2016	Mathematical knowledge	MD	-10.90	-15.10	-6.70
Twilhaar et al	2019	Mathematical knowledge	MD	-0.70	-1.06	-0.34
Agarwal et al	2021	Non-verbal IQ	SMD	-0.9	-1.2	-0.6
Agostini et al	2014	Non-verbal IQ	SMD	-0.19	-0.68	0.31
Agostini et al	2014	Non-verbal IQ	SMD	-0.38	-0.86	0.09
Allin et al	2011	Non-verbal IQ	SMD	-0.58	-0.94	-0.21
Anderson et al	2010	Non-verbal IQ	SMD	-0.85	-1.05	-0.65
Arpón et al	2018	Non-verbal IQ	SMD	0.09	-0.49	0.67
Baldoli et al	2015	Non-verbal IQ	SMD	-0.86	-1.41	-0.3
Baron et al b	2011	Non-verbal IQ	SMD	-0.33	-0.6	-0.06
Blasco et al	2020	Non-verbal IQ	SMD	0.2	-0.17	0.56
Bode et al	2009	Non-verbal IQ	SMD	-0.41	-0.63	-0.19
Bohm	2002	Non-verbal IQ	SMD	-0.78	-1.04	-0.53
Brosch-Fohraheim et al	2019	Non-verbal IQ	SMD	-0.24	-0.78	0.3
Burguet et al	2000	Non-verbal IQ	SMD	-0.74	-1.03	-0.46
Cheong et al a	2017	Non-verbal IQ	SMD	-0.48	-0.68	-0.27
Cherkes-Julkowski et al	1998	Non-verbal IQ	SMD	0.25	-0.42	0.92
Cho et al	2022	Non-verbal IQ	SMD	-0.94	-1.47	-0.41
Crotty et al	2012	Non-verbal IQ	SMD	-1.1	-1.38	-0.82
Cserjesi et al	2012	Non-verbal IQ	SMD	-0.3	-0.51	-0.08

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Dall'Oglio et al	2010	Non-verbal IQ	SMD	-0.83	-1.28	-0.38
Dalziel et al	2007	Non-verbal IQ	SMD	-0.06	-0.36	0.24
De Paula Machado et al	2019	Non-verbal IQ	SMD	-0.15	-0.73	0.44
Do et al	2020	Non-verbal IQ	SMD	-0.81	-1.2	-0.42
Do et al	2020	Non-verbal IQ	SMD	-0.85	-1.23	-0.46
Eickmann et al	2012	Non-verbal IQ	SMD	-0.06	-0.42	0.3
Esbjørn et al	2006	Non-verbal IQ	SMD	-0.88	-1.15	-0.61
Esteban et al	2010	Non-verbal IQ	SMD	-0.51	-1.13	0.11
Feng et al	2010	Non-verbal IQ	SMD	-1.44	-2.14	-0.75
Feng et al	2010	Non-verbal IQ	SMD	-1.47	-2.07	-0.88
Forcada-Guex et al	2006	Non-verbal IQ	SMD	0.55	0.06	1.04
Forslund et al	1990	Non-verbal IQ	SMD	-0.95	-1.47	-0.44
Foulder-Hughes et al	2003	Non-verbal IQ	SMD	-0.75	-0.94	-0.57
Gasparini et al	2017	Non-verbal IQ	SMD	-0.25	-0.58	0.07
Georgsdóttir et al	2004	Non-verbal IQ	SMD	-1.49	-1.98	-1
Gray et al	2015	Non-verbal IQ	SMD	-0.55	-0.86	-0.25
Grunau et al	1990	Non-verbal IQ	SMD	-0.82	-1.42	-0.22
Guarini et al	2014	Non-verbal IQ	SMD	-0.22	-0.65	0.21
Hallin et al	2010	Non-verbal IQ	SMD	-0.99	-1.39	-0.59
Howe et al	2011	Non-verbal IQ	SMD	-1.11	-1.36	-0.85
Huang et al	2012	Non-verbal IQ	SMD	-0.66	-1.3	-0.02
Huang et al	2012	Non-verbal IQ	SMD	-0.37	-0.96	0.23
Ionio et al	2016	Non-verbal IQ	SMD	-1.4	-1.78	-1.03
Jakobson et al	2006	Non-verbal IQ	SMD	-1.63	-2.24	-1.02
Künz et al	2019	Non-verbal IQ	SMD	-0.8	-1.21	-0.4
Largo et al	1989	Non-verbal IQ	SMD	-0.24	-0.66	0.18
Largo et al	1989	Non-verbal IQ	SMD	-0.21	-0.6	0.18
Lejeune et al	2019	Non-verbal IQ	SMD	-0.38	-1.22	0.47
Litt et al	1995	Non-verbal IQ	SMD	-0.23	-0.91	0.45
Løhaugen et al	2010	Non-verbal IQ	SMD	-0.95	-1.31	-0.58
Lowe et al	2012	Non-verbal IQ	SMD	-0.78	-1.27	-0.29
Lundequist et al	2015	Non-verbal IQ	SMD	-0.9	-1.4	-0.39
Lundequist et al	2015	Non-verbal IQ	SMD	-0.06	-0.43	0.3
Lundequist et al	2015	Non-verbal IQ	SMD	-0.69	-1.01	-0.38

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Luoma et al	1998	Non-verbal IQ	SMD	-0.79	-1.22	-0.37
Luu et al	2011	Non-verbal IQ	SMD	-0.92	-1.15	-0.68
Magill-Evans et al	2002	Non-verbal IQ	SMD	-0.68	-1.3	-0.06
Månsson & Stjernqvist	2014	Non-verbal IQ	SMD	-0.86	-1.07	-0.66
Marlow et al	1989	Non-verbal IQ	SMD	-0.98	-1.39	-0.58
McDonald et al	1989	Non-verbal IQ	SMD	-0.9	-1.61	-0.19
Méio et al	2004	Non-verbal IQ	MD	-8.25	-13.34	-3.17
Mu et al	2008	Non-verbal IQ	SMD	-1.1	-1.43	-0.78
Munck et al	2010	Non-verbal IQ	SMD	-0.87	-1.12	-0.63
Neri et al	2020	Non-verbal IQ	SMD	-1.53	-2.1	-0.97
Neri et al	2020	Non-verbal IQ	SMD	-0.6	-1.04	-0.15
Nomura et al	2009	Non-verbal IQ	SMD	-0.33	-0.46	-0.21
Nosarti et al	2007	Non-verbal IQ	SMD	-0.25	-0.6	0.1
Ohls et al	2016	Non-verbal IQ	SMD	-1.65	-2.41	-0.9
Ortiz-Mantilla et al	2008	Non-verbal IQ	SMD	-1.08	-1.61	-0.56
Pearl et al	1995	Non-verbal IQ	SMD	-0.42	-0.89	0.05
Pogribna et al	2014	Non-verbal IQ	SMD	-0.41	-1.06	0.24
Rose et al	1991	Non-verbal IQ	SMD	-0.77	-1.2	-0.34
Ruiz et al	2018	Non-verbal IQ	SMD	-0.56	-0.81	-0.31
Saigal et al	1991	Non-verbal IQ	SMD	-0.85	-1.11	-0.59
Sanchez et al	2019	Non-verbal IQ	SMD	-0.59	-0.83	-0.34
Sansavini et al	2014	Non-verbal IQ	SMD	-1.21	-2.03	-0.39
Scheurer et al	2018	Non-verbal IQ	SMD	-0.33	-0.85	0.19
Schonhaut et al	2012	Non-verbal IQ	SMD	-0.47	-0.72	-0.22
Sejer et al	2019	Non-verbal IQ	SMD	-0.2	-0.49	0.09
Simões et al	2017	Non-verbal IQ	SMD	-0.9	-1.47	-0.33
Sommerfelt et al	1995	Non-verbal IQ	SMD	-0.45	-0.68	-0.22
Stjernqvist et al	1999	Non-verbal IQ	SMD	-1.16	-1.54	-0.77
Strahle et al	2019	Non-verbal IQ	SMD	-1.06	-1.6	-0.51
Strahle et al	2019	Non-verbal IQ	SMD	-0.54	-1	-0.08
Toome et al	2013	Non-verbal IQ	SMD	-0.6	-0.83	-0.38
Van Braeckel et al	2010	Non-verbal IQ	SMD	-0.8	-1.21	-0.39
Van Veen et al	2019	Non-verbal IQ	SMD	-0.19	-0.65	0.27
Wang et al	2014	Non-verbal IQ	SMD	-1.35	-1.63	-1.08

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Wang et al	2018	Non-verbal IQ	SMD	-0.11	-0.39	0.16
Yu et al	2013	Non-verbal IQ	SMD	-0.51	-0.97	-0.05
Yu et al	2013	Non-verbal IQ	SMD	-0.52	-0.96	-0.08
Zuccarini et al	2017	Non-verbal IQ	SMD	-1.16	-2.11	-0.21
Zuccarini et al	2017	Non-verbal IQ	SMD	-0.93	-1.85	-0.01
Zuccarino et al	1983	Non-verbal IQ	SMD	-0.75	-1.91	0.4
Zuccarino et al	1983	Non-verbal IQ	SMD	-0.48	-1.49	0.54
Paquette et al	2015	Non-verbal IQ	SMD	-0.71	-1.48	0.06
Paquette et al	2015	Non-verbal IQ	SMD	-0.6	-1.45	0.24
Paquette et al	2015	Non-verbal IQ	SMD	-0.24	-1.07	0.59
Sansavini et al	2011	Non-verbal IQ	SMD	-0.19	-1.14	0.76
Sansavini et al	2011	Non-verbal IQ	SMD	0.14	-0.78	1.06
Downie et al	2005	Pseudoword decoding	MD	-6.80	-12.27	-1.33
Johnson et al	2011	Pseudoword decoding	MD	-31.00	-33.81	-28.19
Johnson et al	2009	Pseudoword decoding	MD	-13.00	-16.00	-10.00
Leijon et al	2018	Pseudoword decoding	MD	-2.00	-3.38	-0.62
Leijon et al	2018	Pseudoword decoding	MD	-15.30	-22.49	-8.11
Luu et al	2009	Pseudoword decoding	MD	-6.60	-10.20	-3.00
Frye et al	2009	Pseudoword decoding	MD	1.8	-2.8	6.4
Frye et al	2009	Pseudoword decoding	MD	-0.61	-5.71	4.49
Frye et al	2009	Pseudoword decoding	MD	5.18	-0.07	10.43
Frye et al	2009	Pseudoword decoding	MD	0.95	-5.55	7.45
Frye et al	2009	Pseudoword decoding	MD	9.21	4.03	14.39
Frye et al	2009	Pseudoword decoding	MD	7.44	1.63	13.26
Aarnoudse-Moens et al	2011	Reading comprehension	MD	-1.30	-5.22	2.62
Botting et al	1997	Reading comprehension	SMD	-0.53	-0.78	-0.27
Bowen et al	2002	Reading comprehension	MD	-10.40	-15.76	-5.04
Feldman et al	2012	Reading comprehension	MD	-7.00	-15.30	1.30
Grunau et al	2002	Reading comprehension	MD	-13.80	-20.34	-7.26
Guarini et al	2019	Reading comprehension	MD	-1.20	-2.08	-0.32
Johnson et al	2011	Reading comprehension	MD	-14.70	-17.86	-11.54
Johnson et al	2009	Reading comprehension	MD	-15.00	-18.00	-12.00
Kesler et al	2004	Reading comprehension	MD	-1.00	-8.39	6.39
Lee et al	2011	Reading comprehension	MD	-9.40	-14.69	-4.11

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Leijon et al	2018	Reading comprehension	MD	-6.20	-8.79	-3.61
Leijon et al	2018	Reading comprehension	MD	-9.70	-12.57	-6.83
Luu et al	2009	Reading comprehension	MD	-12.80	-17.70	-8.00
Pritchard et al	2009	Reading comprehension	SMD	-0.27	-0.54	0.01
Rose et al	2011	Reading comprehension	MD	-5.51	-10.83	-0.19
Samuelsson et al	2006	Reading comprehension	MD	-4.60	-7.33	-1.87
Short et al	2003	Reading comprehension	MD	-5.30	-10.53	-0.07
Taylor et al	2008	Reading comprehension	MD	-3.20	-7.89	1.49
Taylor et al	2000	Reading comprehension	MD	-5.94	-11.62	-0.26
Taylor et al	2000	Reading comprehension	MD	-14.63	-21.07	-8.19
Travis et al	2015	Reading comprehension	MD	-5.60	-13.56	2.36
Mathiasen et al	2010	school completion	RR	0.86	0.78	0.96
Moster et al	2008	school completion	RR	0.89	0.87	0.90
Cheong et al	2013	Special educational needs	RR	2.52	1.45	4.40
Clark & Woodward	2015	Special educational needs	RR	1.95	1.25	3.05
Johnson et al	2011	Special educational needs	RR	5.55	3.49	8.81
Litt et al	2012	Special educational needs	RR	5.06	2.83	9.05
Luu et al	2009	Special educational needs	RR	2.88	1.86	4.45
McNicholas et al	2014	Special educational needs	RR	2.75	1.15	6.61
Short et al	2003	Special educational needs	RR	1.72	1.17	2.51
Taylor et al	2016	Special educational needs	RR	4.56	2.12	9.78
Taylor et al	2011	Special educational needs	RR	2.02	1.47	2.79
Aarnoudse-Moens et al	2011	Spelling	MD	-1.80	-4.41	0.81
Anderson et al	2003	Spelling	MD	-5.60	-7.96	-3.24
Andreias et al	2010	Spelling	MD	-5.00	-8.00	-2.00
Botting et al	1997	Spelling	SMD	-0.29	-0.55	-0.04
Bowen et al	2002	Spelling	SMD	-0.85	-1.26	-0.43
Cheong et al	2013	Spelling	SMD	-0.55	-0.79	-0.31
Cheong et al b	2017	Spelling	MD	-7.70	-11.30	-4.10
Cheong et al b	2017	Spelling	MD	-15.00	-18.80	-11.20
Cheong et al b	2017	Spelling	MD	-5.90	-8.40	-3.30
Clark & Woodward	2015	Spelling	MD	-8.32	-12.38	-4.26
Downie et al	2005	Spelling	MD	-9.70	-14.88	-4.52
Gross et al	2001	Spelling	MD	-9.19	-11.87	-6.51

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Grunau et al	2004	Spelling	MD	-5	-14.83	4.83
Grunau et al	2004	Spelling	MD	-14.35	-20.91	-7.79
Hutchinson et al	2013	Spelling	SMD	-0.50	-0.71	-0.29
Kilbride et al	2004	Spelling	MD	-15.00	-24.98	-5.02
Leijon et al	2018	Spelling	MD	-4.60	-7.13	-2.07
Leijon et al	2018	Spelling	MD	-6.10	-8.73	-3.47
McGrath & Sullivan	2002	Spelling	MD	-7.80	-13.72	-1.88
McGrath & Sullivan	2002	Spelling	MD	-7.20	-13.04	-1.36
McGrath & Sullivan	2002	Spelling	MD	-7.90	-14.39	-1.41
Northam et al	2012	Spelling	SMD	-0.59	-1.05	-0.13
Rickards et al	2001	Spelling	MD	-4.90	-10.02	0.22
Saigal et al	2000	Spelling	MD	-18.00	-22.15	-13.85
Saigal et al	1991	Spelling	SMD	-0.54	-0.79	-0.29
Tandon et al	2000	Spelling	MD	-9.10	-16.20	-2.00
Taylor et al	2016	Spelling	MD	-6.10	-11.40	-0.80
Taylor et al	2011	Spelling	MD	-8.52	-12.44	-4.60
Taylor et al	2006	Spelling	MD	-7.10	-10.32	-3.88
Adams et al	2018	Verbal IQ	SMD	-0.32	-0.72	0.09
Agarwal et al	2021	Verbal IQ	SMD	-1.26	-1.58	-0.95
Agostini et al	2014	Verbal IQ	SMD	0.23	-0.27	0.73
Agostini et al	2014	Verbal IQ	SMD	0.76	0.28	1.24
Allin et al	2011	Verbal IQ	SMD	-0.64	-1.01	-0.28
Anderson et al	2010	Verbal IQ	SMD	-0.88	-1.08	-0.68
Arpón et al	2018	Verbal IQ	SMD	-0.13	-0.71	0.45
Baldoli et al	2015	Verbal IQ	SMD	-0.78	-1.33	-0.23
Baron et al b	2011	Verbal IQ	SMD	-0.2	-0.47	0.06
Blasco et al	2020	Verbal IQ	SMD	-0.33	-0.69	0.04
Bode et al	2009	Verbal IQ	SMD	-0.46	-0.68	-0.24
Bohm	2002	Verbal IQ	SMD	-0.61	-0.86	-0.36
Bowen et al	2002	Verbal IQ	SMD	-0.5	-0.9	-0.09
Brosch-Fohraheim et al	2019	Verbal IQ	SMD	-0.91	-1.48	-0.35
Burguet et al	2000	Verbal IQ	SMD	-0.49	-0.77	-0.21
Cheong et al a	2017	Verbal IQ	SMD	-0.71	-0.92	-0.5
Cherkes-Julkowski et al	1998	Verbal IQ	SMD	-0.01	-0.68	0.66

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Cho et al	2022	Verbal IQ	SMD	-0.68	-1.2	-0.16
Crotty et al	2012	Verbal IQ	SMD	-0.91	-1.18	-0.63
Cserjesi et al	2012	Verbal IQ	SMD	-0.18	-0.39	0.03
Dall'Oglio et al	2010	Verbal IQ	SMD	-0.42	-0.86	0.02
Dalziel et al	2007	Verbal IQ	SMD	-0.14	-0.44	0.16
Do et al	2020	Verbal IQ	SMD	-0.45	-0.83	-0.06
Do et al	2020	Verbal IQ	SMD	-0.7	-1.08	-0.32
Eickmann et al	2012	Verbal IQ	SMD	-0.16	-0.52	0.2
Esbjørn et al	2006	Verbal IQ	SMD	-0.63	-0.9	-0.37
Esteban et al	2010	Verbal IQ	SMD	-0.1	-0.71	0.51
Feng et al	2010	Verbal IQ	SMD	-0.59	-1.22	0.05
Feng et al	2010	Verbal IQ	SMD	-0.72	-1.27	-0.17
Forcada-Guex et al	2006	Verbal IQ	SMD	-0.11	-0.6	0.37
Forslund et al	1990	Verbal IQ	SMD	-0.6	-1.1	-0.1
Foulder-Hughes et al	2003	Verbal IQ	SMD	-0.62	-0.8	-0.44
Gasparini et al	2017	Verbal IQ	SMD	-0.54	-0.86	-0.21
Georgsdóttir et al	2004	Verbal IQ	SMD	-0.81	-1.26	-0.36
Gray et al	2015	Verbal IQ	SMD	-0.41	-0.71	-0.1
Grunau et al	1990	Verbal IQ	SMD	-0.73	-1.33	-0.14
Guarini et al	2014	Verbal IQ	SMD	-0.33	-0.76	0.1
Heinonen	2017	Verbal IQ	MD	-3.11	-6.01	-0.22
Heinonen	2017	Verbal IQ	MD	-2.2	-4.25	-0.16
Howe et al	2011	Verbal IQ	SMD	-1.09	-1.34	-0.84
Huang et al	2012	Verbal IQ	SMD	-0.82	-1.46	-0.17
Huang et al	2012	Verbal IQ	SMD	-0.53	-1.13	0.07
Ionio et al	2016	Verbal IQ	SMD	-0.67	-1.02	-0.32
Jakobson et al	2006	Verbal IQ	SMD	-1.83	-2.46	-1.2
Künz et al	2019	Verbal IQ	SMD	-1.1	-1.52	-0.68
Lagerstrom et al	1991	Verbal IQ	SMD	-0.24	-0.47	-0.02
Lagerstrom et al	1991	Verbal IQ	SMD	-0.27	-0.87	0.33
Largo et al	1989	Verbal IQ	SMD	-0.18	-0.59	0.24
Largo et al	1989	Verbal IQ	SMD	-0.18	-0.57	0.21
Larroque et al	2008	Verbal IQ	SMD	-0.55	-0.67	-0.42
Lejeune et al	2019	Verbal IQ	SMD	-0.31	-1.16	0.53

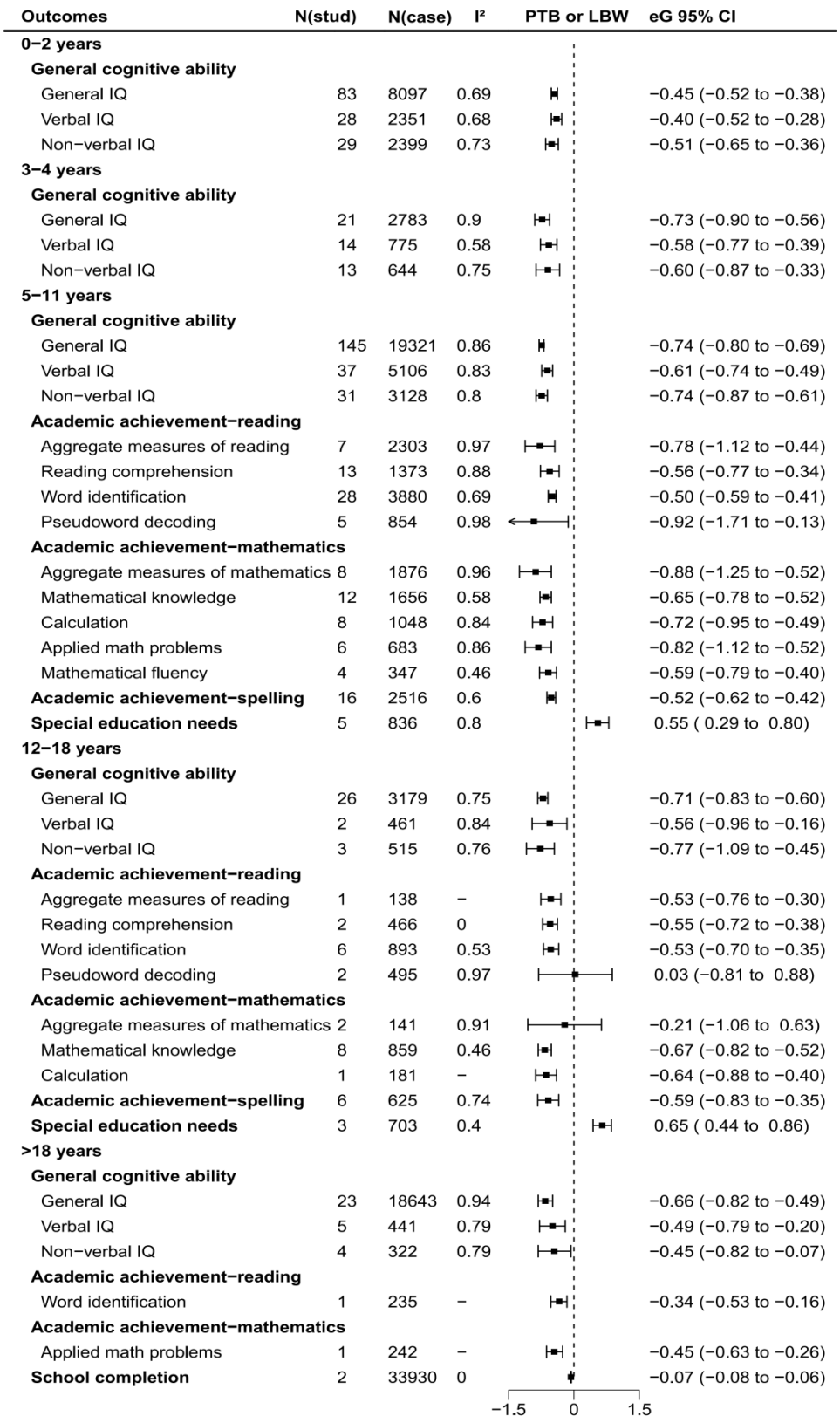
Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Litt et al	1995	Verbal IQ	SMD	-0.82	-1.53	-0.12
Løhaugen et al	2010	Verbal IQ	SMD	-0.95	-1.31	-0.59
Lundequist et al	2015	Verbal IQ	SMD	-0.79	-1.29	-0.28
Lundequist et al	2015	Verbal IQ	SMD	0.05	-0.32	0.41
Lundequist et al	2015	Verbal IQ	SMD	-0.52	-0.84	-0.21
Luoma et al	1998	Verbal IQ	SMD	-0.34	-0.75	0.07
Luu et al	2011	Verbal IQ	SMD	-0.77	-1	-0.54
Magill-Evans et al	2002	Verbal IQ	SMD	0.09	-0.51	0.69
Månsson & Stjernqvist	2014	Verbal IQ	SMD	-0.75	-0.95	-0.54
Marlow et al	1989	Verbal IQ	SMD	-0.4	-0.78	-0.01
Marlow et al	2005	Verbal IQ	SMD	-1.13	-1.35	-0.9
McDonald et al	1989	Verbal IQ	SMD	-0.44	-1.12	0.25
Méio et al	2004	Verbal IQ	MD	-9.17	-13.85	-4.49
Mu et al	2008	Verbal IQ	SMD	-0.95	-1.28	-0.63
Munck et al	2010	Verbal IQ	SMD	-0.49	-0.73	-0.26
Neri et al	2020	Verbal IQ	SMD	-0.15	-0.66	0.35
Neri et al	2020	Verbal IQ	SMD	0.01	-0.42	0.45
Nomura et al	2009	Verbal IQ	SMD	-0.34	-0.47	-0.22
Nosatti et al	2007	Verbal IQ	SMD	-0.67	-1.03	-0.31
Ohls et al	2016	Verbal IQ	SMD	-1.11	-1.81	-0.4
Ortiz-Mantilla et al	2008	Verbal IQ	SMD	-0.75	-1.26	-0.24
Pearl et al	1995	Verbal IQ	SMD	-0.15	-0.62	0.31
Pogribna et al	2014	Verbal IQ	SMD	-0.47	-1.13	0.18
Rose et al	1991	Verbal IQ	SMD	-0.49	-0.91	-0.06
Ruiz et al	2018	Verbal IQ	SMD	-0.5	-0.75	-0.25
Saigal et al	1991	Verbal IQ	SMD	-0.75	-1	-0.5
Sanchez et al	2019	Verbal IQ	SMD	-0.61	-0.86	-0.36
Sansavini et al	2014	Verbal IQ	SMD	-1.04	-1.84	-0.23
Scheurer et al	2018	Verbal IQ	SMD	-0.27	-0.79	0.25
Schneider et al	2014	Verbal IQ	SMD	0.03	-0.41	0.46
Schneider et al	2014	Verbal IQ	SMD	0.23	-0.15	0.62
Schonhaut et al	2012	Verbal IQ	SMD	-0.1	-0.35	0.15
Sejer et al	2019	Verbal IQ	SMD	-0.24	-0.53	0.04
Simões et al	2017	Verbal IQ	SMD	-0.71	-1.27	-0.15

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Sommerfelt et al	1995	Verbal IQ	SMD	-0.39	-0.61	-0.16
Stjernqvist et al	1999	Verbal IQ	SMD	-0.86	-1.24	-0.49
Strahle et al	2019	Verbal IQ	SMD	-1.15	-1.71	-0.6
Strahle et al	2019	Verbal IQ	SMD	-0.64	-1.11	-0.18
Teplin et al	1991	Verbal IQ	SMD	-0.61	-1.16	-0.06
Toome et al	2013	Verbal IQ	SMD	-0.51	-0.74	-0.28
Van Braeckel et al	2010	Verbal IQ	SMD	-1.26	-1.69	-0.83
Van Veen et al	2019	Verbal IQ	SMD	-0.2	-0.66	0.26
Wang et al	2014	Verbal IQ	SMD	-1.3	-1.57	-1.02
Youngblut et al	2001	Verbal IQ	SMD	-0.12	-0.48	0.24
Yu et al	2013	Verbal IQ	SMD	-0.49	-0.95	-0.03
Yu et al	2013	Verbal IQ	SMD	-0.4	-0.84	0.04
Zuccarini et al	2017	Verbal IQ	SMD	-0.71	-1.61	0.2
Zuccarini et al	2017	Verbal IQ	SMD	-0.15	-1.03	0.73
Zuccarino et al	1983	Verbal IQ	SMD	-0.11	-1.23	1.01
Zuccarino et al	1983	Verbal IQ	SMD	-0.3	-1.31	0.7
de Jong et al	2015	Verbal IQ	SMD	-1.93	-2.64	-1.22
de Jong et al	2015	Verbal IQ	SMD	-1.16	-1.83	-0.49
Paquette et al	2015	Verbal IQ	SMD	-0.42	-1.26	0.41
Paquette et al	2015	Verbal IQ	SMD	-0.27	-1.02	0.47
Paquette et al	2015	Verbal IQ	SMD	-0.37	-1.21	0.46
Talge et al	2010	Verbal IQ	MD	-0.15	-3.21	2.91
Morsan et al	2018	Verbal IQ	SMD	0.13	-0.68	0.94
Morsan et al	2018	Verbal IQ	SMD	0.36	-0.22	0.94
Morsan et al	2018	Verbal IQ	SMD	0.11	-0.41	0.63
Sansavini et al	2011	Verbal IQ	SMD	-0.51	-1.47	0.44
Sansavini et al	2011	Verbal IQ	SMD	-0.36	-1.28	0.56
Anderson et al	2003	Word identification	MD	-6.70	-9.45	-3.95
Andreias et al	2010	Word identification	MD	-6.00	-9.11	-2.89
Bowen et al	2002	Word identification	MD	-13.80	-19.42	-8.18
Breslau et al	2001	Word identification	MD	-2.90	-7.19	1.39
Breslau et al	2001	Word identification	MD	-5.70	-8.78	-2.62
Cheong et al b	2017	Word identification	MD	-8.40	-11.95	-4.85
Cheong et al b	2017	Word identification	MD	-15.30	-18.78	-11.82

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Cheong et al b	2017	Word identification	MD	-6.80	-9.90	-3.70
Clark and Woodward	2015	Word identification	MD	-9.43	-13.37	-5.49
Downie et al	2005	Word identification	MD	-8.83	-13.82	-3.84
Feldman et al	2012	Word identification	MD	-4.60	-11.40	2.20
Grunau et al	2002	Word identification	MD	-12.50	-18.92	-6.08
Grunau et al	2004	Word identification	MD	-7.94	-15.84	-0.04
Grunau et al	2004	Word identification	MD	-6.16	-9.96	-2.36
Hack et al	2002	Word identification	MD	-6.30	-9.60	-2.90
Hutchinson et al	2013	Word identification	MD	-7.50	-10.58	-4.42
Johnson et al	2011	Word identification	MD	-13.30	-16.37	-10.23
Johnson et al	2009	Word identification	MD	-13.00	-16.00	-10.00
Kesler et al	2004	Word identification	MD	-4.00	-12.16	4.16
Kilbride et al	2004	Word identification	MD	-6.00	-13.99	1.99
Lee et al	2011	Word identification	MD	-7.00	-11.47	-2.53
Leijon et al	2018	Word identification	MD	-16.50	-27.86	-5.14
Leijon et al	2018	Word identification	MD	-27.50	-36.56	-18.44
Litt et al	2012	Word identification	MD	-10.00	-13.70	-6.30
Litt et al	2012	Word identification	MD	-6.90	-11.00	-2.80
Luu et al	2009	Word identification	MD	-5.70	-8.90	-2.50
McGrath & Sullivan	2002	Word identification	MD	-9.30	-18.23	-0.37
McGrath & Sullivan	2002	Word identification	MD	-5.50	-13.89	2.39
McGrath & Sullivan	2002	Word identification	MD	-5.10	-13.94	3.74
Munk et al	2012	Word identification	MD	-2.50	-4.23	-0.77
Northam et al	2012	Word identification	MD	-9.00	-14.79	-3.21
Rickards et al	2001	Word identification	MD	-3.60	-8.26	1.06
Rose et al	2011	Word identification	MD	-2.65	-7.51	2.21
Saigal et al	2000	Word identification	MD	-16.00	-20.82	-11.18
Saigal et al	1991	Word identification	SMD	-0.49	-0.74	-0.24
Samuelsson et al	2006	Word identification	MD	-11.70	-20.74	-2.66
Samuelsson et al	2006	Word identification	MD	-3.80	-6.43	-1.17
Sayeur et al	2015	Word identification	MD	1.00	-17.23	19.23
Short et al	2003	Word identification	MD	-4.40	-9.97	1.17
Tandon et al	2000	Word identification	MD	-9.30	-16.20	-2.40
Tandon et al	2000	Word identification	MD	-15.10	-20.75	-9.45

Author	Year	Outcome domain	Effect size measure	Effect size	95% CI (lower)	95% CI (upper)
Taylor et al	1995	Word identification	MD	-3.10	-7.29	1.09
Taylor et al	2016	Word identification	MD	-9.70	-14.52	-4.88
Taylor et al	2008	Word identification	MD	-1.90	-6.65	2.85
Taylor et al	2000	Word identification	MD	-4.61	-10.59	1.37
Taylor et al	2000	Word identification	MD	-16.83	-23.88	-9.78
Taylor et al	2011	Word identification	MD	-3.98	-7.33	-0.63
Taylor et al	2006	Word identification	MD	-7.10	-10.26	-3.94
Travis et al	2015	Word identification	MD	-1.40	-8.24	5.44

eFigure. Subgroup analysis of associations between preterm birth or low birth weight and cognitive and educational outcomes by age group



NOTE: This eFigure shows the combined “PTB or LBW” estimates corresponding to the PTB and LBW analyses presented separately in Figure 5.