Supplemental Online Content

Zhou T, Luo Y, Xiong W, Meng Z, Zhang H, Zhang J. Problem-solving skills training for parents of children with chronic health conditions. *JAMA Pediatr*. Published online January 2, 2024. doi:10.1001/jamapediatrics.2023.5753

eTable 1. Study Search Strategies

eTable 2. Intervention Characteristics of Included Studies

eTable 3. Author Judgments of Risk of Bias Across All Included Studies

eTable 4. Grading of Recommendations Assessment, Development, and Evaluation (GRADE) Evidence Profile

eFigure 1. Forest Plot Meta-Analyses for Different Psychosocial Outcomes

eFigure 2. Subgroup Analyses of Each Outcome According to Children- and Intervention-Level Factors

eFigure 3. Funnel Plot Analyses

eFigure 4. Leave-One-Out Sensitivity Analyses

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

eTable 1. Study Search Strategies

PubMed
Search date: 30/04/2023
Number of results: 523

No.	Search strategies
#1	"Child" [Mesh] OR "Pediatrics" [Mesh] OR "Adolescent" [Mesh] OR "Infant" [Mesh] OR "Minors" [Mesh]
#2	"child*" OR "kid*" OR "boy*" OR "girl*" OR "preschool*" OR "schoolchild" OR "pediatric*" OR "paediatric*" OR "adolescen*" OR "teen*" OR "preteen*" OR "youth*" OR "juvenil*" OR "young" OR "puber" OR "pubescen*" OR "underage*" OR "under-age*" OR "infan*" OR "neonat*" OR "neo-nat*" OR "newborn*" OR "new-born*" OR "baby" OR "babies" OR "toddler*" OR "minor*" OR "offspring*" OR "young people"
#3	#1 OR #2
#4	"Chronic Disease" [Mesh] OR "Anemia" [Mesh] OR "Arthritis" [Mesh] OR "Asthma" [Mesh] OR "Attention Deficit Disorder with Hyperactivity" [Mesh] OR "Autism Spectrum Disorder" [Mesh] OR "Asperger Syndrome" [Mesh] OR "Autistic Disorder" [Mesh] OR "Vision Disorders" [Mesh] OR "Brain Injuries" [Mesh] OR "Bronchitis" [Mesh] OR "Cerebral Palsy" [Mesh] OR "Congenital Abnormalities" [Mesh] OR "Cystic Fibrosis" [Mesh] OR "Developmental Disabilities" [Mesh] OR "Diabetes Mellitus" [Mesh] OR "Down Syndrome" [Mesh] OR "Epilepsy" [Mesh] OR "Genetic Diseases, Inborn" [Mesh] OR "Heart Defects, Congenital" [Mesh] OR "Heart Diseases" [Mesh] OR "Hematologic Diseases" [Mesh] OR "Anemia, Sickle Cell" [Mesh] OR "Hemophilia A" [Mesh] OR "HIV" [Mesh] OR "Intellectual Disability" [Mesh] OR "Kidney Diseases" [Mesh] OR "Mental Disorders" [Mesh] OR "Musculoskeletal Diseases" [Mesh] OR "Neoplasms" [Mesh] OR "Schizophrenia" [Mesh] OR "Spinal Dysraphism" [Mesh] OR "Thalassemia" [Mesh] OR "Trisomy" [Mesh]
#5	"chronic disease*" OR "chronic ill*" OR "chronically ill*" OR "chronic disorder*" OR "chronic health" OR "chronic condition*" OR "anemia*" OR "arthriti*" OR "osteoarthriti*" OR "polyarthriti*" OR "asthma*" OR "ADHD" OR "attention deficit disorder*" OR "autism" OR "autistic" OR "asperger disease*" OR "asperger disorders" OR "asperger syndrome" OR "kanner* syndrome" OR "ASD" OR "blindness" OR "amaurosis" OR "vision loss*" OR "loss of vision" OR "vision disorder*" OR "visual* impair*" OR "brain injur*" OR "brain laceration*" OR "TBI" OR "TBIS" OR "bronchiti*" OR "cerebral pals*" OR "little* disease" OR "spastic diplegia*" OR "birth defect*" OR "congenital abnormalit*" OR "congenital anomalies" OR "congenital defect*" OR "deformit*" OR "cystic fibrosis" OR "fibrocystic disease of pancreas" OR "mucoviscidosis" OR "pancreas fibrocystic disease*" OR "development* deviation*" OR "development* disab*" OR "development* disorder*" OR "developmental delay disorder*" OR "diabetes" OR "down* syndrome" OR "mongolism" OR "trisomy 21" OR "trisomy g" OR "epilep*" OR "seizure disorder*" OR "genetic disease*" OR "genetic disorder*" OR "hereditary disease*" OR "single gene defects" OR "cardiac disease*" OR "cardiac disorder*" OR "heart disease*" OR

	“heart disorder*” OR “heart defect*” OR “heart abnormalit*” OR “heart malform*” OR “blood disease*” OR “blood disorder*” OR “haematologic* disease*” OR “hematologic* disease*” OR “haematologic* disorder*” OR “hematologic* disorder*” OR “sickle cell anemia*” OR “sickle cell disease*” OR “sickle cell disorder*” OR “hbs disease” OR “hemoglobin s disease” OR “haemophilia*” OR “hemophilia*” OR “factor viii deficien*” OR “factor 8 deficien*” OR “aids virus*” OR “acquired immune deficiency syndrome virus*” OR “AIDS virus*” OR “hiv” OR “htlv-iii” OR “HIV*” OR “human t cell leukemia virus type iii” OR “human t cell lymphotropic virus type iii” OR “human t lymphotropic virus type iii” OR “lav-htlv-iii” OR “lymphadenopathy associated virus*” OR “intellectual development disorder*” OR “intellectual disabilit*” OR “mental deficienc*” OR “mental retardation” OR “kidney disease*” OR “kidney disorder*” OR “renal disease*” OR “renal disorder*” OR “mental disorder*” OR “mental* ill*” OR “psychiatric disease*” OR “psychiatric disorder*” OR “psychiatric illness∗” OR “musculoskeletal disease*” OR “musculoskeletal disorder*” OR “MSK*” OR “MSD*” OR “orthopedic disorder*” OR “orthopedic disease*” OR “neoplasm*” OR “cancer*” OR “tumor*” OR “tumour*” OR “oncolog*” OR “carcinoma*” OR “malignan*” OR “leukemia*” OR “leukaemia*” OR “lymphoma*” OR “dementia praecox” OR “schizophreni*” OR “spina bifida*” OR “cleft spine*” OR “open spine*” OR “rachischis*” OR “schistorrhach*” OR “spinal dysraphi*” OR “status dysraphicus” OR “thalassemia*” OR “chromosomal triplication*” OR “trisom*”
#6	#4 OR #5
#7	“Parents” [Mesh] OR “Caregivers” [Mesh] OR “Mothers” [Mesh] OR “Fathers” [Mesh] OR “Family” [Mesh]
#8	“parent*” OR “caregiver*” OR “carer*” OR “mother*” OR “father*” OR “famil*” OR “maternal*” OR “paternal*”
#9	#7 OR #8
#10	“Problem Solving” [Mesh]
#11	“problem-solving” OR “problem solving therap*” OR “problem-solving therap*” OR “problem solving intervention*” OR “problem-solving intervention*” OR “problem solving train*” OR “problem-solving train*” OR “problem solving program*” OR “problem-solving program*” OR “problem solving treatment” OR “problem-solving treatment” OR “problem solving workshop” OR “problem-solving workshop” OR “problem solving education” OR “problem-solving education” OR “problem solving approach” OR “problem-solving approach” OR “problem solving skills train*” OR “problem-solving skills train*” OR “PST” OR “PSST”
#12	#10 OR #11
#13	“Clinical Trial” [Publication Type] OR “Controlled Clinical Trial” [Publication Type] OR “Randomized Controlled Trial” [Publication Type] OR “Controlled Clinical Trials as Topic” [Mesh] OR “Random Allocation” [Mesh] OR “Double-Blind Method” [Mesh] OR “Single-Blind Method” [Mesh]
#14	“randomized controlled trial*” OR “RCT” OR “random*” OR “trial” OR “clinical trial*” OR “single blind*” OR “double blind*” OR “triple blind*” OR “waitlist*” OR “wait list*” OR “waiting list*”
#15	#13 OR #14
#16	#3 AND #6 AND #9 AND #12 AND #15

Embase
Search date: 30/04/2023
Number of results: 720

No.	Search strategies
#1	“Child”/exp OR “Pediatrics”/exp OR “Adolescent”/exp OR “Infant”/exp OR “Minors”/exp
#2	(“child*” OR “kid*” OR “boy*” OR “girl*” OR “preschool*” OR “schoolchild” OR “pediatric*” OR “paediatric*” OR “adolescen*” OR “teen*” OR “preteen*” OR “youth*” OR “juvenil*” OR “young” OR “puber” OR “pubescen*” OR “underage*” OR “under-age*” OR “infan*” OR “neonat*” OR “neo-nat*” OR “newborn*” OR “new-born*” OR “baby” OR “babies” OR “toddler*” OR “minor*” OR “offspring*” OR “young people”):ti,ab,kw
#3	#1 OR #2
#4	“Chronic Disease”/exp OR “Anemia”/exp OR “Arthritis”/exp OR “Asthma”/exp OR “Attention Deficit Disorder with Hyperactivity”/exp OR “Autism Spectrum Disorder”/exp OR “Asperger Syndrome”/exp OR “Autistic Disorder”/exp OR “Vision Disorders”/exp OR “Brain Injuries”/exp OR “Bronchitis”/exp OR “Cerebral Palsy”/exp OR “Congenital Abnormalities”/exp OR “Cystic Fibrosis”/exp OR “Developmental Disabilities”/exp OR “Diabetes Mellitus”/exp OR “Down Syndrome”/exp OR “Epilepsy”/exp OR “Genetic Diseases, Inborn”/exp OR “Heart Defects, Congenital”/exp OR “Heart Diseases”/exp OR “Hematologic Diseases”/exp OR “Anemia, Sickle Cell”/exp OR “Hemophilia A”/exp OR “HIV”/exp OR “Intellectual Disability”/exp OR “Kidney Diseases”/exp OR “Mental Disorders”/exp OR “Musculoskeletal Diseases”/exp OR “Neoplasms”/exp OR “Schizophrenia”/exp OR “Spinal Dysraphism”/exp OR “Thalassemia”/exp OR “Trisomy”/exp
#5	(“chronic disease*” OR “chronic ill*” OR “chronically ill*” OR “chronic disorder*” OR “chronic health” OR “chronic condition*” OR “anemia*” OR “arthriti*” OR “osteoarthriti*” OR “polyarthriti*” OR “asthma*” OR “ADHD” OR “attention deficit disorder*” OR “autism” OR “autistic” OR “asperger disease*” OR “asperger disorders” OR “asperger syndrome” OR “kanner* syndrome” OR “ASD” OR “blindness” OR “amaurosis” OR “vision loss*” OR “loss of vision” OR “vision disorder*” OR “visual* impair*” OR “brain injur*” OR “brain laceration*” OR “TBI” OR “TBIS” OR “bronchiti*” OR “cerebral pals*” OR “little* disease” OR “spastic diplegia*” OR “birth defect*” OR “congenital abnormalit*” OR “congenital anomalies” OR “congenital defect*” OR “deformit*” OR “cystic fibrosis” OR “fibrocystic disease of pancreas” OR “mucoviscidosis” OR “pancreas fibrocystic disease*” OR “development* deviation*” OR “development* disab*” OR “development* disorder*” OR “developmental delay disorder*” OR “diabetes” OR “down* syndrome” OR “mongolism” OR “trisomy 21” OR “trisomy g” OR “epilep*” OR “seizure disorder*” OR “genetic disease*” OR “genetic disorder*” OR “hereditary disease*” OR “single gene defects” OR “cardiac disease*” OR “cardiac disorder*” OR “heart disease*” OR “heart disorder*” OR “heart defect*” OR “heart abnormalit*” OR “heart malform*” OR “blood disease*” OR “blood disorder*” OR “haematologic* disease*” OR “hematologic* disease*” OR “haematologic* disorder*” OR “hematologic* disorder*”

	OR “sickle cell anemia*” OR “sickle cell disease*” OR “sickle cell disorder*” OR “hbs disease” OR “hemoglobin s disease” OR “haemophilia*” OR “hemophilia*” OR “factor viii deficien*” OR “factor 8 deficien*” OR “aids virus*” OR “acquired immune deficiency syndrome virus*” OR “AIDS virus*” OR “hiv” OR “htlv-iii” OR “HIV*” OR “human t cell leukemia virus type iii” OR “human t cell lymphotropic virus type iii” OR “human t lymphotropic virus type iii” OR “lav-htlv-iii” OR “lymphadenopathy associated virus*” OR “intellectual development disorder*” OR “intellectual disabilit*” OR “mental deficienc*” OR “mental retardation” OR “kidney disease*” OR “kidney disorder*” OR “renal disease*” OR “renal disorder*” OR “mental disorder*” OR “mental* ill*” OR “psychiatric disease*” OR “psychiatric disorder*” OR “psychiatric illness∗” OR “musculoskeletal disease*” OR “musculoskeletal disorder*” OR “MSK*” OR “MSD*” OR “orthopedic disorder*” OR “orthopedic disease*” OR “neoplasm*” OR “cancer*” OR “tumor*” OR “tumour*” OR “oncolog*” OR “carcinoma*” OR “malignan*” OR “leukemia*” OR “leukaemia*” OR “lymphoma*” OR “dementia praecox” OR “schizophreni*” OR “spina bifida*” OR “cleft spine*” OR “open spine*” OR “rachischis*” OR “schistorrhach*” OR “spinal dysraphi*” OR “status dysraphicus” OR “thalassemia*” OR “chromosomal triplication*” OR “trisom*”):ti,ab,kw
#6	#4 OR #5
#7	“Parents”/exp OR “Caregivers”/exp OR “Mothers”/exp OR “Fathers”/exp OR “Family”/exp
#8	(“parent*” OR “caregiver*” OR “carer*” OR “mother*” OR “father*” OR “famil*” OR “maternal*” OR “paternal*”):ti,ab,kw
#9	#7 OR #8
#10	“Problem Solving”/exp
#11	(“problem-solving” OR “problem solving therap*” OR “problem-solving therap*” OR “problem solving intervention*” OR “problem-solving intervention*” OR “problem solving train*” OR “problem-solving train*” OR “problem solving program*” OR “problem-solving program*” OR “problem solving treatment” OR “problem-solving treatment” OR “problem solving workshop” OR “problem-solving workshop” OR “problem solving education” OR “problem-solving education” OR “problem solving approach” OR “problem-solving approach” OR “problem solving skills train*” OR “problem-solving skills train*” OR “PST” OR “PSST”):ti,ab,kw
#12	#10 OR #11
#13	“Clinical Trial”/de OR “Controlled Clinical Trial”/de OR “Randomized Controlled Trial”/de OR “Controlled Clinical Trial (topic)”/exp OR “Random Allocation”/exp OR “Double-Blind Method”/exp OR “Single-Blind Method”/exp
#14	(“randomized controlled trial*” OR “RCT” OR “random*” OR “trial” OR “clinical trial*” OR “single blind*” OR “double blind*” OR “triple blind*” OR “waitlist*” OR “wait list*” OR “waiting list*”):ti,ab,kw
#15	#13 OR #14
#16	#3 AND #6 AND #9 AND #12 AND #15

CINAHL
Search date: 30/04/2023
Number of results: 131

No.	Search strategies
#1	(MH “Child”) OR (MH “Pediatrics”) OR (MH “Adolescent”) OR (MH “Infant”) OR (MH “Minors”)
#2	TI (“child*” OR “kid*” OR “boy*” OR “girl*” OR “preschool*” OR “schoolchild” OR “pediatric*” OR “paediatric*” OR “adolescen*” OR “teen*” OR “preteen*” OR “youth*” OR “juvenil*” OR “young” OR “puber” OR “pubescen*” OR “underage*” OR “under-age*” OR “infan*” OR “neonat*” OR “neo-nat*” OR “newborn*” OR “new-born*” OR “baby” OR “babies” OR “toddler*” OR “minor*” OR “offspring*” OR “young people”) OR “AB (child*” OR “kid*” OR “boy*” OR “girl*” OR “preschool*” OR “schoolchild” OR “pediatric*” OR “paediatric*” OR “adolescen*” OR “teen*” OR “preteen*” OR “youth*” OR “juvenil*” OR “young” OR “puber” OR “pubescen*” OR “underage*” OR “under-age*” OR “infan*” OR “neonat*” OR “neo-nat*” OR “newborn*” OR “new-born*” OR “baby” OR “babies” OR “toddler*” OR “minor*” OR “offspring*” OR “young people”)
#3	#1 OR #2
#4	(MH “Chronic Disease”) OR (MH “Anemia”) OR (MH “Arthritis”) OR (MH “Asthma”) OR (MH “Attention Deficit Disorder with Hyperactivity”) OR (MH “Autism Spectrum Disorder”) OR (MH “Asperger Syndrome”) OR (MH “Autistic Disorder”) OR (MH “Vision Disorders”) OR (MH “Brain Injuries”) OR (MH “Bronchitis”) OR (MH “Cerebral Palsy”) OR (MH “Congenital Abnormalities”) OR (MH “Cystic Fibrosis”) OR (MH “Developmental Disabilities”) OR (MH “Diabetes Mellitus”) OR (MH “Down Syndrome”) OR (MH “Epilepsy”) OR (MH “Genetic Diseases, Inborn”) OR (MH “Heart Defects, Congenital”) OR (MH “Heart Diseases”) OR (MH “Hematologic Diseases”) OR (MH “Anemia, Sickle Cell”) OR (MH “Hemophilia A”) OR (MH “HIV”) OR (MH “Intellectual Disability”) OR (MH “Kidney Diseases”) OR (MH “Mental Disorders”) OR (MH “Musculoskeletal Diseases”) OR (MH “Neoplasms”) OR (MH “Schizophrenia”) OR (MH “Spinal Dysraphism”) OR (MH “Thalassemia”) OR (MH “Trisomy”)
#5	TI (“chronic disease*” OR “chronic ill*” OR “chronically ill*” OR “chronic disorder*” OR “chronic health” OR “chronic condition*” OR “anemia*” OR “arthriti*” OR “osteoarthriti*” OR “polyarthriti*” OR “asthma*” OR “ADHD” OR “attention deficit disorder*” OR “autism” OR “autistic” OR “asperger disease*” OR “asperger disorders” OR “asperger syndrome” OR “kanner* syndrome” OR “ASD” OR “blindness” OR “amaurosis” OR “vision loss*” OR “loss of vision” OR “vision disorder*” OR “visual* impair*” OR “brain injur*” OR “brain laceration*” OR “TBI” OR “TBIS” OR “bronchiti*” OR “cerebral pals*” OR “little* disease” OR “spastic diplegia*” OR “birth defect*” OR “congenital abnormalit*” OR “congenital anomalies” OR “congenital defect*” OR “deformit*” OR “cystic fibrosis” OR “fibrocystic disease of pancreas” OR “mucoviscidosis” OR “pancreas fibrocystic disease*” OR “development* deviation*” OR “development* disab*” OR “development* disorder*” OR “developmental delay disorder*” OR “diabetes” OR “down* syndrome” OR

	“mongolism” OR “trisomy 21” OR “trisomy g” OR “epilep*” OR “seizure disorder*” OR “genetic disease*” OR “genetic disorder*” OR “hereditary disease*” OR “single gene defects” OR “cardiac disease*” OR “cardiac disorder*” OR “heart disease*” OR “heart disorder*” OR “heart defect*” OR “heart abnormalit*” OR “heart malform*” OR “blood disease*” OR “blood disorder*” OR “haematologic* disease*” OR “hematologic* disease*” OR “haematologic* disorder*” OR “hematologic* disorder*” OR “sickle cell anemia*” OR “sickle cell disease*” OR “sickle cell disorder*” OR “hbs disease” OR “hemoglobin s disease” OR “haemophilia*” OR “hemophilia*” OR “factor viii deficien*” OR “factor 8 deficien*” OR “aids virus*” OR “acquired immune deficiency syndrome virus*” OR “AIDS virus*” OR “hiv” OR “htlv-iii” OR “HIV*” OR “human t cell leukemia virus type iii” OR “human t cell lymphotropic virus type iii” OR “human t lymphotropic virus type iii” OR “lav-htlv-iii” OR “lymphadenopathy associated virus*” OR “intellectual development disorder*” OR “intellectual disabilit*” OR “mental deficienc*” OR “mental retardation” OR “kidney disease*” OR “kidney disorder*” OR “renal disease*” OR “renal disorder*” OR “mental disorder*” OR “mental* ill*” OR “psychiatric disease*” OR “psychiatric disorder*” OR “psychiatric illness∗” OR “musculoskeletal disease*” OR “musculoskeletal disorder*” OR “MSK*” OR “MSD*” OR “orthopedic disorder*” OR “orthopedic disease*” OR “neoplasm*” OR “cancer*” OR “tumor*” OR “tumour*” OR “oncolog*” OR “carcinoma*” OR “malignan*” OR “leukemia*” OR “leukaemia*” OR “lymphoma*” OR “dementia praecox” OR “schizophreni*” OR “spina bifida*” OR “cleft spine*” OR “open spine*” OR “rachischis*” OR “schistorrhach*” OR “spinal dysraphi*” OR “status dysraphicus” OR “thalassemia*” OR “chromosomal triplication*” OR “trisom*”) OR AB (“chronic disease*” OR “chronic ill*” OR “chronically ill*” OR “chronic disorder*” OR “chronic health” OR “chronic condition*” OR “anemia*” OR “arthriti*” OR “osteoarthriti*” OR “polyarthriti*” OR “asthma*” OR “ADHD” OR “attention deficit disorder*” OR “autism” OR “autistic” OR “asperger disease*” OR “asperger disorders” OR “asperger syndrome” OR “kanner* syndrome” OR “ASD” OR “blindness” OR “amaurosis” OR “vision loss*” OR “loss of vision” OR “vision disorder*” OR “visual* impair*” OR “brain injur*” OR “brain laceration*” OR “TBI” OR “TBIS” OR “bronchiti*” OR “cerebral pals*” OR “little* disease” OR “spastic diplegia*” OR “birth defect*” OR “congenital abnormalit*” OR “congenital anomalies” OR “congenital defect*” OR “deformit*” OR “cystic fibrosis” OR “fibrocystic disease of pancreas” OR “mucoviscidosis” OR “pancreas fibrocystic disease*” OR “development* deviation*” OR “development* disab*” OR “development* disorder*” OR “developmental delay disorder*” OR “diabetes” OR “down* syndrome” OR “mongolism” OR “trisomy 21” OR “trisomy g” OR “epilep*” OR “seizure disorder*” OR “genetic disease*” OR “genetic disorder*” OR “hereditary disease*” OR “single gene defects” OR “cardiac disease*” OR “cardiac disorder*” OR “heart disease*” OR “heart disorder*” OR “heart defect*” OR “heart abnormalit*” OR “heart malform*” OR “blood disease*” OR “blood disorder*” OR “haematologic* disease*” OR “hematologic* disease*” OR “haematologic* disorder*” OR “hematologic* disorder*” OR “sickle cell anemia*” OR “sickle cell disease*” OR “sickle cell disorder*” OR “hbs disease” OR “hemoglobin s disease” OR “haemophilia*” OR “hemophilia*” OR “factor viii deficien*” OR “factor 8 deficien*” OR “aids virus*” OR “acquired immune deficiency syndrome virus*” OR

	“AIDS virus*” OR “hiv” OR “htlv-iii” OR “HIV*” OR “human t cell leukemia virus type iii” OR “human t cell lymphotropic virus type iii” OR “human t lymphotropic virus type iii” OR “lav-htlv-iii” OR “lymphadenopathy associated virus*” OR “intellectual development disorder*” OR “intellectual disabilit*” OR “mental deficienc*” OR “mental retardation” OR “kidney disease*” OR “kidney disorder*” OR “renal disease*” OR “renal disorder*” OR “mental disorder*” OR “mental* ill*” OR “psychiatric disease*” OR “psychiatric disorder*” OR “psychiatric illness∗” OR “musculoskeletal disease*” OR “musculoskeletal disorder*” OR “MSK*” OR “MSD*” OR “orthopedic disorder*” OR “orthopedic disease*” OR “neoplasm*” OR “cancer*” OR “tumor*” OR “tumour*” OR “oncolog*” OR “carcinoma*” OR “malignan*” OR “leukemia*” OR “leukaemia*” OR “lymphoma*” OR “dementia praecox” OR “schizophreni*” OR “spina bifida*” OR “cleft spine*” OR “open spine*” OR “rachischis*” OR “schistorrhach*” OR “spinal dysraphi*” OR “status dysraphicus” OR “thalassemia*” OR “chromosomal triplication*” OR “trisom*”)
#6	#4 OR #5
#7	(MH “Parents”) OR (MH “Caregivers”) OR (MH “Mothers”) OR (MH “Fathers”) OR (MH “Family”)
#8	TI (“parent*” OR “caregiver*” OR “carer*” OR “mother*” OR “father*” OR “famil*” OR “maternal*” OR “paternal*”) OR AB (“parent*” OR “caregiver*” OR “carer*” OR “mother*” OR “father*” OR “famil*” OR “maternal*” OR “paternal*”)
#9	#7 OR #8
#10	(MH “Problem Solving”)
#11	TI (“problem-solving” OR “problem solving therap*” OR “problem-solving therap*” OR “problem solving intervention*” OR “problem-solving intervention*” OR “problem solving train*” OR “problem-solving train*” OR “problem solving program*” OR “problem-solving program*” OR “problem solving treatment” OR “problem-solving treatment” OR “problem solving workshop” OR “problem-solving workshop” OR “problem solving education” OR “problem-solving education” OR “problem solving approach” OR “problem-solving approach” OR “problem solving skills train*” OR “problem-solving skills train*” OR “PST” OR “PSST”) OR AB (“problem-solving” OR “problem solving therap*” OR “problem-solving therap*” OR “problem solving intervention*” OR “problem-solving intervention*” OR “problem solving train*” OR “problem-solving train*” OR “problem solving program*” OR “problem-solving program*” OR “problem solving treatment” OR “problem-solving treatment” OR “problem solving workshop” OR “problem-solving workshop” OR “problem solving education” OR “problem-solving education” OR “problem solving approach” OR “problem-solving approach” OR “problem solving skills train*” OR “problem-solving skills train*” OR “PST” OR “PSST”)
#12	#10 OR #11
#13	(MH “Clinical Trial”) OR (MH “Controlled Clinical Trial”) OR (MH “Randomized Controlled Trial”) OR (MH “Controlled Clinical Trials as Topic”) OR (MH “Random Allocation”) OR (MH “Double-Blind Method”) OR (MH “Single-Blind Method”)
#14	TI (“randomized controlled trial*” OR “RCT” OR “random*” OR “trial” OR “clinical trial*” OR “single blind*” OR “double blind*” OR “triple blind*” OR “waitlist*” OR “wait list*” OR “waiting list*”) OR AB (“randomized controlled trial*” OR “RCT” OR

	“random*” OR “trial” OR “clinical trial*” OR “single blind*” OR “double blind*” OR “triple blind*” OR “waitlist*” OR “wait list*” OR “waiting list*”)
#15	#13 OR #14
#16	#3 AND #6 AND #9 AND #12 AND #15

PsycINFO
Search date: 30/04/2023
Number of results: 170

No.	Search strategies
#1	(MA “Child”) OR (MA “Pediatrics”) OR (MA “Adolescent”) OR (MA “Infant”) OR (MA “Minors”)
#2	TI (“child*” OR “kid*” OR “boy*” OR “girl*” OR “preschool*” OR “schoolchild” OR “pediatric*” OR “paediatric*” OR “adolescen*” OR “teen*” OR “preteen*” OR “youth*” OR “juvenil*” OR “young” OR “puber” OR “pubescen*” OR “underage*” OR “under-age*” OR “infan*” OR “neonat*” OR “neo-nat*” OR “newborn*” OR “new-born*” OR “baby” OR “babies” OR “toddler*” OR “minor*” OR “offspring*” OR “young people”) OR “AB (child*” OR “kid*” OR “boy*” OR “girl*” OR “preschool*” OR “schoolchild” OR “pediatric*” OR “paediatric*” OR “adolescen*” OR “teen*” OR “preteen*” OR “youth*” OR “juvenil*” OR “young” OR “puber” OR “pubescen*” OR “underage*” OR “under-age*” OR “infan*” OR “neonat*” OR “neo-nat*” OR “newborn*” OR “new-born*” OR “baby” OR “babies” OR “toddler*” OR “minor*” OR “offspring*” OR “young people”)
#3	#1 OR #2
#4	(MA “Chronic Disease”) OR (MA “Anemia”) OR (MA “Arthritis”) OR (MA “Asthma”) OR (MA “Attention Deficit Disorder with Hyperactivity”) OR (MA “Autism Spectrum Disorder”) OR (MA “Asperger Syndrome”) OR (MA “Autistic Disorder”) OR (MA “Vision Disorders”) OR (MA “Brain Injuries”) OR (MA “Bronchitis”) OR (MA “Cerebral Palsy”) OR (MA “Congenital Abnormalities”) OR (MA “Cystic Fibrosis”) OR (MA “Developmental Disabilities”) OR (MA “Diabetes Mellitus”) OR (MA “Down Syndrome”) OR (MA “Epilepsy”) OR (MA “Genetic Diseases, Inborn”) OR (MA “Heart Defects, Congenital”) OR (MA “Heart Diseases”) OR (MA “Hematologic Diseases”) OR (MA “Anemia, Sickle Cell”) OR (MA “Hemophilia A”) OR (MA “HIV”) OR (MA “Intellectual Disability”) OR (MA “Kidney Diseases”) OR (MA “Mental Disorders”) OR (MA “Musculoskeletal Diseases”) OR (MA “Neoplasms”) OR (MA “Schizophrenia”) OR (MA “Spinal Dysraphism”) OR (MA “Thalassemia”) OR (MA “Trisomy”)
#5	TI (“chronic disease*” OR “chronic ill*” OR “chronically ill*” OR “chronic disorder*” OR “chronic health” OR “chronic condition*” OR “anemia*” OR “arthriti*” OR “osteoarthriti*” OR “polyarthriti*” OR “asthma*” OR “ADHD” OR “attention deficit disorder*” OR “autism” OR “autistic” OR “asperger disease*” OR “asperger disorders” OR “asperger syndrome” OR “kanner* syndrome” OR “ASD” OR “blindness” OR “amaurosis” OR “vision loss*” OR “loss of vision” OR “vision disorder*” OR “visual* impair*” OR “brain injur*” OR “brain laceration*” OR “TBI” OR

	“TBIS” OR “bronchiti*” OR “cerebral pals*” OR “little* disease” OR “spastic diplegia*” OR “birth defect*” OR “congenital abnormalit*” OR “congenital anomalies” OR “congenital defect*” OR “deformit*” OR “cystic fibrosis” OR “fibrocystic disease of pancreas” OR “mucoviscidosis” OR “pancreas fibrocystic disease*” OR “development* deviation*” OR “development* disab*” OR “development* disorder*” OR “developmental delay disorder*” OR “diabetes” OR “down* syndrome” OR “mongolism” OR “trisomy 21” OR “trisomy g” OR “epilep*” OR “seizure disorder*” OR “genetic disease*” OR “genetic disorder*” OR “hereditary disease*” OR “single gene defects” OR “cardiac disease*” OR “cardiac disorder*” OR “heart disease*” OR “heart disorder*” OR “heart defect*” OR “heart abnormalit*” OR “heart malform*” OR “blood disease*” OR “blood disorder*” OR “haematologic* disease*” OR “hematologic* disease*” OR “haematologic* disorder*” OR “hematologic* disorder*” OR “sickle cell anemia*” OR “sickle cell disease*” OR “sickle cell disorder*” OR “hbs disease” OR “hemoglobin s disease” OR “haemophilia*” OR “hemophilia*” OR “factor viii deficien*” OR “factor 8 deficien*” OR “aids virus*” OR “acquired immune deficiency syndrome virus*” OR “AIDS virus*” OR “hiv” OR “htlv-iii” OR “HIV*” OR “human t cell leukemia virus type iii” OR “human t cell lymphotropic virus type iii” OR “human t lymphotropic virus type iii” OR “lav-htlv-iii” OR “lymphadenopathy associated virus*” OR “intellectual development disorder*” OR “intellectual disabilit*” OR “mental deficienc*” OR “mental retardation” OR “kidney disease*” OR “kidney disorder*” OR “renal disease*” OR “renal disorder*” OR “mental disorder*” OR “mental* ill*” OR “psychiatric disease*” OR “psychiatric disorder*” OR “psychiatric illness∗” OR “musculoskeletal disease*” OR “musculoskeletal disorder*” OR “MSK*” OR “MSD*” OR “orthopedic disorder*” OR “orthopedic disease*” OR “neoplasm*” OR “cancer*” OR “tumor*” OR “tumour*” OR “oncolog*” OR “carcinoma*” OR “malignan*” OR “leukemia*” OR “leukaemia*” OR “lymphoma*” OR “dementia praecox” OR “schizophreni*” OR “spina bifida*” OR “cleft spine*” OR “open spine*” OR “rachischis*” OR “schistorrhach*” OR “spinal dysraphi*” OR “status dysraphicus” OR “thalassemia*” OR “chromosomal triplication*” OR “trisom*”) OR AB (“chronic disease*” OR “chronic ill*” OR “chronically ill*” OR “chronic disorder*” OR “chronic health” OR “chronic condition*” OR “anemia*” OR “arthriti*” OR “osteoarthriti*” OR “polyarthriti*” OR “asthma*” OR “ADHD” OR “attention deficit disorder*” OR “autism” OR “autistic” OR “asperger disease*” OR “asperger disorders” OR “asperger syndrome” OR “kanner* syndrome” OR “ASD” OR “blindness” OR “amaurosis” OR “vision loss*” OR “loss of vision” OR “vision disorder*” OR “visual* impair*” OR “brain injur*” OR “brain laceration*” OR “TBI” OR “TBIS” OR “bronchiti*” OR “cerebral pals*” OR “little* disease” OR “spastic diplegia*” OR “birth defect*” OR “congenital abnormalit*” OR “congenital anomalies” OR “congenital defect*” OR “deformit*” OR “cystic fibrosis” OR “fibrocystic disease of pancreas” OR “mucoviscidosis” OR “pancreas fibrocystic disease*” OR “development* deviation*” OR “development* disab*” OR “development* disorder*” OR “developmental delay disorder*” OR “diabetes” OR “down* syndrome” OR “mongolism” OR “trisomy 21” OR “trisomy g” OR “epilep*” OR “seizure disorder*” OR “genetic disease*” OR “genetic disorder*” OR “hereditary disease*” OR “single gene defects” OR “cardiac disease*” OR “cardiac disorder*” OR “heart disease*” OR “heart disorder*” OR

	“heart defect*” OR “heart abnormalit*” OR “heart malform*” OR “blood disease*” OR “blood disorder*” OR “haematologic* disease*” OR “hematologic* disease*” OR “haematologic* disorder*” OR “hematologic* disorder*” OR “sickle cell anemia*” OR “sickle cell disease*” OR “sickle cell disorder*” OR “hbs disease” OR “hemoglobin s disease” OR “haemophilia*” OR “hemophilia*” OR “factor viii deficien*” OR “factor 8 deficien*” OR “aids virus*” OR “acquired immune deficiency syndrome virus*” OR “AIDS virus*” OR “hiv” OR “htlv-iii” OR “HIV*” OR “human t cell leukemia virus type iii” OR “human t cell lymphotropic virus type iii” OR “human t lymphotropic virus type iii” OR “lav-htlv-iii” OR “lymphadenopathy associated virus*” OR “intellectual development disorder*” OR “intellectual disabilit*” OR “mental deficienc*” OR “mental retardation” OR “kidney disease*” OR “kidney disorder*” OR “renal disease*” OR “renal disorder*” OR “mental disorder*” OR “mental* ill*” OR “psychiatric disease*” OR “psychiatric disorder*” OR “psychiatric illness∗” OR “musculoskeletal disease*” OR “musculoskeletal disorder*” OR “MSK*” OR “MSD*” OR “orthopedic disorder*” OR “orthopedic disease*” OR “neoplasm*” OR “cancer*” OR “tumor*” OR “tumour*” OR “oncolog*” OR “carcinoma*” OR “malignan*” OR “leukemia*” OR “leukaemia*” OR “lymphoma*” OR “dementia praecox” OR “schizophreni*” OR “spina bifida*” OR “cleft spine*” OR “open spine*” OR “rachischis*” OR “schistorrhach*” OR “spinal dysraphi*” OR “status dysraphicus” OR “thalassemia*” OR “chromosomal triplication*” OR “trisom*”)
#6	#4 OR #5
#7	(MA “Parents”) OR (MA “Caregivers”) OR (MA “Mothers”) OR (MA “Fathers”) OR (MA “Family”)
#8	TI (“parent*” OR “caregiver*” OR “carer*” OR “mother*” OR “father*” OR “famil*” OR “maternal*” OR “paternal*”) OR AB (“parent*” OR “caregiver*” OR “carer*” OR “mother*” OR “father*” OR “famil*” OR “maternal*” OR “paternal*”)
#9	#7 OR #8
#10	(MA “Problem Solving”)
#11	TI (“problem-solving” OR “problem solving therap*” OR “problem-solving therap*” OR “problem solving intervention*” OR “problem-solving intervention*” OR “problem solving train*” OR “problem-solving train*” OR “problem solving program*” OR “problem-solving program*” OR “problem solving treatment” OR “problem-solving treatment” OR “problem solving workshop” OR “problem-solving workshop” OR “problem solving education” OR “problem-solving education” OR “problem solving approach” OR “problem-solving approach” OR “problem solving skills train*” OR “problem-solving skills train*” OR “PST” OR “PSST”) OR AB (“problem-solving” OR “problem solving therap*” OR “problem-solving therap*” OR “problem solving intervention*” OR “problem-solving intervention*” OR “problem solving train*” OR “problem-solving train*” OR “problem solving program*” OR “problem-solving program*” OR “problem solving treatment” OR “problem-solving treatment” OR “problem solving workshop” OR “problem-solving workshop” OR “problem solving education” OR “problem-solving education” OR “problem solving approach” OR “problem-solving approach” OR “problem solving skills train*” OR “problem-solving skills train*” OR “PST” OR “PSST”)
#12	#10 OR #11

#13	(MA “Clinical Trial”) OR (MA “Controlled Clinical Trial”) OR (MA “Randomized Controlled Trial”) OR (MA “Controlled Clinical Trials as Topic”) OR (MA “Random Allocation”) OR (MA “Double-Blind Method”) OR (MA “Single-Blind Method”)
#14	TI (“randomized controlled trial*” OR “RCT” OR “random*” OR “trial” OR “clinical trial*” OR “single blind*” OR “double blind*” OR “triple blind*” OR “waitlist*” OR “wait list*” OR “waiting list*”) OR AB (“randomized controlled trial*” OR “RCT” OR “random*” OR “trial” OR “clinical trial*” OR “single blind*” OR “double blind*” OR “triple blind*” OR “waitlist*” OR “wait list*” OR “waiting list*”)
#15	#13 OR #14
#16	#3 AND #6 AND #9 AND #12 AND #15

Web of Science

Search date: 30/04/2023

Number of results: 474

No.	Search strategies
#1	TS=(“child*” OR “kid*” OR “boy*” OR “girl*” OR “preschool*” OR “schoolchild” OR “pediatric*” OR “paediatric*” OR “adolescen*” OR “teen*” OR “preteen*” OR “youth*” OR “juvenil*” OR “young” OR “puber” OR “pubescen*” OR “underage*” OR “under-age*” OR “infan*” OR “neonat*” OR “neo-nat*” OR “newborn*” OR “new-born*” OR “baby” OR “babies” OR “toddler*” OR “minor*” OR “offspring*” OR “young people”)
#2	TS=(“chronic disease*” OR “chronic ill*” OR “chronically ill*” OR “chronic disorder*” OR “chronic health” OR “chronic condition*” OR “anemia*” OR “arthriti*” OR “osteoarthriti*” OR “polyarthriti*” OR “asthma*” OR “ADHD” OR “attention deficit disorder*” OR “autism” OR “autistic” OR “asperger disease*” OR “asperger disorders” OR “asperger syndrome” OR “kanner* syndrome” OR “ASD” OR “blindness” OR “amaurosis” OR “vision loss*” OR “loss of vision” OR “vision disorder*” OR “visual* impair*” OR “brain injur*” OR “brain laceration*” OR “TBI” OR “TBIS” OR “bronchiti*” OR “cerebral pals*” OR “little* disease” OR “spastic diplegia*” OR “birth defect*” OR “congenital abnormalit*” OR “congenital anomalies” OR “congenital defect*” OR “deformit*” OR “cystic fibrosis” OR “fibrocystic disease of pancreas” OR “mucoviscidosis” OR “pancreas fibrocystic disease*” OR “development* deviation*” OR “development* disab*” OR “development* disorder*” OR “developmental delay disorder*” OR “diabetes” OR “down* syndrome” OR “mongolism” OR “trisomy 21” OR “trisomy g” OR “epilep*” OR “seizure disorder*” OR “genetic disease*” OR “genetic disorder*” OR “hereditary disease*” OR “single gene defects” OR “cardiac disease*” OR “cardiac disorder*” OR “heart disease*” OR “heart disorder*” OR “heart defect*” OR “heart abnormalit*” OR “heart malform*” OR “blood disease*” OR “blood disorder*” OR “haematologic* disease*” OR “hematologic* disease*” OR “haematologic* disorder*” OR “hematologic* disorder*” OR “sickle cell anemia*” OR “sickle cell disease*” OR “sickle cell disorder*” OR “hbs disease” OR “hemoglobin s disease” OR “haemophilia*” OR “hemophilia*” OR “factor viii deficien*” OR “factor 8

	deficien*” OR “aids virus*” OR “acquired immune deficiency syndrome virus*” OR “AIDS virus*” OR “hiv” OR “htlv-iii” OR “HIV*” OR “human t cell leukemia virus type iii” OR “human t cell lymphotropic virus type iii” OR “human t lymphotropic virus type iii” OR “lav-htlv-iii” OR “lymphadenopathy associated virus*” OR “intellectual development disorder*” OR “intellectual disabilit*” OR “mental deficienc*” OR “mental retardation” OR “kidney disease*” OR “kidney disorder*” OR “renal disease*” OR “renal disorder*” OR “mental disorder*” OR “mental* ill*” OR “psychiatric disease*” OR “psychiatric disorder*” OR “psychiatric illness∗” OR “musculoskeletal disease*” OR “musculoskeletal disorder*” OR “MSK*” OR “MSD*” OR “orthopedic disorder*” OR “orthopedic disease*” OR “neoplasm*” OR “cancer*” OR “tumor*” OR “tumour*” OR “oncolog*” OR “carcinoma*” OR “malignan*” OR “leukemia*” OR “leukaemia*” OR “lymphoma*” OR “dementia praecox” OR “schizophreni*” OR “spina bifida*” OR “cleft spine*” OR “open spine*” OR “rachischis*” OR “schistorrhach*” OR “spinal dysraphi*” OR “status dysraphicus” OR “thalassemia*” OR “chromosomal triplication*” OR “trisom*”)
#3	TS=(“parent*” OR “caregiver*” OR “carer*” OR “mother*” OR “father*” OR “famil*” OR “maternal*” OR “paternal*”)
#4	TS=(“problem solving” OR “problem-solving” OR “problem solving therap*” OR “problem-solving therap*” OR “problem solving intervention*” OR “problem-solving intervention*” OR “problem solving train*” OR “problem-solving train*” OR “problem solving program*” OR “problem-solving program*” OR “problem solving treatment” OR “problem-solving treatment” OR “problem solving workshop” OR “problem-solving workshop” OR “problem solving education” OR “problem-solving education” OR “problem solving approach” OR “problem-solving approach” OR “problem solving skills train*” OR “problem-solving skills train*” OR “PST” OR “PSST”)
#5	TS=(“randomized controlled trial*” OR “RCT” OR “random*” OR “trial” OR “clinical trial*” OR “single blind*” OR “double blind*” OR “triple blind*” OR “waitlist*” OR “wait list*” OR “waiting list*”)
#6	#1 AND #2 AND #3 AND #4 AND #5

Cochrane Library
Search date: 30/04/2023
Number of results: 450

No.	Search strategies
#1	(MeSH descriptor: [Child] explode all trees) OR (MeSH descriptor: [Pediatrics] explode all trees) OR (MeSH descriptor: [Adolescent] explode all trees) OR (MeSH descriptor: [Infant] explode all trees) OR (MeSH descriptor: [Minors] explode all trees)
#2	(“child*” OR “kid*” OR “preschool*” OR “pediatric*” OR “paediatric*” OR “adolescen*” OR “teen*” OR “youth*” OR “juvenil*” OR “young” OR “puber” OR “pubescen*” OR “underage*” OR “under-age*” OR “infan*” OR “neonat*” OR “neo-

	nat*” OR “newborn*” OR “new-born*” OR “baby” OR “babies” OR “toddler*” OR “minor*” OR “offspring*” OR “young people”).ti,ab,kw
#3	#1 OR #2
#4	(MeSH descriptor: [Chronic Disease] explode all trees) OR (MeSH descriptor: [Anemia] explode all trees) OR (MeSH descriptor: [Arthritis] explode all trees) OR (MeSH descriptor: [Asthma] explode all trees) OR (MeSH descriptor: [Attention Deficit Disorder with Hyperactivity] explode all trees) OR (MeSH descriptor: [Autism Spectrum Disorder] explode all trees) OR (MeSH descriptor: [Asperger Syndrome] explode all trees) OR (MeSH descriptor: [Autistic Disorder] explode all trees) OR (MeSH descriptor: [Vision Disorders] explode all trees) OR (MeSH descriptor: [Brain Injuries] explode all trees) OR (MeSH descriptor: [Bronchitis] explode all trees) OR (MeSH descriptor: [Cerebral Palsy] explode all trees) OR (MeSH descriptor: [Congenital Abnormalities] explode all trees) OR (MeSH descriptor: [Cystic Fibrosis] explode all trees) OR (MeSH descriptor: [Developmental Disabilities] explode all trees) OR (MeSH descriptor: [Diabetes Mellitus] explode all trees) OR (MeSH descriptor: [Down Syndrome] explode all trees) OR (MeSH descriptor: [Epilepsy] explode all trees) OR (MeSH descriptor: [Genetic Diseases, Inborn] explode all trees) OR (MeSH descriptor: [Heart Defects, Congenital] explode all trees) OR (MeSH descriptor: [Heart Diseases] explode all trees) OR (MeSH descriptor: [Hematologic Diseases] explode all trees) OR (MeSH descriptor: [Anemia, Sickle Cell] explode all trees) OR (MeSH descriptor: [Hemophilia A] explode all trees) OR (MeSH descriptor: [HIV] explode all trees) OR (MeSH descriptor: [Intellectual Disability] explode all trees) OR (MeSH descriptor: [Kidney Diseases] explode all trees) OR (MeSH descriptor: [Mental Disorders] explode all trees) OR (MeSH descriptor: [Musculoskeletal Diseases] explode all trees) OR (MeSH descriptor: [Neoplasms] explode all trees) OR (MeSH descriptor: [Schizophrenia] explode all trees) OR (MeSH descriptor: [Spinal Dysraphism] explode all trees) OR (MeSH descriptor: [Thalassemia] explode all trees) OR (MeSH descriptor: [Trisomy] explode all trees)
#5	(“chronic disease*” OR “chronic ill*” OR “chronically ill*” OR “chronic disorder*” OR “chronic health” OR “chronic condition*” OR “anemia*” OR “arthriti*” OR “osteoarthriti*” OR “polyarthriti*” OR “asthma*” OR “ADHD” OR “attention deficit disorder*” OR “autism” OR “autistic” OR “asperger disease*” OR “asperger disorders” OR “asperger syndrome” OR “kanner* syndrome” OR “ASD” OR “blindness” OR “amaurosis” OR “vision loss*” OR “loss of vision” OR “vision disorder*” OR “visual* impair*” OR “brain injur*” OR “brain laceration*” OR “TBI” OR “TBIS” OR “bronchiti*” OR “cerebral pals*” OR “little* disease” OR “spastic diplegia*” OR “birth defect*” OR “congenital abnormalit*” OR “congenital anomalies” OR “congenital defect*” OR “deformit*” OR “cystic fibrosis” OR “fibrocystic disease of pancreas” OR “mucoviscidosis” OR “pancreas fibrocystic disease*” OR “development* deviation*” OR “development* disab*” OR “development* disorder*” OR “developmental delay disorder*” OR “diabetes” OR “down* syndrome” OR “mongolism” OR “trisomy 21” OR “trisomy g” OR “epilep*” OR “seizure disorder*” OR “genetic disease*” OR “genetic disorder*” OR “hereditary disease*” OR “single gene defects” OR “cardiac disease*” OR “cardiac

	disorder*” OR “heart disease*” OR “heart disorder*” OR “heart defect*” OR “heart abnormalit*” OR “heart malform*” OR “blood disease*” OR “blood disorder*” OR “haematologic* disease*” OR “hematologic* disease*” OR “haematologic* disorder*” OR “hematologic* disorder*” OR “sickle cell anemia*” OR “sickle cell disease*” OR “sickle cell disorder*” OR “hbs disease” OR “hemoglobin s disease” OR “haemophilia*” OR “hemophilia*” OR “factor viii deficien*” OR “factor 8 deficien*” OR “aids virus*” OR “acquired immune deficiency syndrome virus*” OR “AIDS virus*” OR “hiv” OR “htlv-iii” OR “HIV*” OR “human t cell leukemia virus type iii” OR “human t cell lymphotropic virus type iii” OR “human t lymphotropic virus type iii” OR “lav-htlv-iii” OR “lymphadenopathy associated virus*” OR “intellectual development disorder*” OR “intellectual disabilit*” OR “mental deficienc*” OR “mental retardation” OR “kidney disease*” OR “kidney disorder*” OR “renal disease*” OR “renal disorder*” OR “mental disorder*” OR “mental* ill*” OR “psychiatric disease*” OR “psychiatric disorder*” OR “psychiatric illness∗” OR “musculoskeletal disease*” OR “musculoskeletal disorder*” OR “MSK*” OR “MSD*” OR “orthopedic disorder*” OR “orthopedic disease*” OR “neoplasm*” OR “cancer*” OR “tumor*” OR “tumour*” OR “oncolog*” OR “carcinoma*” OR “malignan*” OR “leukemia*” OR “leukaemia*” OR “lymphoma*” OR “dementia praecox” OR “schizophreni*” OR “spina bifida*” OR “cleft spine*” OR “open spine*” OR “rachischis*” OR “schistorrhach*” OR “spinal dysraphi*” OR “status dysraphicus” OR “thalassemia*” OR “chromosomal triplication*” OR “trisom*”).ti,ab,kw
#6	#4 OR #5
#7	(MeSH descriptor: [Parents] explode all trees) OR (MeSH descriptor: [Caregivers] explode all trees) OR (MeSH descriptor: [Mothers] explode all trees) OR (MeSH descriptor: [Fathers] explode all trees) OR (MeSH descriptor: [Family] explode all trees)
#8	(“parent*” OR “caregiver*” OR “carer*” OR “mother*” OR “father*” OR “famil*” OR “maternal*” OR “paternal*”).ti,ab,kw
#9	#7 OR #8
#10	(MeSH descriptor: [Problem Solving] explode all trees)
#11	(“problem-solving” OR “problem solving therap*” OR “problem-solving therap*” OR “problem solving intervention*” OR “problem-solving intervention*” OR “problem solving train*” OR “problem-solving train*” OR “problem solving program*” OR “problem-solving program*” OR “problem solving treatment” OR “problem-solving treatment” OR “problem solving workshop” OR “problem-solving workshop” OR “problem solving education” OR “problem-solving education” OR “problem solving approach” OR “problem-solving approach” OR “problem solving skills train*” OR “problem-solving skills train*” OR “PST” OR “PSST”).ti,ab,kw
#12	#10 OR #11
#13	(MeSH descriptor: [Clinical Trial] explode all trees) OR (MeSH descriptor: [Controlled Clinical Trial] explode all trees) OR (MeSH descriptor: [Randomized Controlled Trial] explode all trees) OR (MeSH descriptor: [Controlled Clinical Trials as Topic] explode all trees) OR (MeSH descriptor: [Random Allocation] explode all trees)

#14	(“randomized controlled trial*” OR “RCT” OR “random*” OR “trial” OR “clinical trial*” OR “single blind*” OR “double blind*” OR “triple blind*” OR “waitlist*” OR “wait list*” OR “waiting list*”).ti,ab,kw
#15	#13 OR #14
#16	#3 AND #6 AND #9 AND #12 AND #15

Chinese Databases

Search date: 30/04/2023

Number of results: CNKI (14), VIP (118), and Wanfang (41)

Database	Search strategies
China National Knowledge Infrastructure (CNKI)	SU=(儿童 + 孩子 + 小孩 + 患儿 + 小儿 + 未成年人 + 婴儿 + 幼儿 + 青少年) AND SU=(慢性病 + 慢病 + 癌症 + 肿瘤 + 癌 + 瘤 + 白血病 + 血液病 + 贫血 + 关节炎 + 哮喘 + 糖尿病 + 自闭症 + 注意力缺陷 + 多动症 + 脑损伤 + 肾病 + 脑瘫 + 癫痫 + 心脏病 + 镰状细胞病 + 发育障碍 + 发育迟缓 + 唐氏综合征 + 艾滋病 + HIV + AIDS) AND SU=(父母 + 父亲 + 母亲 + 爸爸 + 妈妈 + 家属 + 亲属 + 照护者 + 照顾者) AND SU=(问题解决疗法 + 问题解决干预 + 问题解决培训 + 问题解决技能培训 + 问题解决能力 + 问题解决应对 + 问题解决)
China Science and Technology Journal Database (VIP)	“U=(儿童 + 孩子 + 小孩 + 患儿 + 小儿 + 未成年人 + 婴儿 + 幼儿 + 青少年) AND U=(慢性病 + 慢病 + 癌症 + 肿瘤 + 癌 + 瘤 + 白血病 + 血液病 + 贫血 + 关节炎 + 哮喘 + 糖尿病 + 自闭症 + 注意力缺陷 + 多动症 + 脑损伤 + 肾病 + 脑瘫 + 癫痫 + 心脏病 + 镰状细胞病 + 发育障碍 + 发育迟缓 + 唐氏综合征 + 艾滋病 + HIV + AIDS) AND U=(父母 + 父亲 + 母亲 + 爸爸 + 妈妈 + 家属 + 亲属 + 照护者 + 照顾者) AND U=(问题解决疗法 + 问题解决干预 + 问题解决培训 + 问题解决技能培训 + 问题解决能力 + 问题解决应对 + 问题解决)”, 模糊匹配
Wanfang	主题=(儿童 OR 孩子 OR 小孩 OR 患儿 OR 小儿 OR 未成年人 OR 婴儿 OR 幼儿 OR 青少年) AND 主题=(慢性病 OR 慢病 OR 癌症 OR 肿瘤 OR 癌 OR 瘤 OR 白血病 OR 血液病 OR 贫血 OR 关节炎 OR 哮喘 OR 糖尿病 OR 自闭症 OR 注意力缺陷 OR 多动症 OR 脑损伤 OR 肾病 OR 脑瘫 OR 癫痫 OR 心脏病 OR 镰状细胞病 OR 发育障碍 OR 发育迟缓 OR 唐氏综合征 OR 艾滋病 OR HIV OR AIDS) AND 主题=(父母 OR 父亲 OR 母亲 OR 爸爸 OR 妈妈 OR 家属 OR 亲属 OR 照护者 OR 照顾者) AND 主题=(问题解决疗法 OR 问题解决干预 OR 问题解决培训 OR 问题解决技能培训 OR 问题解决能力 OR 问题解决应对 OR 问题解决)

eTable 2. Intervention Characteristics of Included Studies

Study ID	Intervention Name	Intervention Description	Intervention approach, mode of delivery, duration of delivery, and providers
Askins et al, 2009	"Bright IDEAS" PSST	Bright represents the sense of optimism (positive orientation) necessary for successful problem-solving. The letters in "IDEAS" signify the five major steps of problem-solving. To promote engagement, the specific problems discussed during the PSST intervention were identified by the individual mother as particularly relevant to her and her family's situation.	Online (personal digital assistant), individual intervention, 8 × 1-h sessions = 8 h over 8 weeks delivered by therapists who had graduate training in psychology.
Asnani et al, 2021	"Bright IDEAS" PSST	The stages of the training are: identification of the problem/s; generating possible solutions; evaluating the options; implementing the preferred solution; and evaluating to see if the solutions were successful. The mothers were taught a process of problem-solving with reference to problems they identified themselves, both general everyday problems as well as specific problems which arose while parenting a child with sickle cell disease.	F2F (in a private room), multi-family group intervention, 6 × 45-min sessions = 4.5 h over 6 months delivered by sickle cell unit clinic nurses.
Daniel et al, 2015	Families Taking Control	The manualized intervention was developed for the current study based on PST. The workshop was divided into four sessions: introduction; applying problem-solving to school challenges; review session and solution generation; goal setting. Following the intervention, the family had approximately three booster phone call sessions to provide support in implementing the problem-solving model by refining goals and trouble-shooting barriers.	F2F (at the hospital) + online (telephone), multi-family group intervention, 1-day workshop (7 h) + 3 × 30-min booster phone calls = 9.5 h over 6 months delivered by doctoral and master's students and peer patient navigators.
DaWalt et al, 2018	Transitioning Together	Parent intervention group sessions involved education on a variety of topics relevant to autism spectrum disorder as well as guided practice in problem-solving. The adolescent social group involved learning activities and games on topics such as sharing interests, goal setting, problem-solving, and social planning. For both parents and teens, positivity and problem-solving were explicitly modeled and emphasized across all sessions.	F2F (at the hospital or the clinic), multi-family group intervention, 2 × 1-h joining sessions + 8 × 1.5-h group sessions = 14 h over 8 weeks delivered by PhD-level psychologists and graduate students.

eTable 2. Intervention Characteristics of Included Studies (Continued)

Study ID	Intervention Name	Intervention Description	Intervention approach, mode of delivery, duration of delivery, and providers
Feinberg et al, 2014	Problem-solving Education	A manualized cognitive behavioral intervention adapted from PST. During each workbook-based problem-solving education session, mothers work one-on-one with a trained interventionist to identify a single, measurable problem and then proceed through a series of steps that involve goal setting, brainstorming, and evaluating solutions, choosing a solution, and action planning.	F2F (at home or other location of the mother's choosing), individual intervention, 6 sessions (30-45 mins) = 3-4.5 h over 8 weeks delivered by existing multidisciplinary staff who work with families of young children with ASD.
Gerkensmeyer et al, 2013	Building Our Solutions and Connections	The "Building Our Solutions and Connections" intervention is a cognitive-behavioral PST. During each session, participants learned to enact 7 prescribed steps that guided their problem-solving: (1) evaluating outcomes from the previous week (except for the first week), (2) selecting and defining a problem, (3) establishing realistic and achievable goals for problem resolution, (4) generating multiple solution alternatives (brainstorming), (5) implementing decision-making guidelines (pros and cons), (6) evaluating and choosing solutions, and (7) implementing the caregiver-selected solutions.	F2F (at the hospital) + online (telephone), individual intervention, 1-h beginning session + 8 × 30-min telephone sessions = 5 h over 8 weeks delivered by doctoral and masters clinicians.
Greenley et al, 2015	PSST	The PSST intervention was modeled after the PST outlined by D'Zurilla et al. Families were introduced to the PSST framework and educated about the 5 core problem solving steps (i.e., developing a positive problem outlook, formulating a clear and specific problem definition, brainstorming possible solutions, choosing the best solution, and formulating a solution implementation plan).	Online (telephone), parent-child intervention, 2-4 sessions (session 1: 75 mins, other sessions: 45 mins) = 2-3.5 h over 8 weeks delivered by graduate students enrolled in psychology.

eTable 2. Intervention Characteristics of Included Studies (Continued)

Study ID	Intervention Name	Intervention Description	Intervention approach, mode of delivery, duration of delivery, and providers
McCann et al, 2013	Problem-Solving Bibliotherapy Intervention	The Problem-Solving Bibliotherapy Intervention group completed a self-help manual, which was based on PST. The intervention involved helping carers to (a) develop a positive attitude to caregiving; (b) identify caregiving-related problems by ascertaining the facts, identifying obstacles that inhibited goal achievement, and setting realistic goals; (c) consider a range of alternatives to circumvent the obstacles and achieve the stated goal; (d) predict positive and negative implications of each alternative in order to choose the one most likely to achieve the problem-solving goal; and (e) try out the solution and monitor if it worked.	F2F (self-help manual) + online (telephone), individual intervention, 5 × 2-h modules = 10 h over 5 weeks with no interventionists reported.
Modi et al, 2016	STAR Intervention	A family-tailored problem-solving intervention, including 1) The interventionist helped identify an adherence barrier (Problem Definition); 2) The caregiver and child were taught to generate creative solutions (Generating Alternative Solutions); 3) The potential solutions were written down and systematically evaluated (Family Decision-Making); 4) The family selected one solution (Implementation of New Solution); 5) A detailed solution was written out with specifics regarding when, where, and how the new solution will be attempted. A behavioral contract was signed by all participants of the problem-solving session; and 6) Phone follow-ups were conducted one week after the problem-solving session to assist the family in either fine-tuning the solution or renegotiating a new solution (Evaluation and Re-Negotiation).	F2F (at the clinic or home) + online (telephone), parent-child intervention, 4 × 1-h F2F sessions + 2 × 15-min telephone sessions = 4.5 h over 8 weeks delivered by psychology doctoral student and post-doctoral fellow.
Modi et al, 2021	STAR Intervention	A problem-solving approach to address the family's individualized adherence barriers, including 1) Identification of the adherence barrier experienced by the family, 2) Generation of 8–10 creative solutions by all family members involved in the session, 3) Evaluation of the solutions by family members, with each member rating the solution as + or −, 4) Choice of one or two combined solutions to implement, and 5) Provision of detailed information on how the solution will be implemented (who, what, when, where, and how).	F2F (at the clinic or home) + online (telephone), parent-child intervention, 6 × 1-h F2F sessions + 2 × 15-min telephone sessions = 6.5 h over 4 months delivered by master's and doctoral level psychologists/trainees.

eTable 2. Intervention Characteristics of Included Studies (Continued)

Study ID	Intervention Name	Intervention Description	Intervention approach, mode of delivery, duration of delivery, and providers
Nansel et al, 2009	WE*CAN Intervention	Based on PST, the WE*CAN structure was developed: W - Work together to set goals; E - Explore possible barriers and solutions; C - Choose the best solutions; A - Act on your plan; N - Note the results. The goal of WE*CAN is to improve family management of diabetes, including domains of blood sugar monitoring, insulin administration, diet, physical activity, and management of blood sugar excursions.	F2F (at routine clinic visits) + online (telephone), parent-child intervention, 3 sessions + 9 phone calls over a maximum of 12 months delivered by health advisors (college graduates).
Narad et al, 2019	TOPS-Family	A web-based, family-centered problem-solving intervention designed to support adolescent and family outcomes following pediatric TBI. The intervention addressed common challenges following TBI by providing psychoeducation as well as teaching adolescents and their parents a 5-step problem solving process (Aim, Brainstorm, Choose, Do, and Evaluate) that was generalizable to concerns beyond those addressed during the study. This problem-solving framework was grounded in PST model.	Online (web-based didactic modules + videoconference), parent-child intervention, 10 core sessions + max of 4 supplemental sessions over 6 months, delivered by advanced clinical psychology graduate students or licensed clinical psychologists.
Palermo et al, 2016	“Bright IDEAS” PSST	The intervention was adapted from treatment materials for caregivers of children with cancer (“Bright IDEAS”). Drawing from D’Zurilla and colleagues’ conceptualization of PST, “Bright IDEAS” emphasizes a positive problem-solving orientation characterized by optimism and problem-solving self-efficacy (Bright), as well as the major components of rational problem solving. These include problem definition and formulation (Identify the Problem), generation of alternative solutions (Determine the options), decision-making (Evaluate options), solution implementation (Act), and verification (See if it worked).	F2F (in pain clinic), individual intervention, 4-6 × 1-h sessions = 4-6 h over 6-8 weeks, delivered by psychology postdoctoral fellows and licensed clinical psychologists.

eTable 2. Intervention Characteristics of Included Studies (Continued)

Study ID	Intervention Name	Intervention Description	Intervention approach, mode of delivery, duration of delivery, and providers
Petranovich et al, 2015	Counselor-Assisted Problem Solving	A family problem-solving intervention based on PST that provided training in communication skills, self-regulation and anger management. The core sessions primarily focused on problem-solving and application to a goal or problem identified by the family. After generating a solution to the goal or problem that the family initially identified as problematic, the family's homework was to implement the agreed-upon plan and evaluate its success. Subsequent core sessions focused on developing strategies to facilitate effective family problem-solving, including basic communication skills and developing strategies to address common cognitive and behavioral consequences of TBI.	Online (web-based didactic modules + videoconference), parent-child intervention, 7 core sessions (45–60 minutes) + max of 4 supplemental sessions over 6 months, delivered by clinical psychologists.
Phipps et al, 2020	"Bright IDEAS" PSST	The term "Bright" signifies optimism, and instills the belief that problems can be solved, which is considered an essential component for successful implementation of the intervention. The acronym 'IDEAS' is used as a mnemonic for the 5 essential steps of our problem-solving approach, with each letter signifying a step: I (Identify the problem), D (Determine the options), E (Evaluate/choose the best option), A (Act), and S (See if it worked).	Online (web-based videos, interactive activities, and homework), individual intervention, 7 videos + 4 photos over 8 weeks, delivered by research assistants with graduate education in clinical psychology.
Sahler et al, 2002	"Bright IDEAS" PSST	'Bright'' signifies the sense of optimism (positive orientation) about solving problems that is essential for successful implementation. The letters I (Identify the problem), D (Determine the options), E (Evaluate options and choose the best), A (Act), and S (See if it worked) signify the five essential steps of PST as articulated by D'Zurilla and Nezu.	F2F (at the hospital, the clinic, or home), individual intervention, 8 × 1-h sessions = 8 h over 8 weeks, delivered by master-level mental health professional or psychology graduate student.

eTable 2. Intervention Characteristics of Included Studies (Continued)

Study ID	Intervention Name	Intervention Description	Intervention approach, mode of delivery, duration of delivery, and providers
Sahler et al, 2005	"Bright IDEAS" PSST	Bright signifies the sense of optimism (positive orientation) about solving problems that is essential for successful implementation. The letters I (identify the problem), D (determine the options), E (evaluate options and choose the best), A (act), and S (see if it worked) signify the five essential steps of PST.	F2F (at the hospital, the clinic, or home), individual intervention, 8 × 1-h sessions = 8 h over 8 weeks, delivered by master-level mental health professional or psychology graduate student.
Sahler et al, 2013	"Bright IDEAS" PSST	"Bright" signifies the optimism about solving problems essential for successful implementation. The letters I (identify the problem), D (determine the options), E (evaluate options/choose the best), A (act), and S (see if it worked) signify the five essential steps of PST.	F2F (at the hospital, the clinic, or home), individual intervention, 8×1 h sessions over 8 weeks= 8 h, delivered by research assistants who had graduate education in clinical psychology or behavioral health.
Seid et al, 2010	PSST	PSST is a generic psychoeducational approach in which problems are normalized and participants are taught to approach problems proactively, define the problem, generate alternative solutions, choose the best solution, implement the solution, and evaluate how well that solution worked. The intervention was based on PST and adapted from a comprehensive protocol used in mothers of children with cancer.	F2F (at home), parent-child intervention, 6 weekly sessions (45-60 mins) = 4.5-6 h over 6 weeks, delivered by a bilingual, bicultural master's level health educator.
Wade et al, 2006a	FPS	The family problem-solving intervention, adapted from D'Zurilla and Nezu, involved a 5-step process: Aim, Brainstorm, Choose, Do It, and Evaluate—ABCDE for short. Prior to introducing the problem-solving process, the therapist emphasized the importance of having a positive attitude toward problem solving, which was referred to as a positive problem orientation.	F2F (at the clinic or the family's home), parent-child intervention, 7 core sessions + max of 4 individualized sessions (each session 75-100 mins) over 6 months, delivered by a 5th year clinical psychology graduate student.

eTable 2. Intervention Characteristics of Included Studies (Continued)

Study ID	Intervention Name	Intervention Description	Intervention approach, mode of delivery, duration of delivery, and providers
Wade et al, 2006b	Online-FPS	The Family Problem-Solving Therapy had 14 separate sessions. Eight "core" sessions provided training in problem solving, communication, and antecedent behavior management skills for all enrolled families, whereas the remaining six sessions addressed content related to stressors or issues that affected some but not all families. The first two Web-based sessions addressed the importance of having a positive problem orientation and the steps of problem solving (Aim, Brainstorm, Choose, Do It, and Evaluate; ABCDE).	Online (web-based didactic modules + teleconference), parent-child intervention, 8 core sessions + 6 supplemental sessions over 6 months, delivered by clinical psychology graduate student.
Wade et al, 2012	TOPS	The TOPS intervention focused on developing a positive approach to problems and the steps of problem-solving. The problem-solving heuristic consisted of five steps: Aim (goal identification), Brainstorm (solution generation), Choose (evaluation of the various solutions), Do It (detailed implementation plan), and Evaluate (did it work).	Online (web-based didactic modules + teleconference), parent-child intervention, 10 core sessions + max of 4 supplemental sessions (each session 45-60 minutes) over 6 months, delivered by a staff psychologist and doctoral students in clinical psychology.
Wade et al, 2019	FPS	Treatment content was equivalent across treatment arms, though groups differed in terms of delivery mode (online vs face to face) and degree of therapist involvement (therapist-guided vs self-guided). Participants and their families in all 3 treatment arms could complete up to 10 sequential sessions providing training in staying positive/cognitive reframing, problem-solving, and communication.	(a) Online (therapist-guided, web-based didactic modules + videoconference), parent-child intervention, 10 core sessions+ max of 4 supplemental sessions (each session 60 minutes) over 6 months, delivered by licensed psychologists and postdoctoral fellows in psychology. (b) Online (self-guided, web-based didactic modules), parent-child intervention, 10 core sessions+ all 11 supplemental sessions (each session 60 minutes) over 6 months, with no interventionist.

Abbreviations: ASD, autism spectrum disorder; FPS, family problem-solving therapy; F2F, face-to-face; PSST, problem-solving skills training; PST, problem-solving therapy; STAR, supporting treatment adherence regimens; TBI, traumatic brain injury; TOPS, teen online problem-solving.

eTable 3. Author Judgments of Risk of Bias Across All Included Studies

Study ID	Domain 1. Randomization process				Domain 2. Deviations from intended interventions							
	1.1	1.2	1.3	Judgement	2.1	2.2	2.3	2.4	2.5	2.6	2.7	Judgement
Askins et al, 2009	Y	NI	N	Some concerns	PY	PY	N	NA	NA	Y	NA	Low
Asnani et al, 2021	Y	Y	N	Low	PY	PY	N	NA	NA	Y	NA	Low
Daniel et al, 2015	NI	PY	N	Low	Y	Y	PN	NA	NA	Y	NA	Low
DaWalt et al, 2018	NI	NI	PY	High	PY	PY	PN	NA	NA	PN	PN	Some concerns
Feinberg et al, 2014	Y	Y	PN	Low	PY	PY	PN	NA	NA	PY	NA	Low
Gerkensmeyer et al, 2013	NI	NI	N	Some concerns	PY	PY	PN	NA	NA	NI	PN	Some concerns
Greenley et al, 2015	Y	Y	PN	Low	PY	PY	N	NA	NA	PN	PN	Some concerns
McCann et al, 2013	Y	Y	N	Low	PY	PY	N	NA	NA	Y	NA	Low
Modi et al, 2016	Y	NI	NI	Some concerns	NI	NI	N	NA	NA	PY	NA	Low
Modi et al, 2021	Y	Y	N	Low	PY	N	N	NA	NA	Y	NA	Low
Nansel et al, 2009	NI	PN	N	High	PY	PY	PN	NA	NA	NI	PN	Some concerns
Narad et al, 2019	Y	Y	N	Low	PY	PY	N	NA	NA	Y	NA	Low
Palermo et al, 2016	Y	Y	N	Low	Y	Y	N	NA	NA	Y	NA	Low
Petranovich et al, 2015	Y	Y	N	Low	PY	PY	N	NA	NA	Y	NA	Low
Phipps et al, 2020	PY	NI	N	Some concerns	PY	PY	PN	NA	NA	Y	NA	Low
Sahler et al, 2002	PY	PY	N	Low	PY	PY	NI	NA	NA	Y	NA	Some concerns
Sahler et al, 2005	PY	NI	N	Some concerns	PY	PY	PN	NA	NA	PY	NA	Low
Sahler et al, 2013	PY	NI	N	Some concerns	PY	PY	PN	NA	NA	Y	NA	Low
Seid et al, 2010	PY	PY	N	Low	PY	PY	N	NA	NA	Y	NA	Low
Wade et al, 2006a	PY	NI	N	Some concerns	PY	PY	PN	NA	NA	NI	PN	Some concerns
Wade et al, 2006b	Y	NI	N	Some concerns	Y	Y	PN	NA	NA	PY	NA	Low
Wade et al, 2012	PY	NI	N	Some concerns	Y	Y	PN	NA	NA	NI	PN	Some concerns
Wade et al, 2019	Y	Y	PN	Low	PN	PY	PN	NA	NA	NI	PN	Some concerns

eTable 3. Author Judgments of Risk of Bias Across All Included Studies (Continued)

Study ID	Domain 3. Missing outcome data					Domain 4. Measurement of the outcome					
	3.1	3.2	3.3	3.4	Judgement	4.1	4.2	4.3	4.4	4.5	Judgement
Askins et al, 2009	N	PN	PY	PN	Some concerns	N	N	PN	NA	NA	Low
Asnani et al, 2021	N	PN	PN	NA	Low	N	N	N	NA	NA	Low
Daniel et al, 2015	N	N	NI	PN	Some concerns	N	PN	PY	PY	PN	Some concerns
DaWalt et al, 2018	N	PN	PN	NA	Low	N	N	NI	PY	PN	Some concerns
Feinberg et al, 2014	N	PN	PN	NA	Low	N	N	N	NA	NA	Low
Gerkensmeyer et al, 2013	N	PN	PN	NA	Low	N	N	PY	PY	PY	High
Greenley et al, 2015	N	PN	N	NA	Low	N	N	PN	NA	NA	Low
McCann et al, 2013	N	N	PN	NA	Low	N	N	N	NA	NA	Low
Modi et al, 2016	N	N	NI	PN	Some concerns	N	N	NI	NI	PN	Some concerns
Modi et al, 2021	N	Y	NA	NA	Low	N	N	N	NA	NA	Low
Nansel et al, 2009	PN	PN	NI	NI	High	N	N	PN	NA	NA	Low
Narad et al, 2019	N	PN	PN	NA	Low	N	N	PY	PN	NA	Low
Palermo et al, 2016	Y	NA	NA	NA	Low	N	N	N	NA	NA	Low
Petranovich et al, 2015	PN	PY	NA	NA	Low	N	N	N	NA	NA	Low
Phipps et al, 2020	N	PY	NA	NA	Low	N	N	NI	PN	NA	Low
Sahler et al, 2002	NI	PN	NI	NI	Some concerns	N	N	NI	PY	PN	Some concerns
Sahler et al, 2005	N	PN	NI	PN	Some concerns	N	N	NI	PY	PN	Some concerns
Sahler et al, 2013	PN	PN	NI	PN	Some concerns	N	N	N	NA	NA	Low
Seid et al, 2010	N	PY	NA	NA	Low	N	N	N	NA	NA	Low
Wade et al, 2006a	PN	PN	PY	PN	Some concerns	N	N	NI	NI	PN	Some concerns
Wade et al, 2006b	PN	PY	NA	NA	Low	N	N	PY	PN	NA	Low
Wade et al, 2012	N	N	PY	PY	High	N	N	Y	PN	NA	Low
Wade et al, 2019	N	PN	PN	NA	Low	N	N	PN	NA	NA	Low

eTable 3. Author Judgments of Risk of Bias Across All Included Studies (Continued)

Study ID	Domain 5. Selection of the reported result				Overall
	1.1	1.2	1.3	Judgement	
Askins et al, 2009	Y	PN	PY	High	High[c]
Asnani et al, 2021	Y	N	N	Low	Low[a]
Daniel et al, 2015	NI	PN	PN	Some concerns	Some concerns[b]
DaWalt et al, 2018	PY	N	N	Low	High
Feinberg et al, 2014	Y	N	N	Low	Low
Gerkensmeyer et al, 2013	PY	PN	PN	Low	High
Greenley et al, 2015	Y	N	N	Low	Some concerns
McCann et al, 2013	Y	N	N	Low	Low
Modi et al, 2016	Y	N	N	Low	Some concerns
Modi et al, 2021	Y	N	N	Low	Low
Nansel et al, 2009	PY	PN	PN	Low	High
Narad et al, 2019	PY	PY	PY	High	High
Palermo et al, 2016	Y	N	N	Low	Low
Petranovich et al, 2015	Y	N	N	Low	Low
Phipps et al, 2020	Y	N	N	Low	Some concerns
Sahler et al, 2002	Y	N	PY	High	High
Sahler et al, 2005	Y	N	PY	High	High
Sahler et al, 2013	Y	N	N	Low	Some concerns
Seid et al, 2010	Y	N	N	Low	Low
Wade et al, 2006a	PY	N	N	Low	Some concerns
Wade et al, 2006b	PY	PN	PN	Low	Some concerns
Wade et al, 2012	PY	PN	PY	High	High
Wade et al, 2019	PY	PN	PN	Low	Some concerns

Abbreviations: Y, Yes; PY, Probably yes; PN, Probably no; N, No; NI, No information; NA, Not applicable.

[a] Low risk of bias: The study is judged to be at low risk of bias for all domains for this result.

[b] Some concerns: The study is judged to be at some concerns in at least one domain for this result.

[c] High risk of bias: The study is judged to be at high risk of bias in at least one domain for this result or the study is judged to have some concerns for multiple domains in a way that substantially lowers confidence in the result.

eTable 4.Grading of Recommendations Assessment, Development, and Evaluation (GRADE) Evidence Profile

Outcomes	Risk of bias[a]	Inconsistency[b]	Indirectness[c]	Imprecision[d]	Publication bias[e]	Certainty of the evidence (GRADE)[f]
Parental psychosocial outcome						
Depression	Not serious	Serious	Not serious	Not serious	Not serious	⊕⊕⊕◯ Moderate
Distress	Not serious	Serious	Not serious	Not serious	Not serious	⊕⊕⊕◯ Moderate
Problem-solving skills	Not serious	Serious	Not serious	Not serious	Not serious	⊕⊕⊕◯ Moderate
Post-traumatic stress	Serious	Not serious	Not serious	Not serious	Not serious	⊕⊕⊕◯ Moderate
Parenting stress	Not serious	Serious	Not serious	Serious	Not serious	⊕⊕◯◯ Low
Anxiety	Not serious	Serious	Not serious	Very serious	Not serious	⊕◯◯◯ Very low
Parental quality of Life	Not serious	Not serious	Not serious	Very serious	Not serious	⊕⊕◯◯ Low
Pediatric psychosocial outcome						
Pediatric quality of life	Not serious	Serious	Not serious	Serious	Not serious	⊕⊕◯◯ Low
Mental problems	Not serious	Not serious	Not serious	Serious	Not serious	⊕⊕⊕◯ Moderate
Social functioning	Not serious	Serious	Not serious	Very serious	Not serious	⊕◯◯◯ Very low
Family psychosocial outcome						
Parent-child conflict	Serious	Not serious	Not serious	Serious	Not serious	⊕⊕◯◯ Low

[a] Risk-of-bias: certainty was downgraded if more than 50% of the weights of individual RCTs in each outcome assessed came from high-risk studies.

[b] Inconsistency: based on the variability and heterogeneity across individual trials. Certainty was downgraded if $I^2 > 50\%$ and/or if the p-value of the heterogeneity test was < .05.

[c] Indirectness: assessed qualitatively by the extent to which the population, interventions, and outcome measures directly reflect the aims of the systematic review.

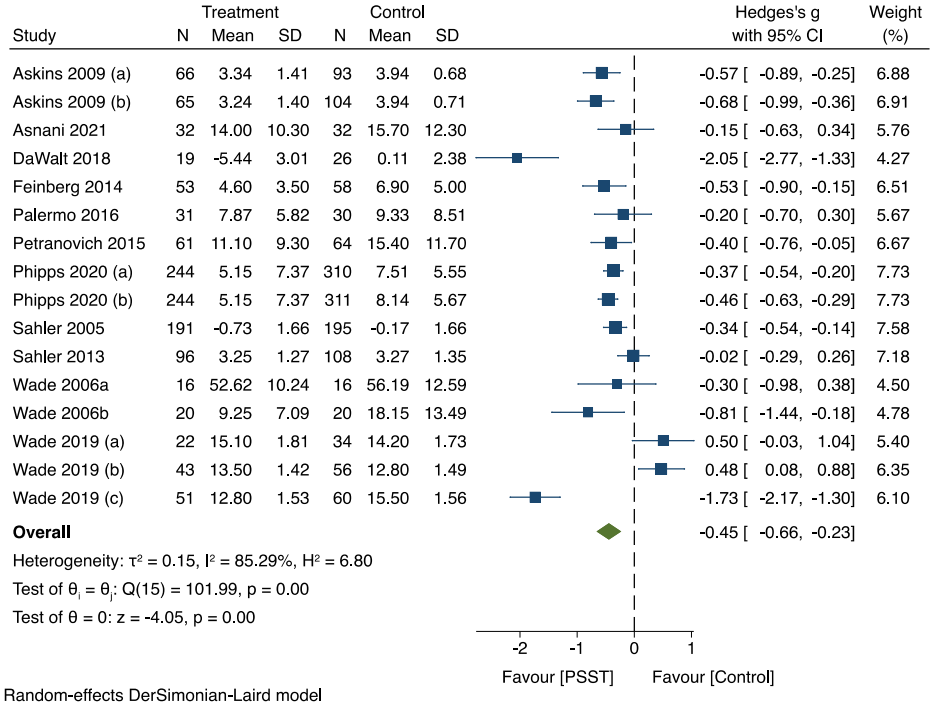
[d] Imprecision: based on inspection of the pooled estimate and the 95% confidence interval (95%CIs). We decreased the grade rating by one (-1) when the analysis included fewer than 500 participants or if there were wide confidence intervals, and by two (-2) when the number of participants included in the analysis was very low or if confidence intervals were very wide.

[e] Publication bias: assessed by a funnel plot and an extension to Egger's regression test. Certainty downgraded when $p < 0.05$.

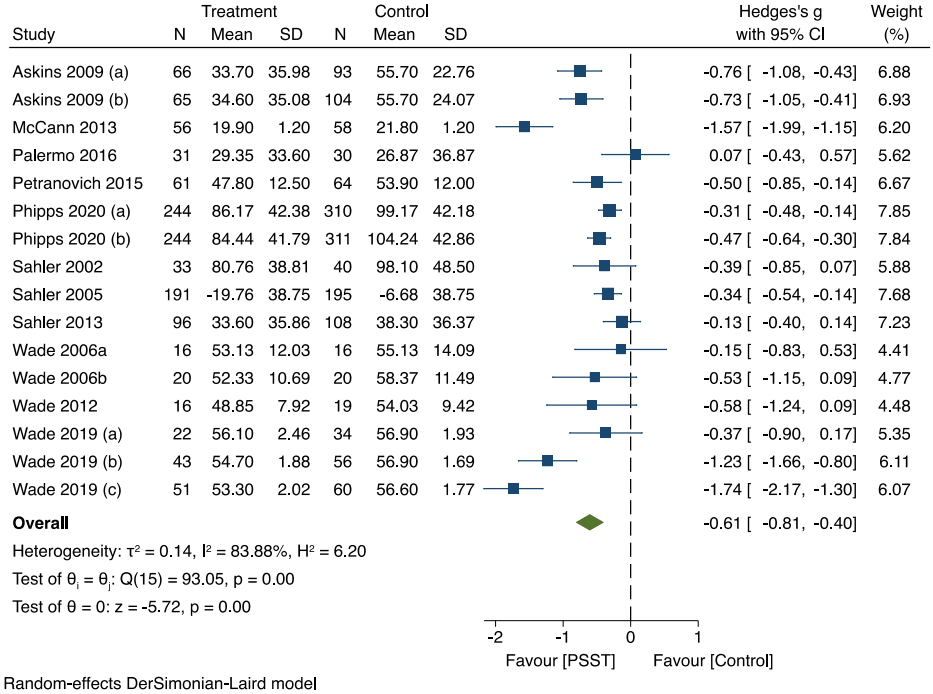
[f] High certainty: we are very confident that the true effect lies close to that of the estimate of the effect; Moderate certainty: we are moderately confident in the effect estimate: the true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different; Low certainty: our confidence in the effect estimate is limited: the true effect may be substantially different from the estimate of the effect; Very low certainty: we have very little confidence in the effect estimate: the true effect is likely to be substantially different from the estimate of effect.

eFigure 1. Forest Plot Meta-Analyses for Different Psychosocial Outcomes

eFigure 1.1. Forest Plot of PSST Association with Parental Depression



eFigure 1.2. Forest Plot of PSST Association with Parental Distress



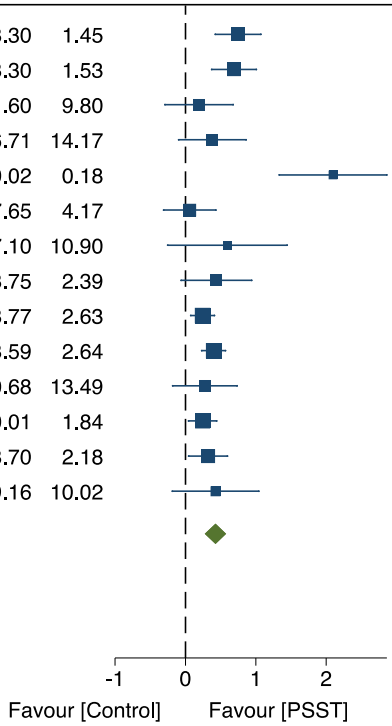
eFigure 1.3. Forest Plot of PSST Association with Parental Problem-solving Skills

Study	Treatment N	Treatment Mean	Treatment SD	Control N	Control Mean	Control SD	Hedges's g with 95% CI	Weight (%)
Askins 2009 (a)	66	14.60	2.06	93	13.30	1.45	0.75 [0.42, 1.07]	8.31
Askins 2009 (b)	65	14.50	2.01	104	13.30	1.53	0.69 [0.37, 1.01]	8.45
Asnani 2021	32	93.60	10.60	32	91.60	9.80	0.19 [-0.29, 0.68]	5.66
Daniel 2015	28	111.81	11.48	41	106.71	14.17	0.38 [-0.10, 0.86]	5.74
DaWalt 2018	16	0.44	0.22	25	0.02	0.18	2.10 [1.33, 2.86]	3.05
Feinberg 2014	53	17.89	3.51	57	17.65	4.17	0.06 [-0.31, 0.43]	7.43
Modi 2016	9	114.40	12.80	12	107.10	10.90	0.60 [-0.25, 1.45]	2.58
Palermo 2016	31	14.73	2.00	30	13.75	2.39	0.44 [-0.06, 0.94]	5.44
Phipps 2020 (a)	244	14.43	2.80	310	13.77	2.63	0.24 [0.08, 0.41]	11.49
Phipps 2020 (b)	244	14.68	2.82	311	13.59	2.64	0.40 [0.23, 0.57]	11.48
Sahler 2002	33	74.58	14.48	40	70.68	13.49	0.28 [-0.18, 0.73]	6.03
Sahler 2005	191	0.46	1.84	195	0.01	1.84	0.24 [0.04, 0.44]	10.86
Sahler 2013	96	14.40	2.16	108	13.70	2.18	0.32 [0.05, 0.60]	9.29
Wade 2006b	20	73.45	9.61	20	69.16	10.02	0.43 [-0.19, 1.04]	4.19
Overall							0.43 [0.27, 0.58]	

Heterogeneity: $\tau^2 = 0.04$, $I^2 = 64.28\%$, $H^2 = 2.80$

Test of $\theta_i = \theta_j$: Q(13) = 36.39, p = 0.00

Test of $\theta = 0$: z = 5.50, p = 0.00



Random-effects DerSimonian-Laird model

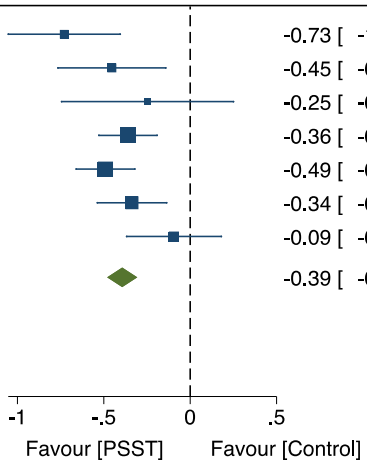
eFigure 1.4. Forest Plot of PSST Association with Parental Post-traumatic Stress

Study	Treatment N	Treatment Mean	Treatment SD	Control N	Control Mean	Control SD	Hedges's g with 95% CI	Weight (%)
Askins 2009 (a)	66	26.00	15.98	93	35.50	10.32	-0.73 [-1.05, -0.41]	7.23
Askins 2009 (b)	65	29.60	15.68	104	35.50	10.91	-0.45 [-0.77, -0.14]	7.78
Palermo 2016	31	32.65	8.67	30	34.79	8.44	-0.25 [-0.74, 0.25]	3.07
Phipps 2020 (a)	244	23.10	21.98	310	30.18	17.59	-0.36 [-0.53, -0.19]	26.63
Phipps 2020 (b)	244	20.85	22.06	311	30.45	17.35	-0.49 [-0.66, -0.32]	26.31
Sahler 2005	191	-9.24	15.64	195	-3.96	15.64	-0.34 [-0.54, -0.14]	18.87
Sahler 2013	96	28.20	15.87	108	29.70	16.00	-0.09 [-0.37, 0.18]	10.11
Overall							-0.39 [-0.48, -0.31]	

Heterogeneity: $I^2 = 44.93\%$, $H^2 = 1.82$

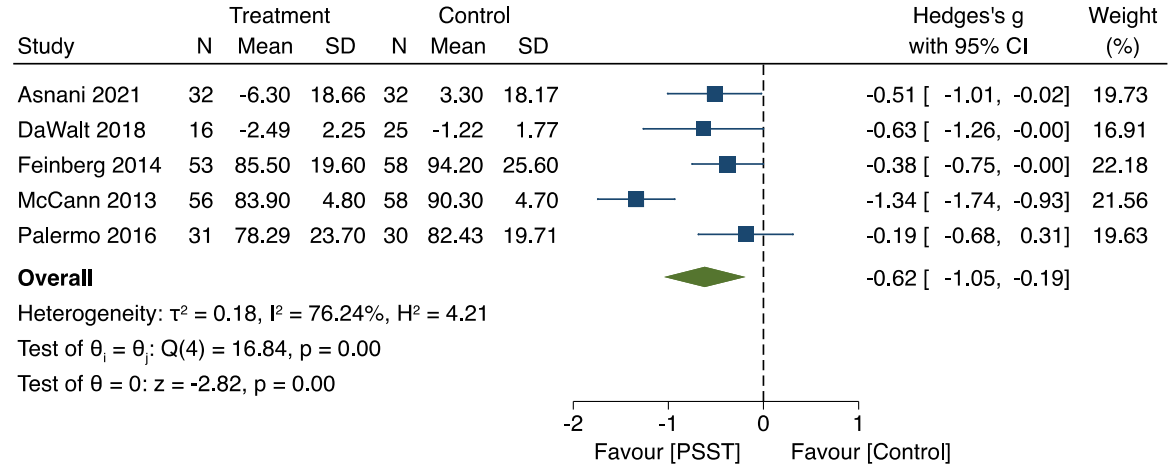
Test of $\theta_i = \theta_j$: Q(6) = 10.89, p = 0.09

Test of $\theta = 0$: z = -8.85, p = 0.00



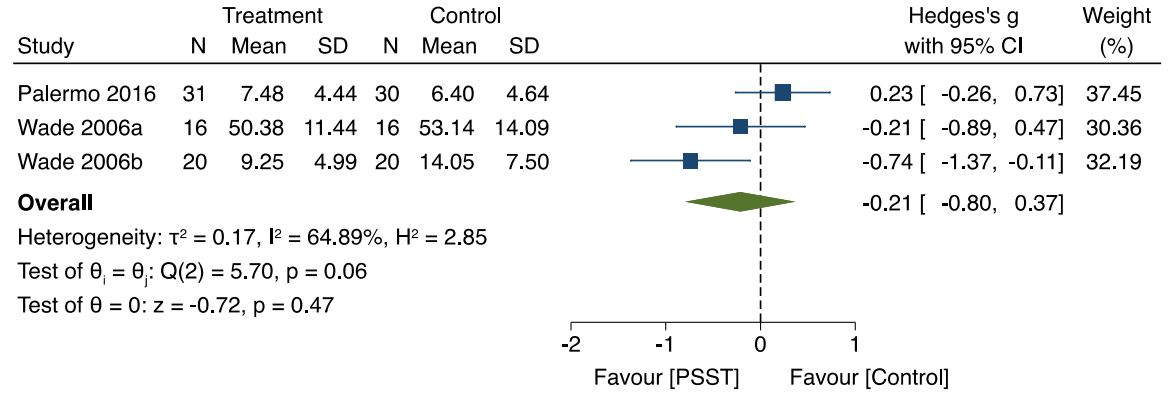
Fixed-effects inverse-variance model

eFigure 1.5. Forest Plot of PSST Association with Parenting Stress



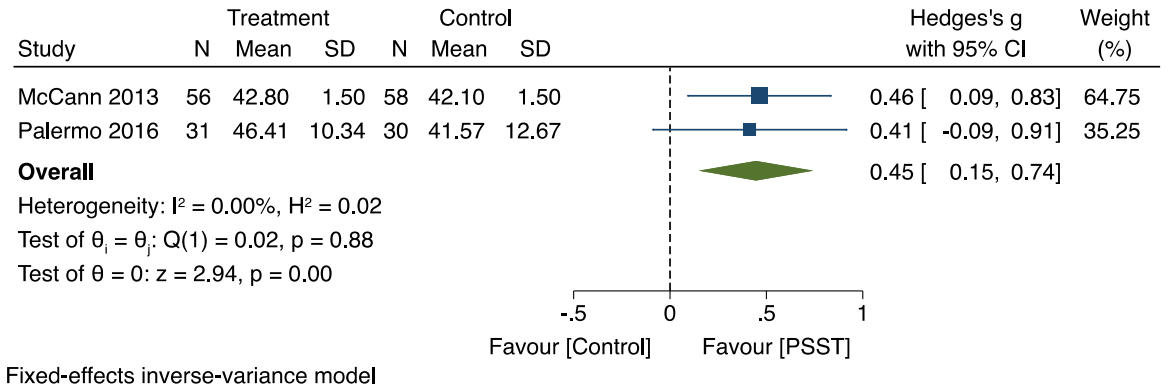
Random-effects DerSimonian-Laird model

eFigure 1.6. Forest Plot of PSST Association with Parental Anxiety



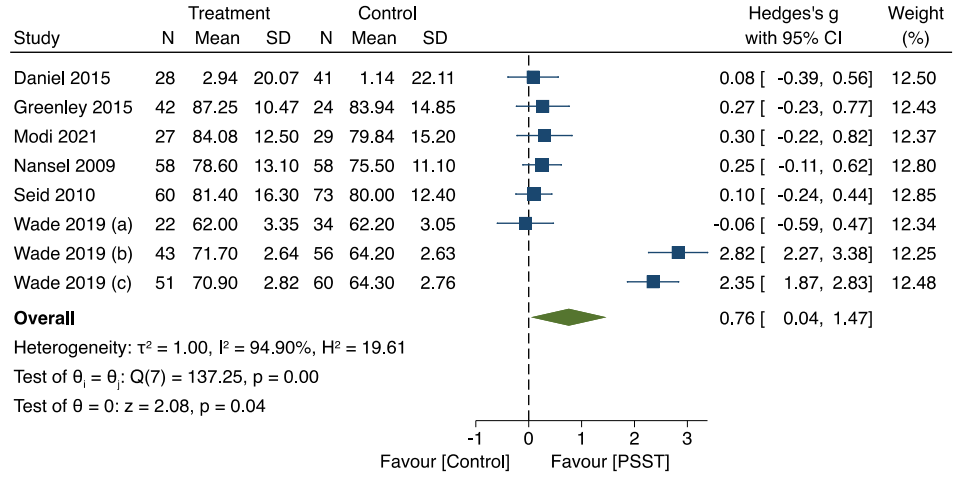
Random-effects DerSimonian-Laird model

eFigure 1.7. Forest Plot of PSST Association with Parental Quality of Life



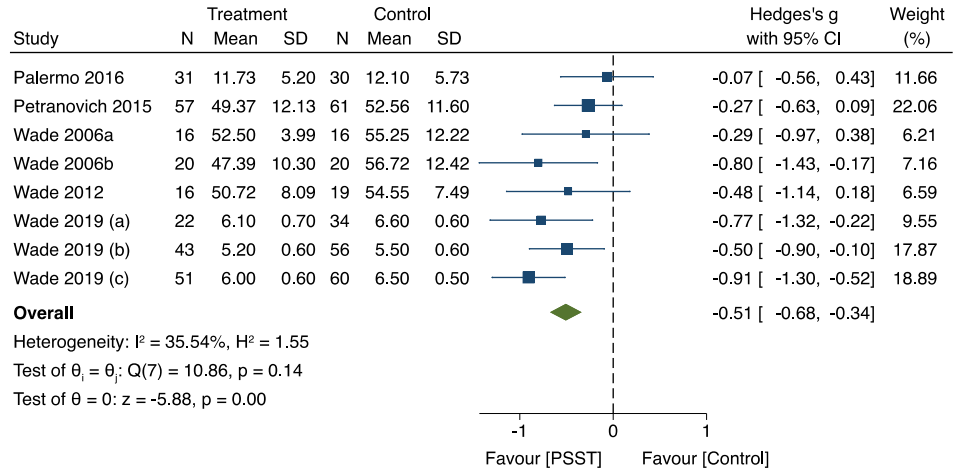
Fixed-effects inverse-variance model

eFigure 1.8. Forest Plot of PSST Association with Pediatric Quality of Life



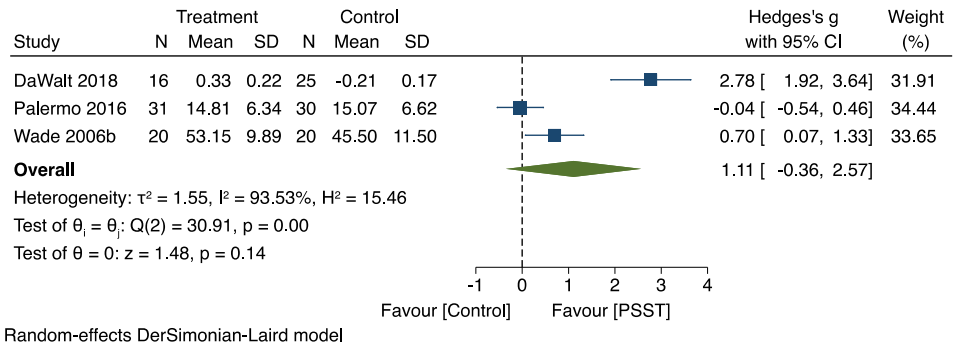
Random-effects DerSimonian-Laird model

eFigure 1.9. Forest Plot of PSST Association with Pediatric Mental Problems



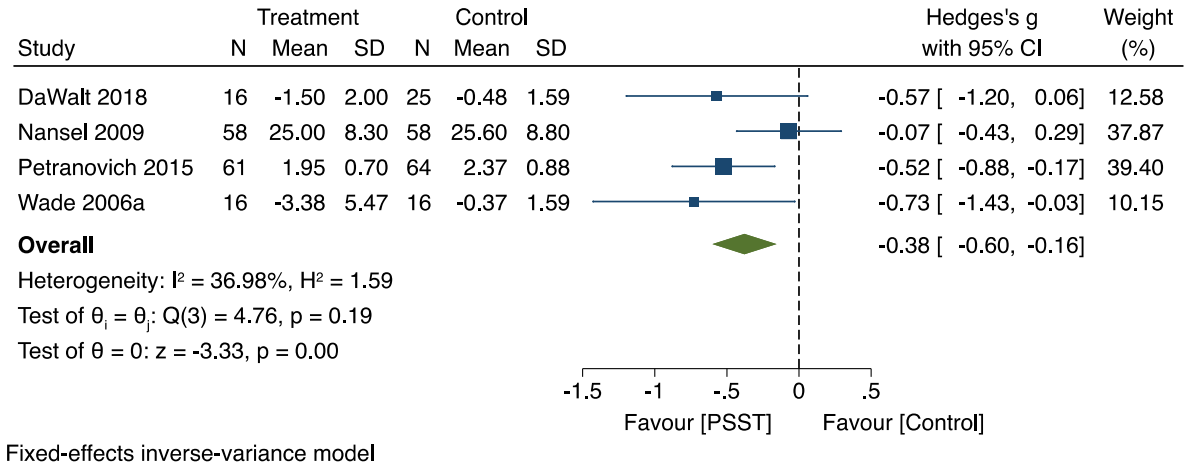
Fixed-effects inverse-variance model

eFigure 1.10. Forest Plot of PSST Association with Pediatric Social Functioning



Random-effects DerSimonian-Laird model

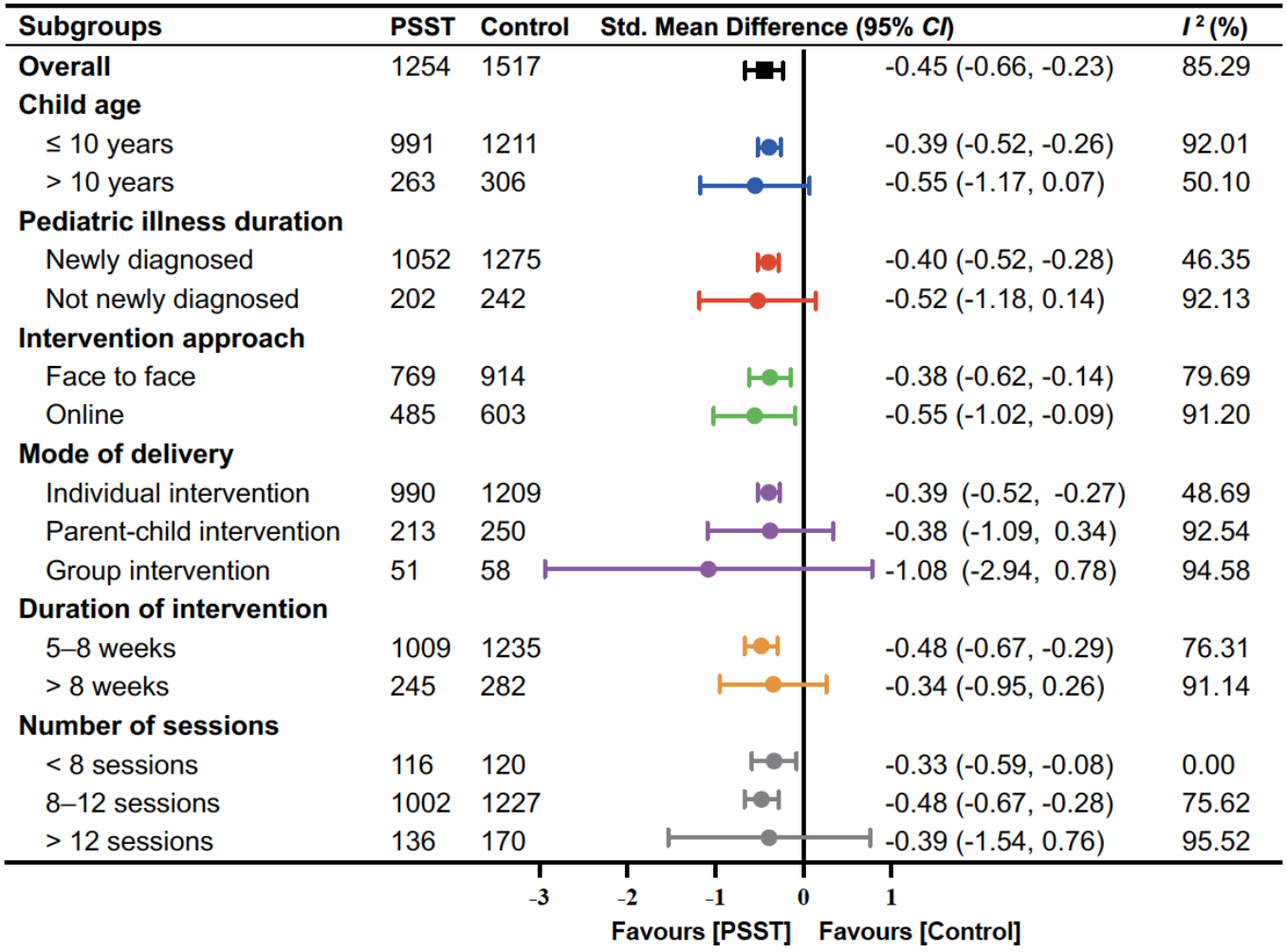
eFigure 1.11. Forest Plot of PSST Association with Parent-child conflict



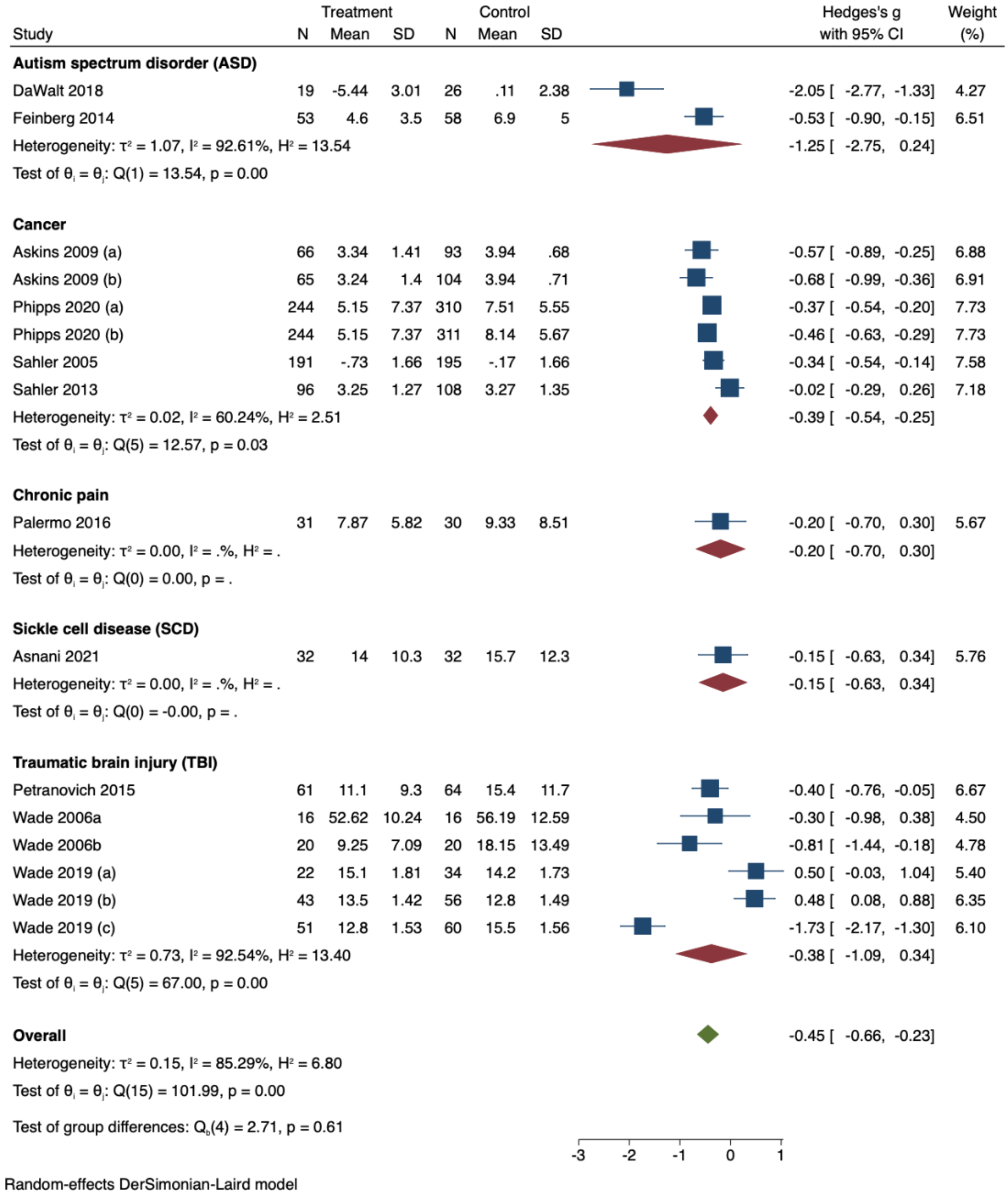
Fixed-effects inverse-variance model

eFigure 2. Subgroup Analyses of Each Outcome According to Children- and Intervention-Level Factors

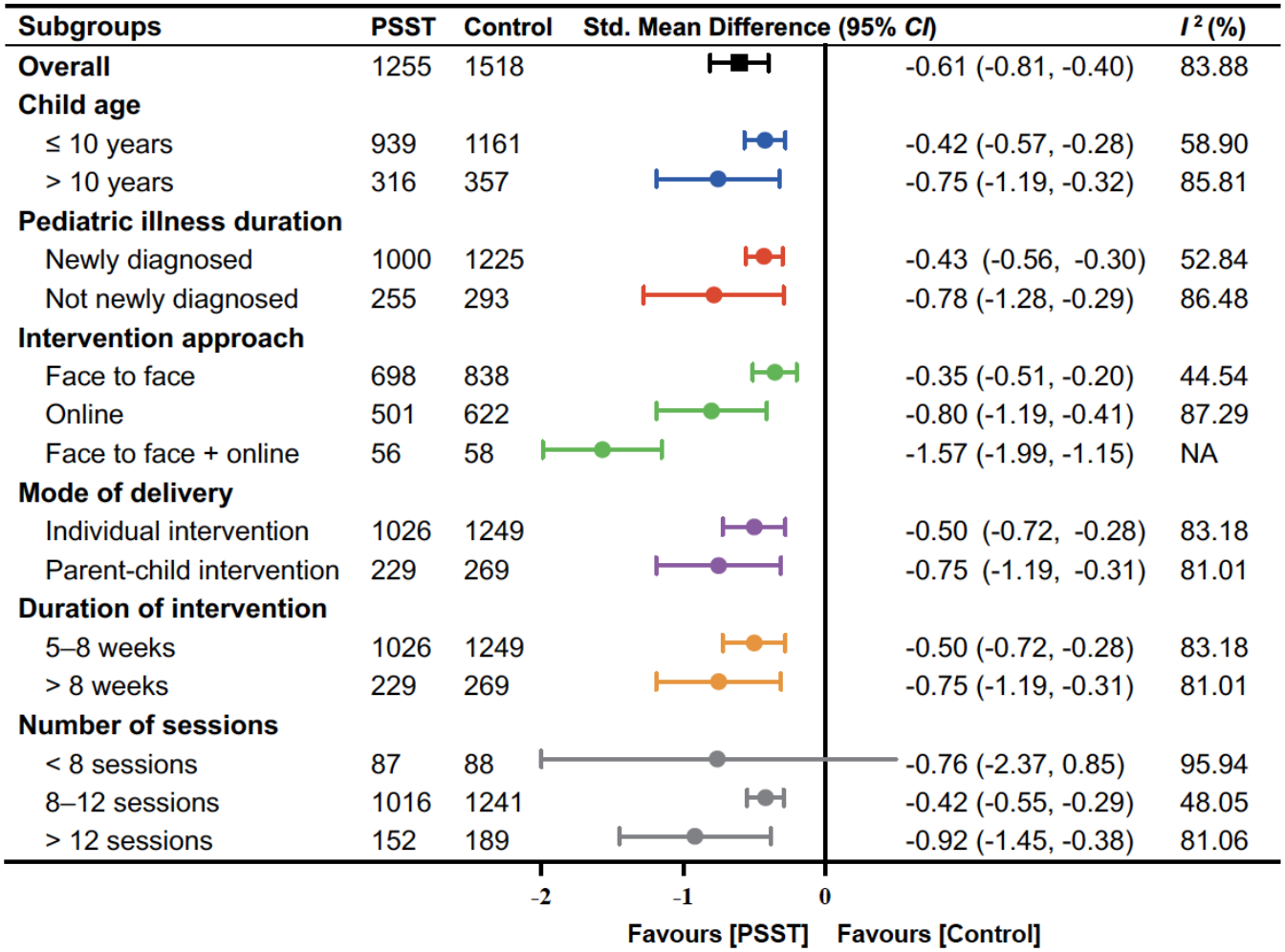
eFigure 2.1 Subgroup Analysis of PSST on Parental Depression Changes (Overall)



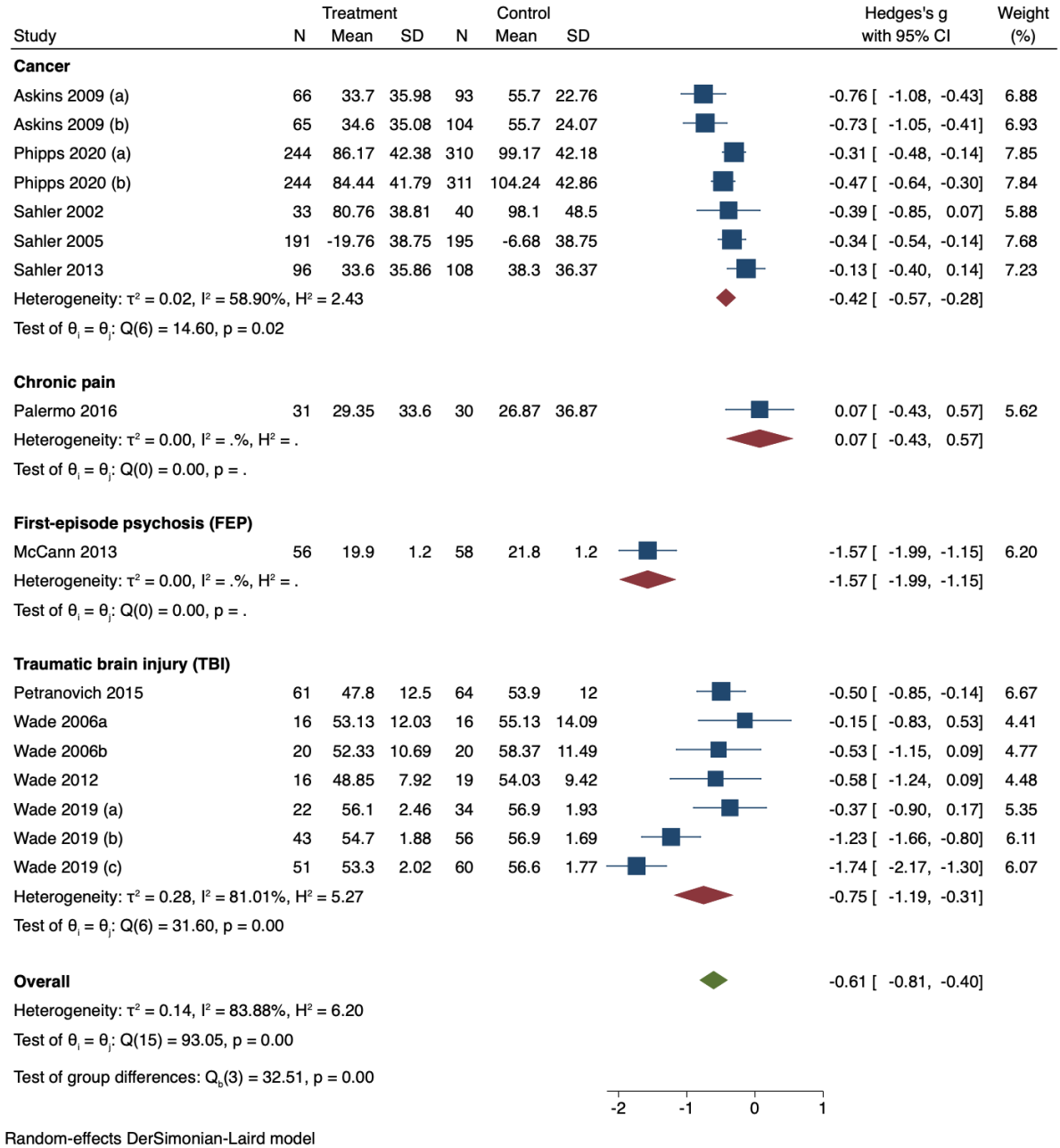
eFigure 2.2 Subgroup Analysis of Childhood Medical Conditions on Parental Depression Changes



eFigure 2.3 Subgroup Analysis of PSST on Parental Distress Changes (Overall)

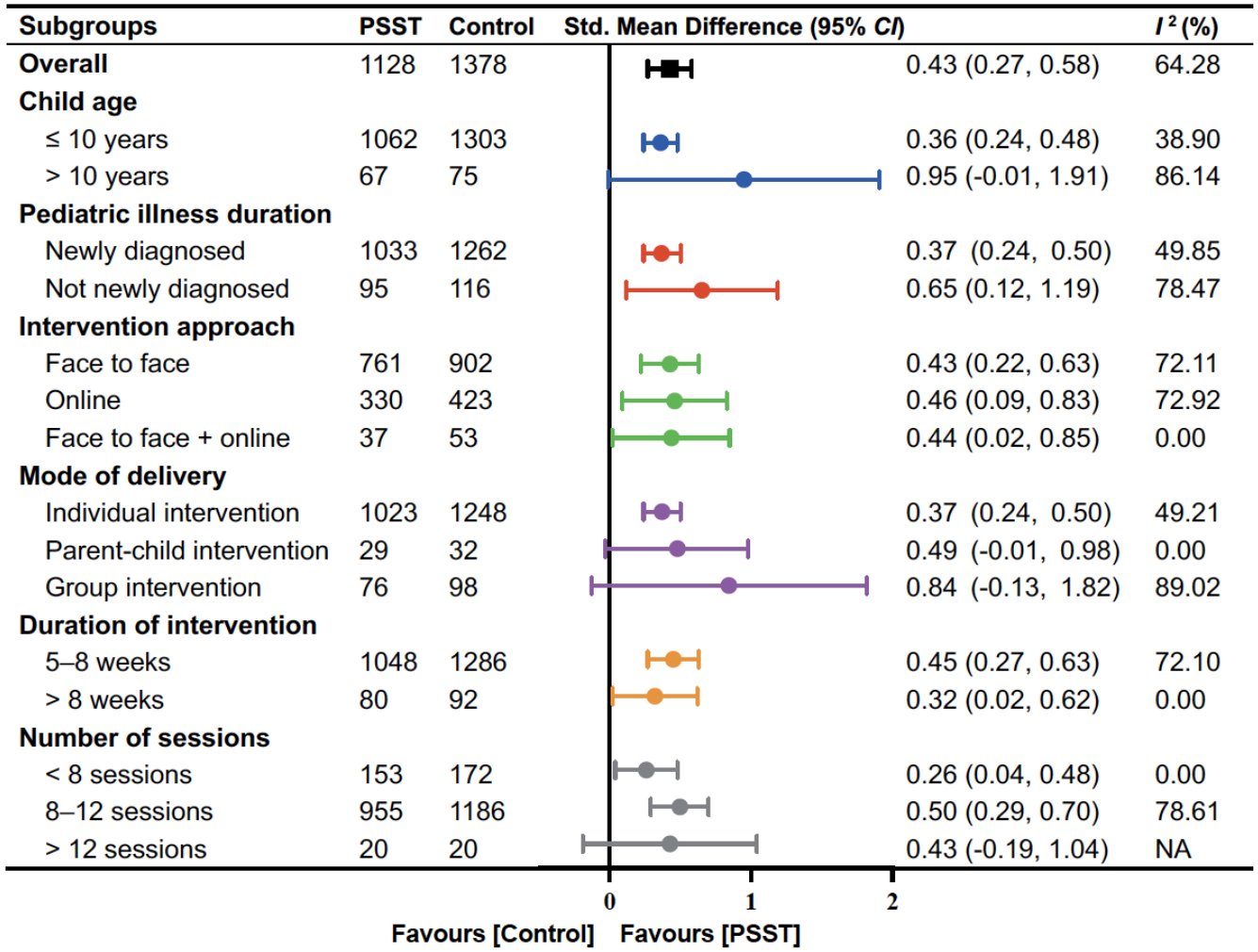


eFigure 2.4 Subgroup Analysis of Childhood Medical Conditions on Parental Distress Changes

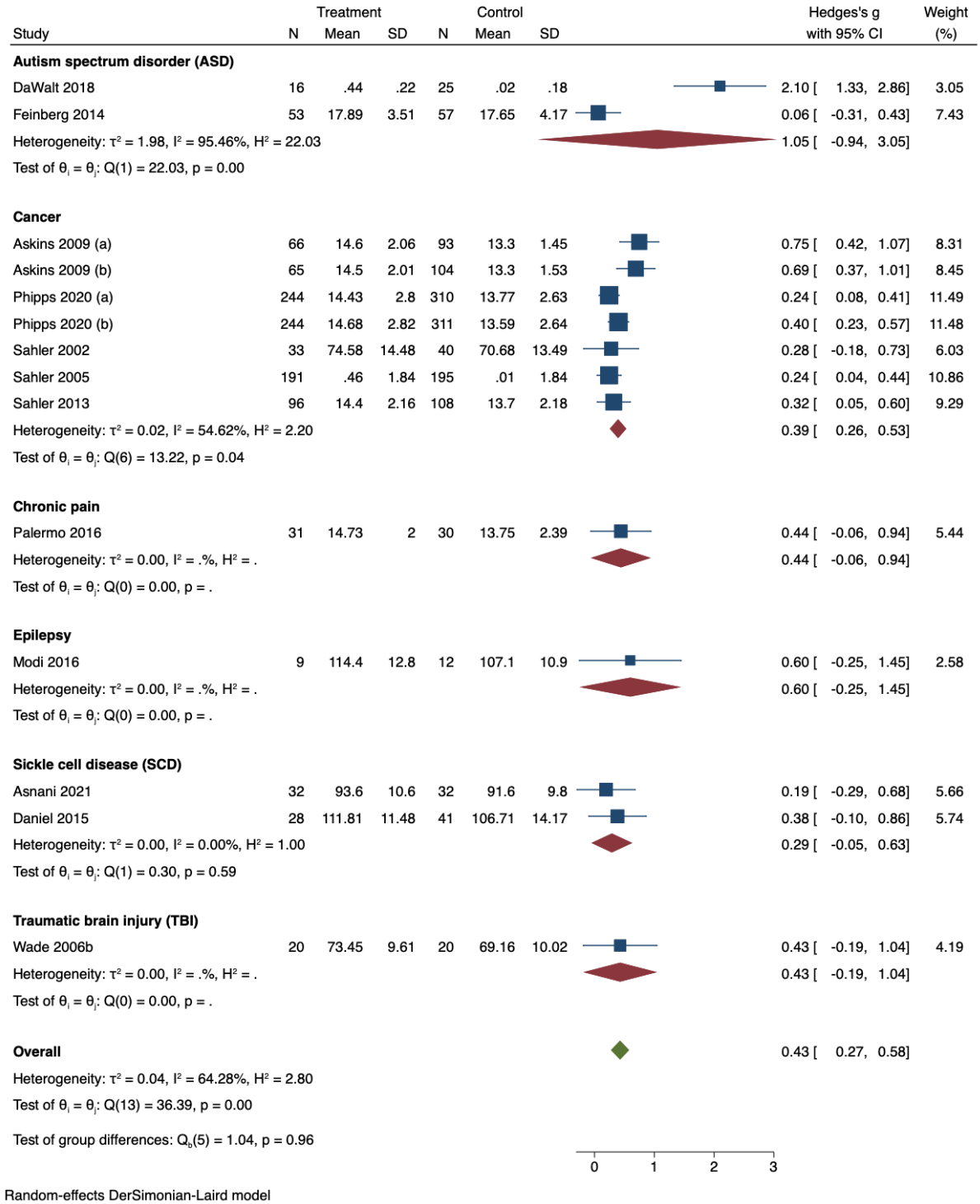


Random-effects DerSimonian-Laird model

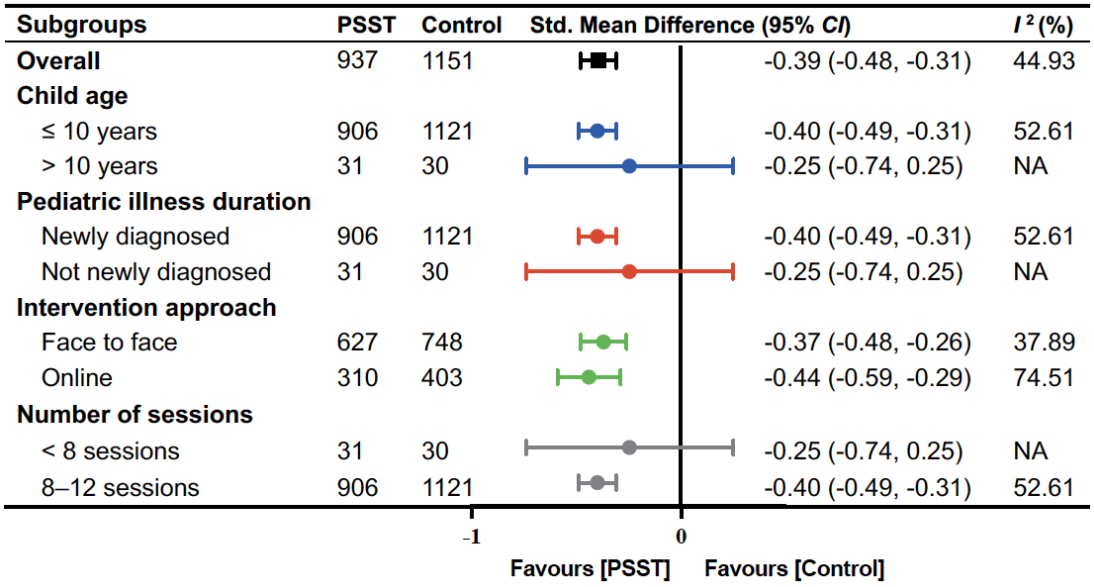
eFigure 2.5 Subgroup Analysis of PSST on Parental Problem-solving Skills Changes (Overall)



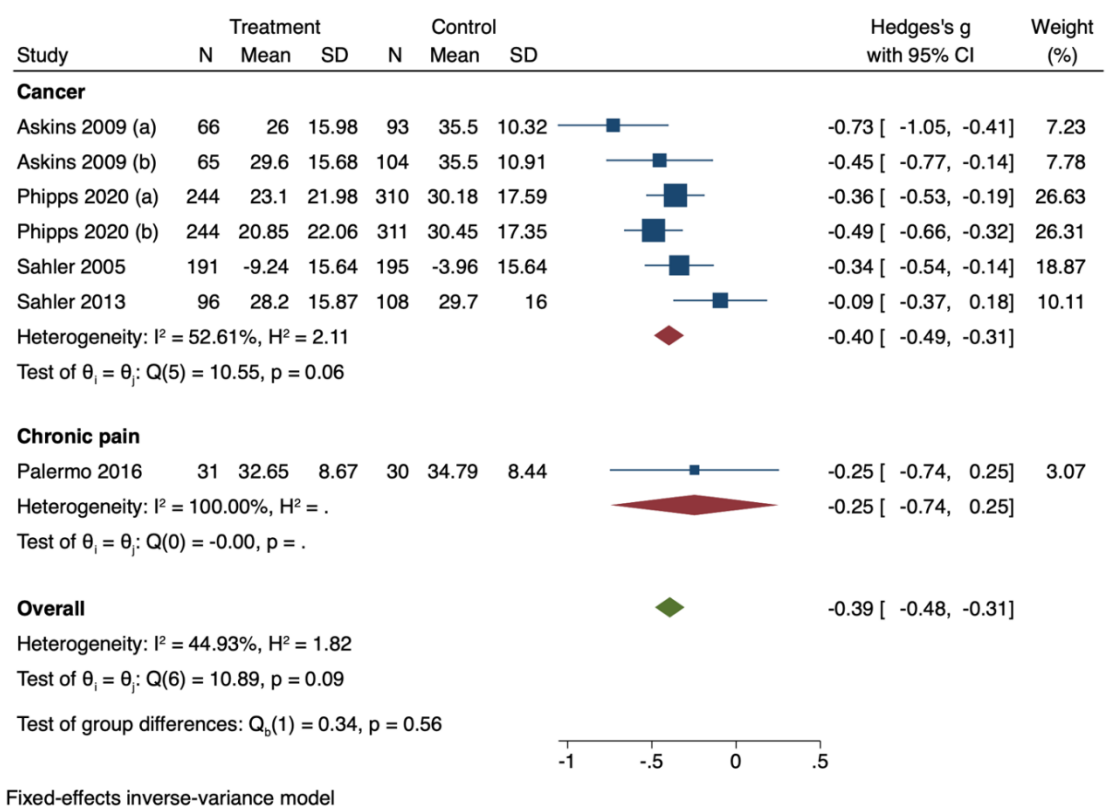
eFigure 2.6 Subgroup Analysis of Childhood Medical Conditions on Parental Problem-solving Skills Changes



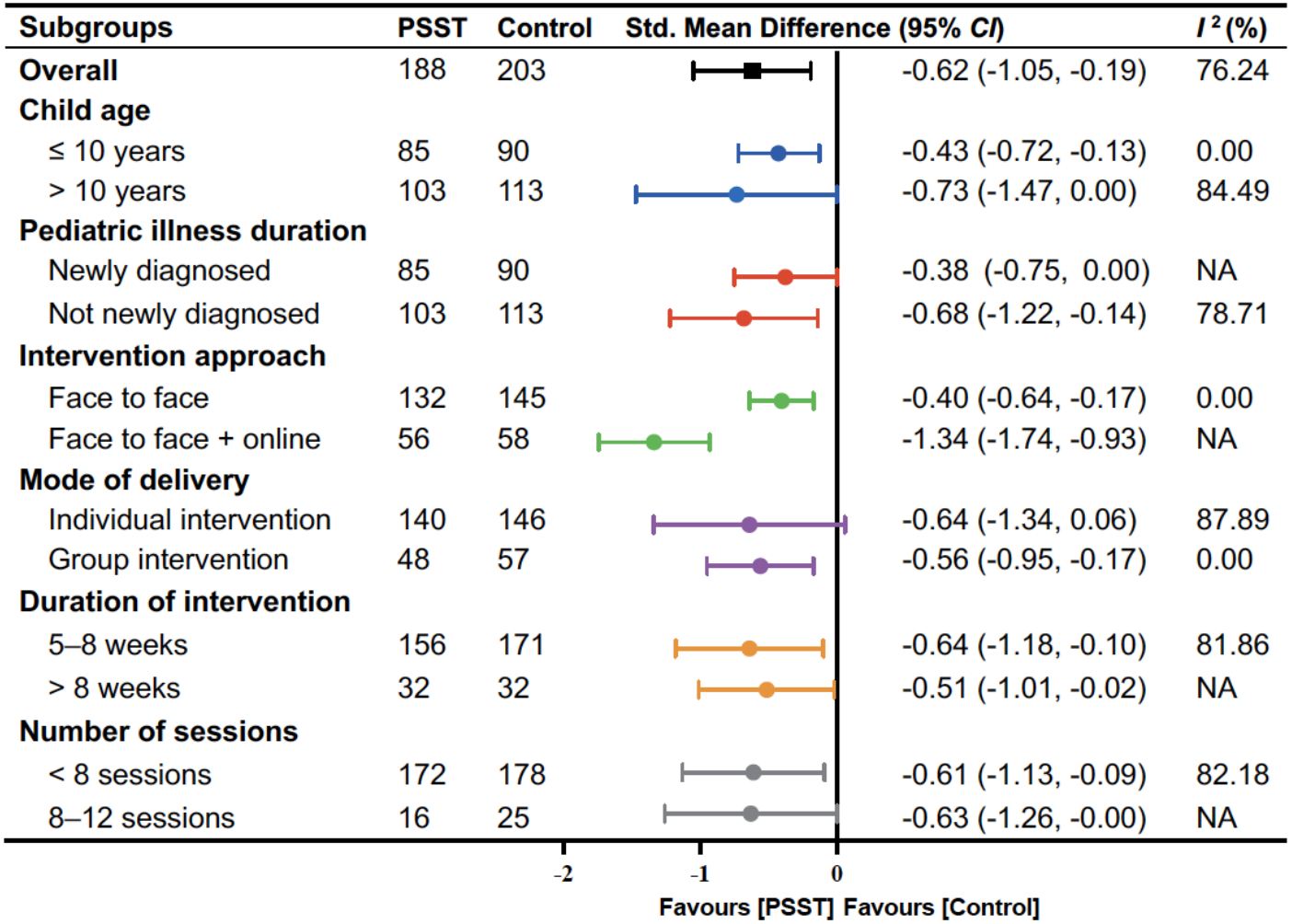
eFigure 2.7 Subgroup Analysis of PSST on Parental Post-traumatic Stress Changes (Overall)



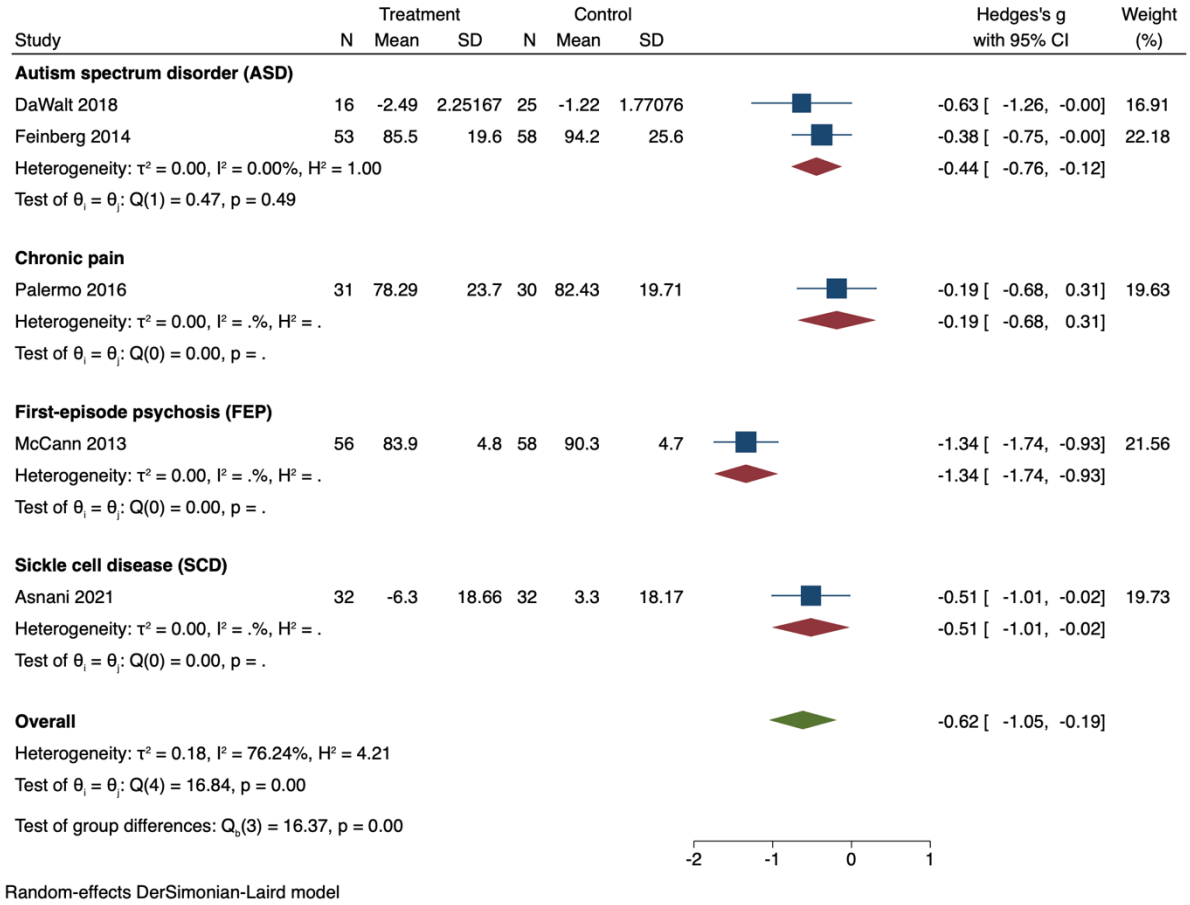
eFigure 2.8 Subgroup Analysis of Childhood Medical Conditions on Parental Post-traumatic Stress Changes



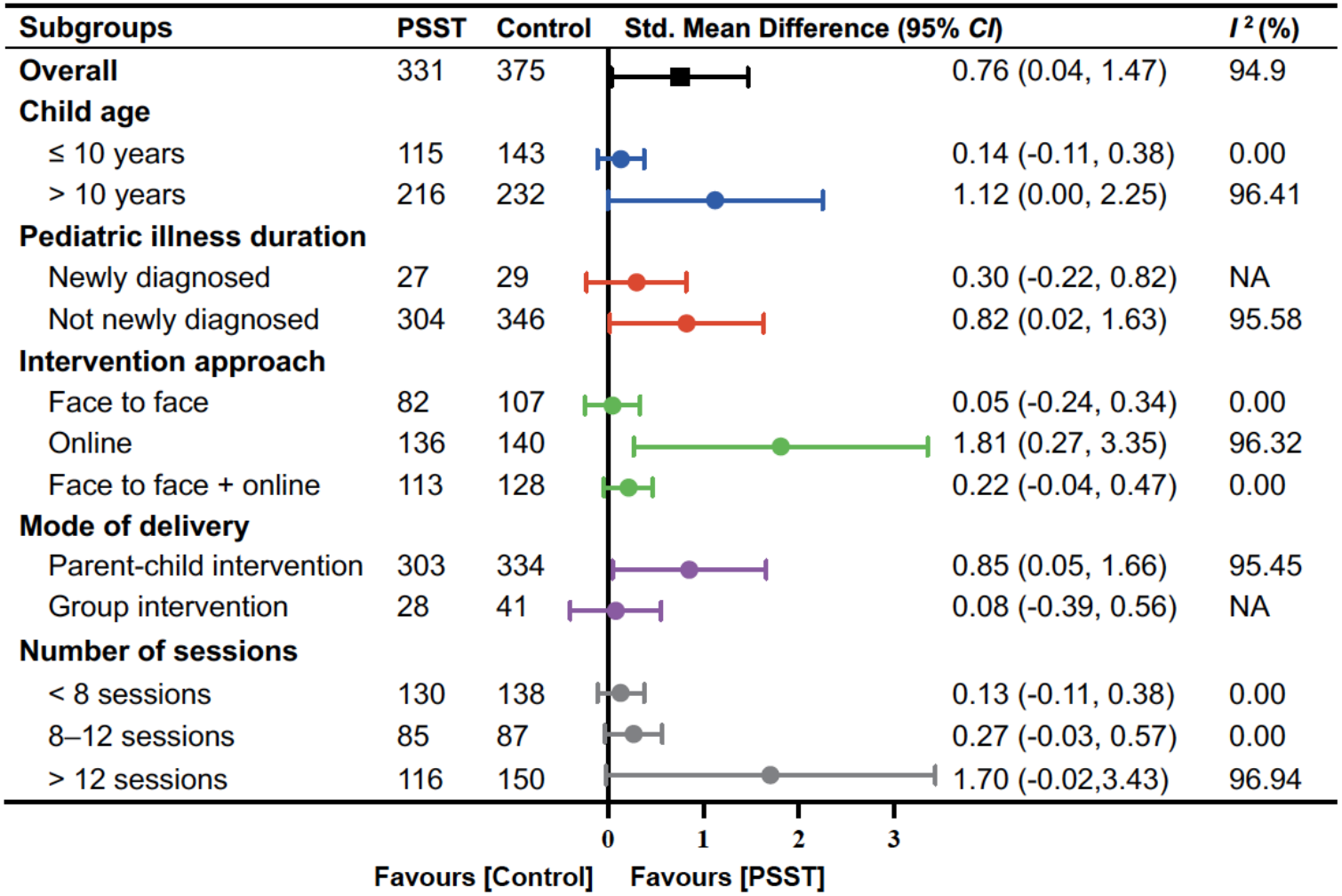
eFigure 2.9 Subgroup Analysis of PSST on Parenting Stress Changes (Overall)



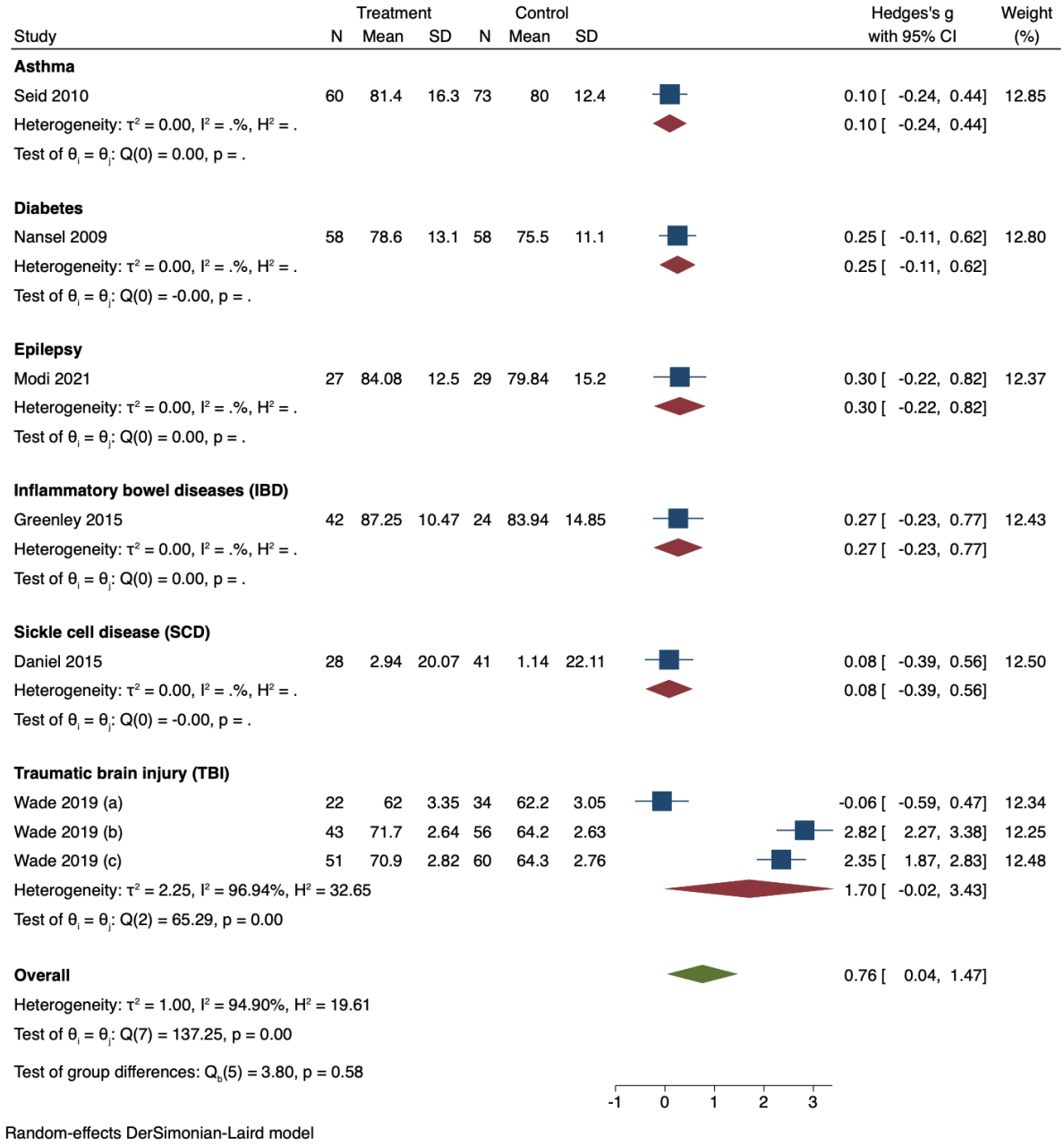
eFigure 2.10 Subgroup Analysis of Childhood Medical Conditions on Parenting Stress Changes



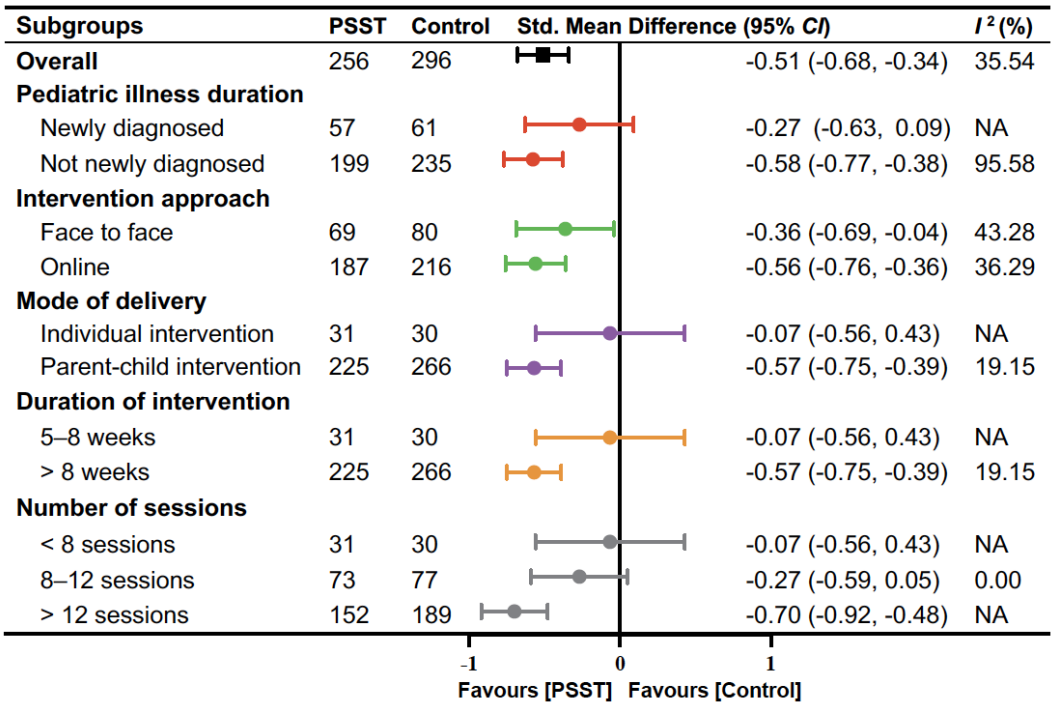
eFigure 2.11 Subgroup Analysis of PSST on Pediatric Quality of Life Changes (Overall)



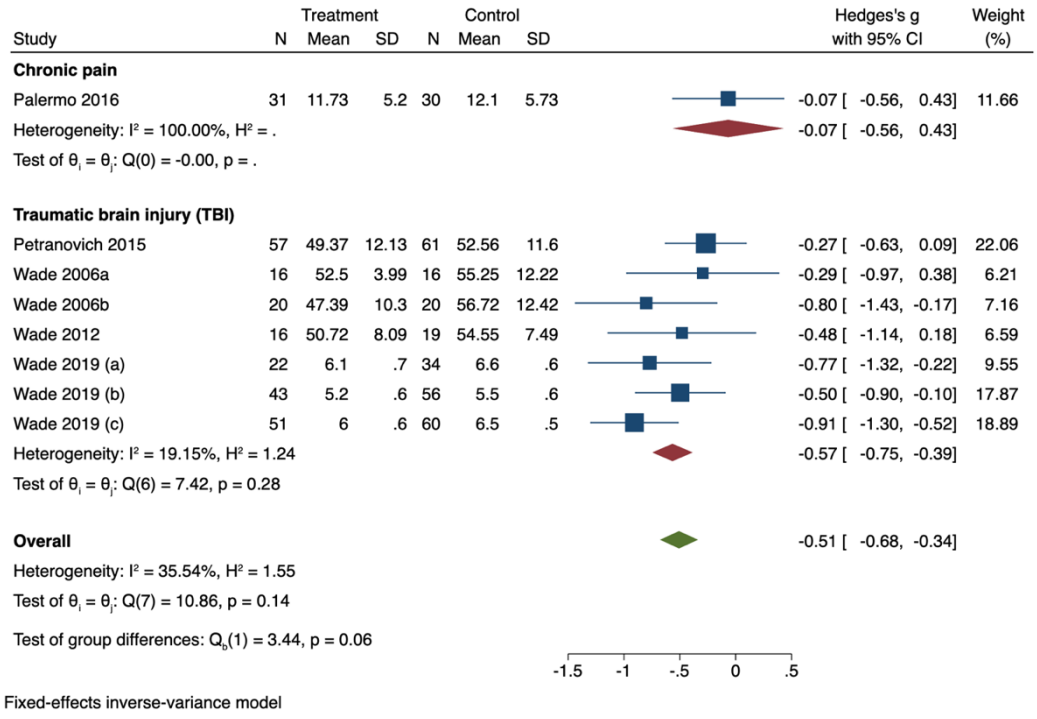
eFigure 2.12 Subgroup Analysis of Childhood Medical Conditions on Pediatric Quality of Life Changes



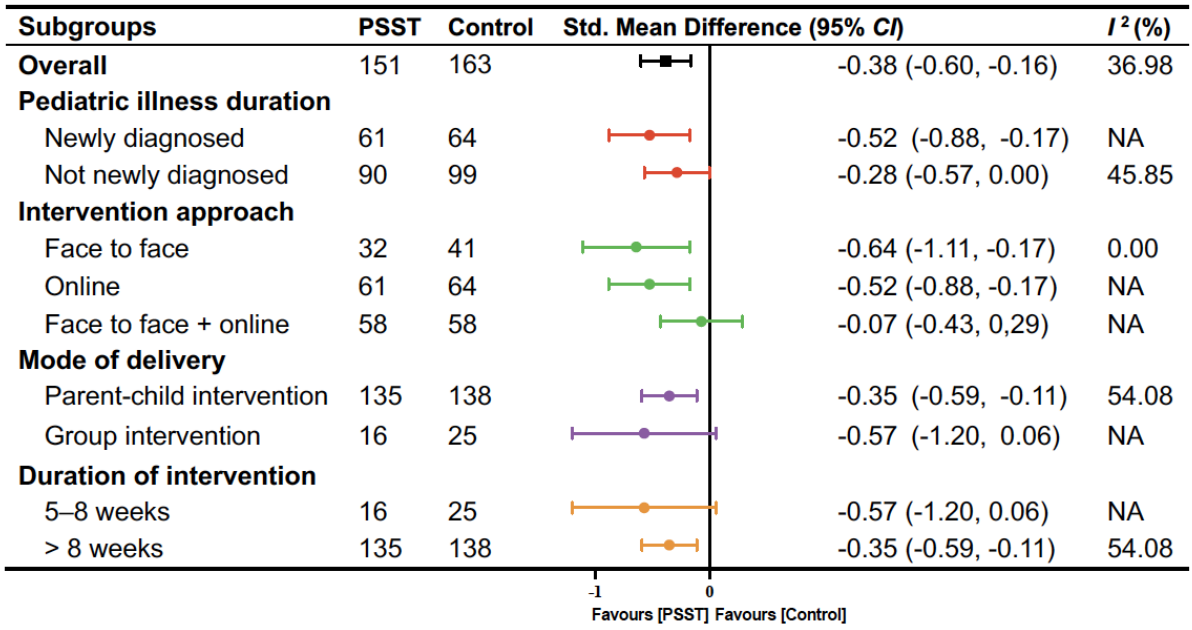
eFigure 2.13 Subgroup Analysis of PSST on Pediatric Mental Problems Changes (Overall)



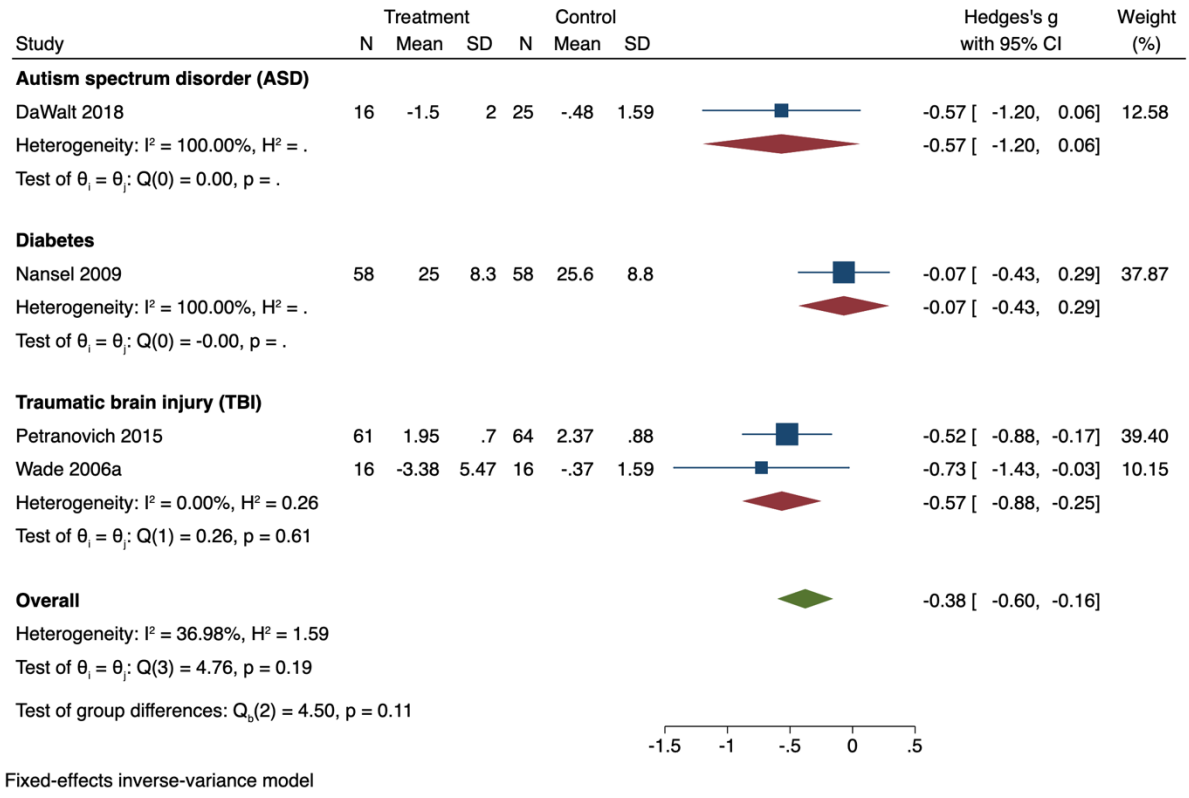
eFigure 2.14 Subgroup Analysis of Childhood Medical Conditions on Pediatric Mental Problems Changes



eFigure 2.15 Subgroup Analysis of PSST on Parent-child Conflict Changes (Overall)

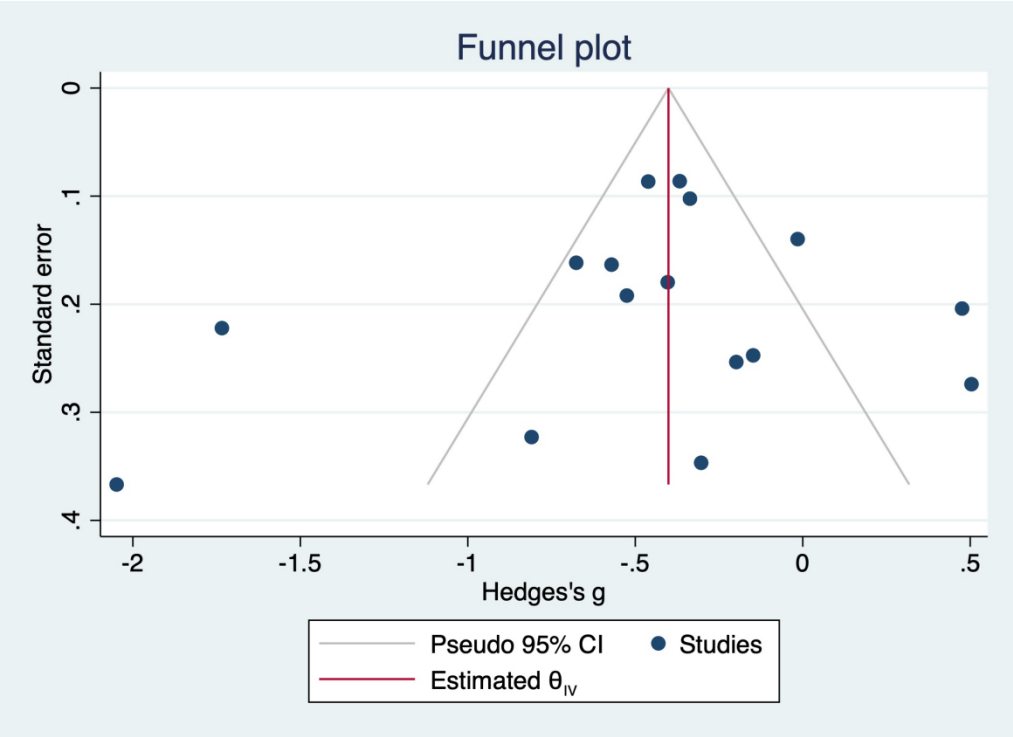


eFigure 2.16 Subgroup Analysis of Childhood Medical Conditions on Parent-child Conflict Changes

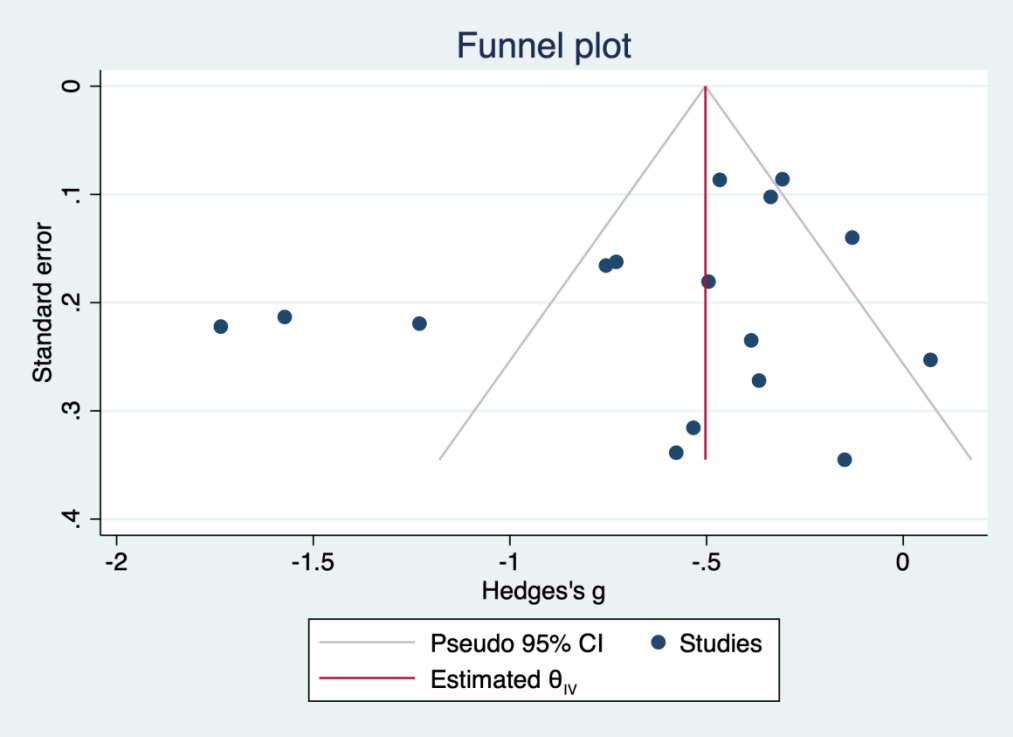


eFigure 3. Funnel Plot Analyses

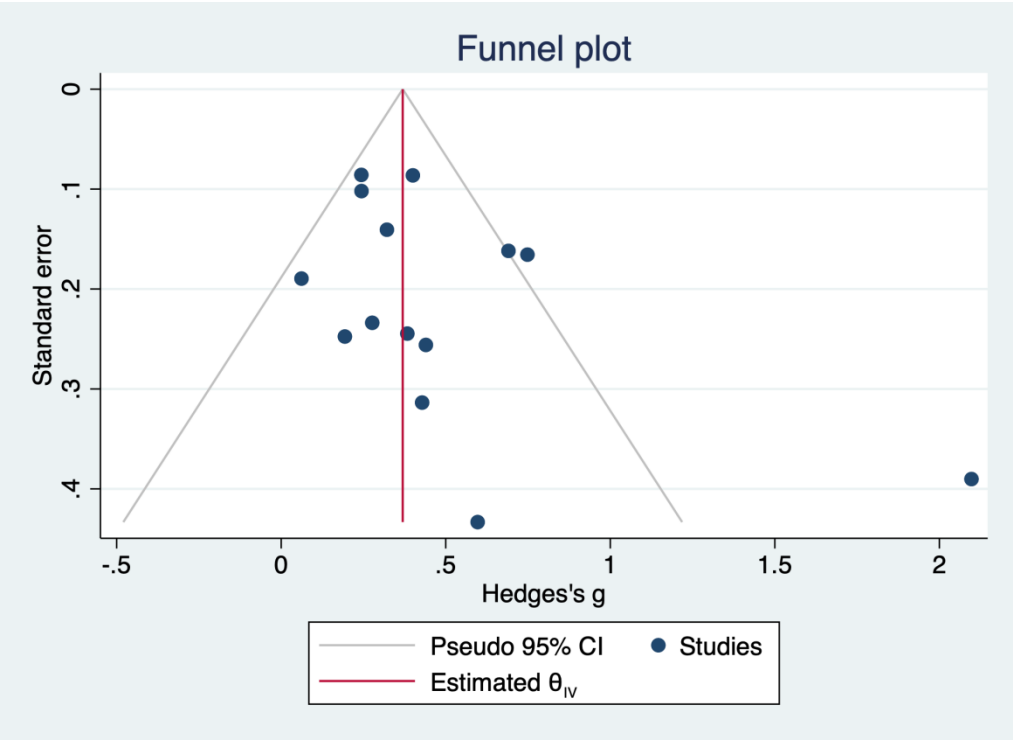
eFigure 3.1 Funnel Plot for Parental Depression



eFigure 3.2 Funnel Plot for Parental Distress

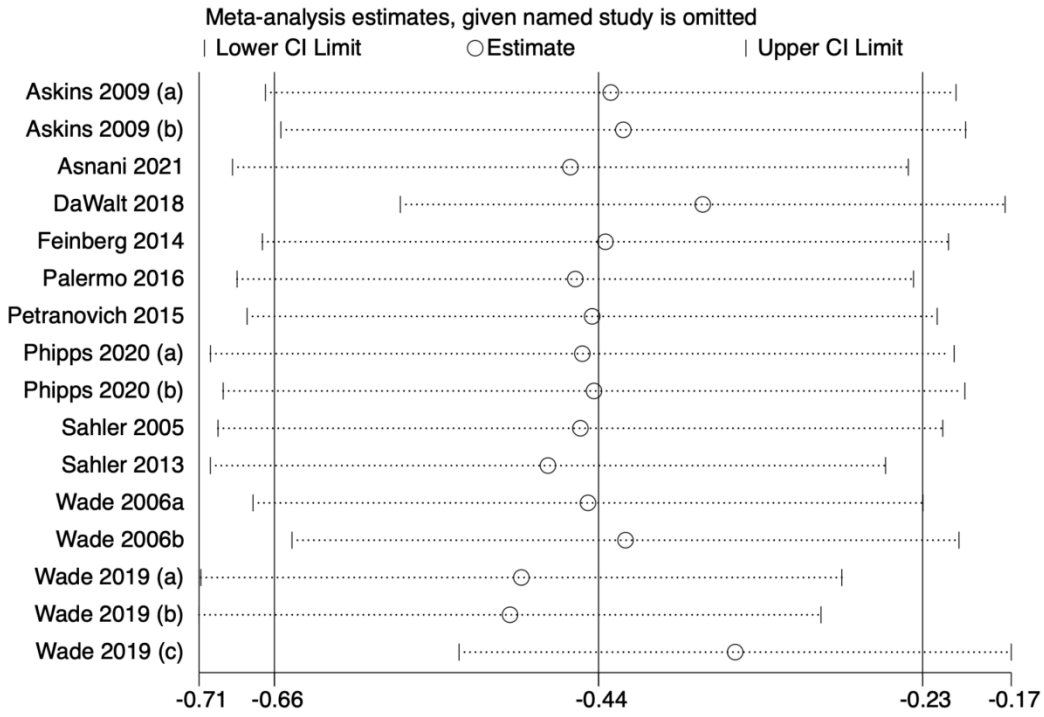


eFigure 3.3 Funnel Plot for Parental Problem-solving Skills

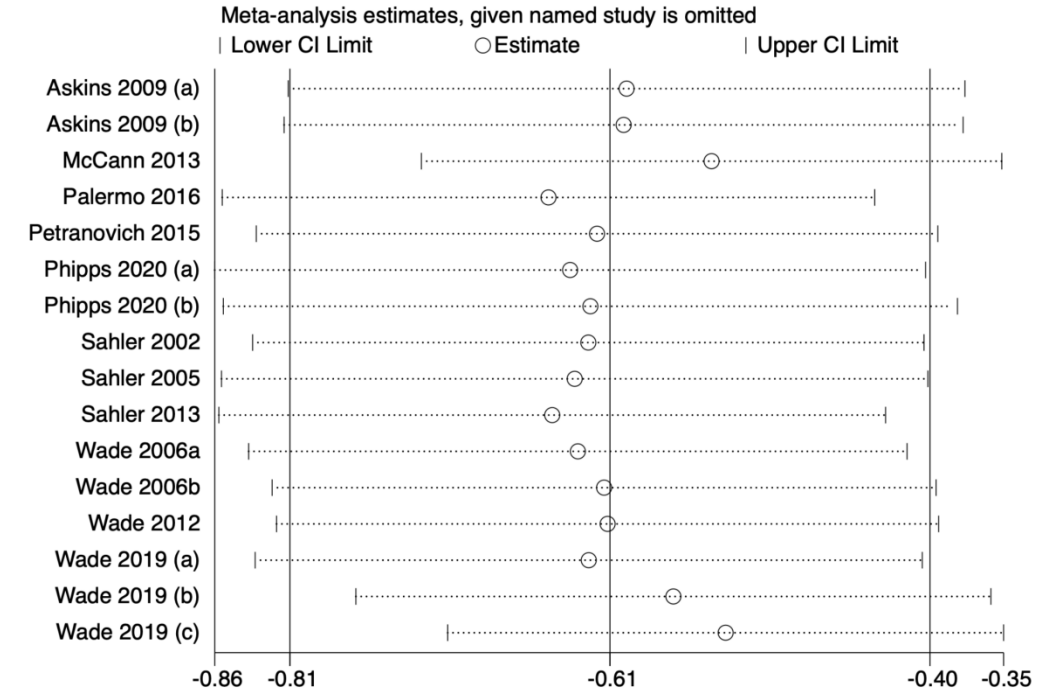


eFigure 4. Leave-One-Out Sensitivity Analyses

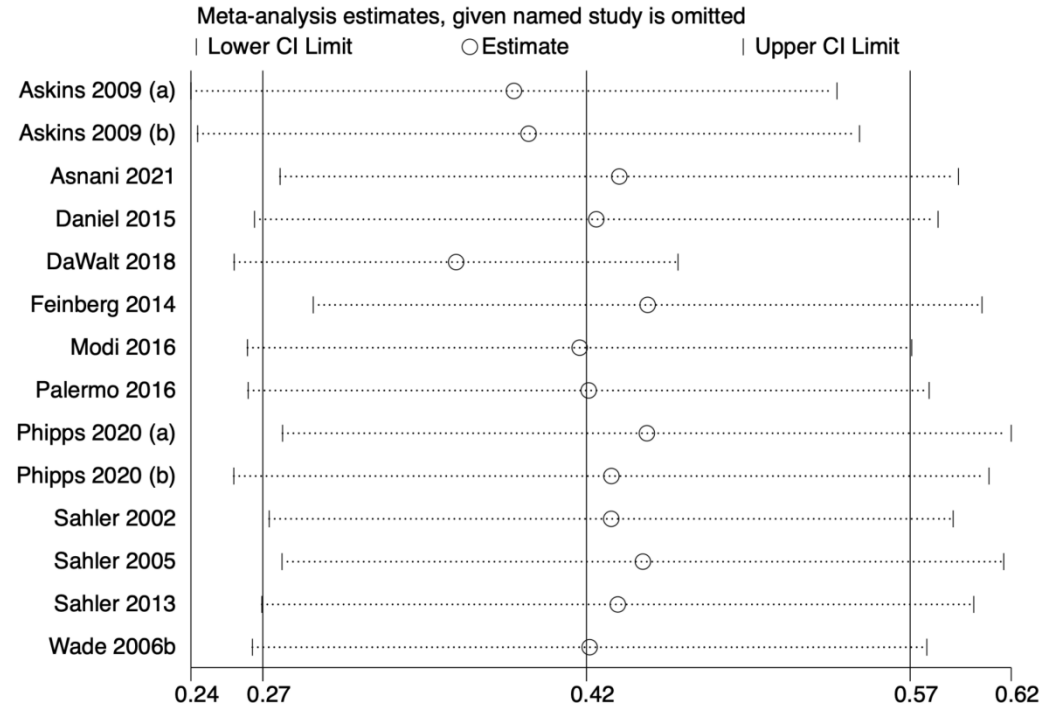
eFigure 4.1 Leave-one-out Sensitivity Analysis for Parental Depression



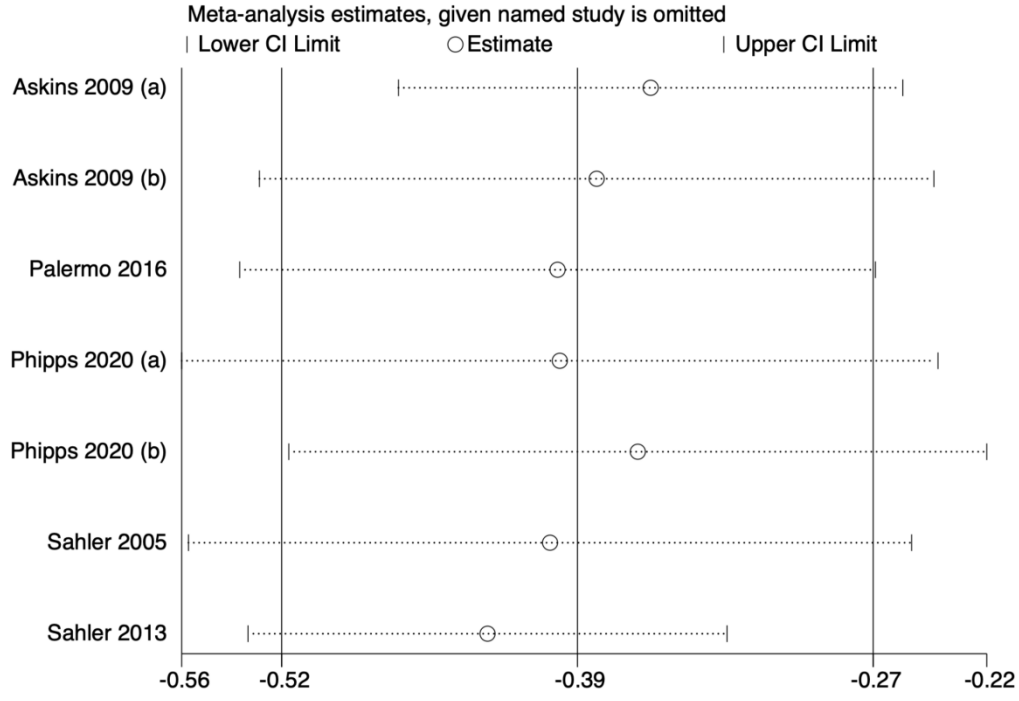
eFigure 4.2 Leave-one-out Sensitivity Analysis for Parental Distress



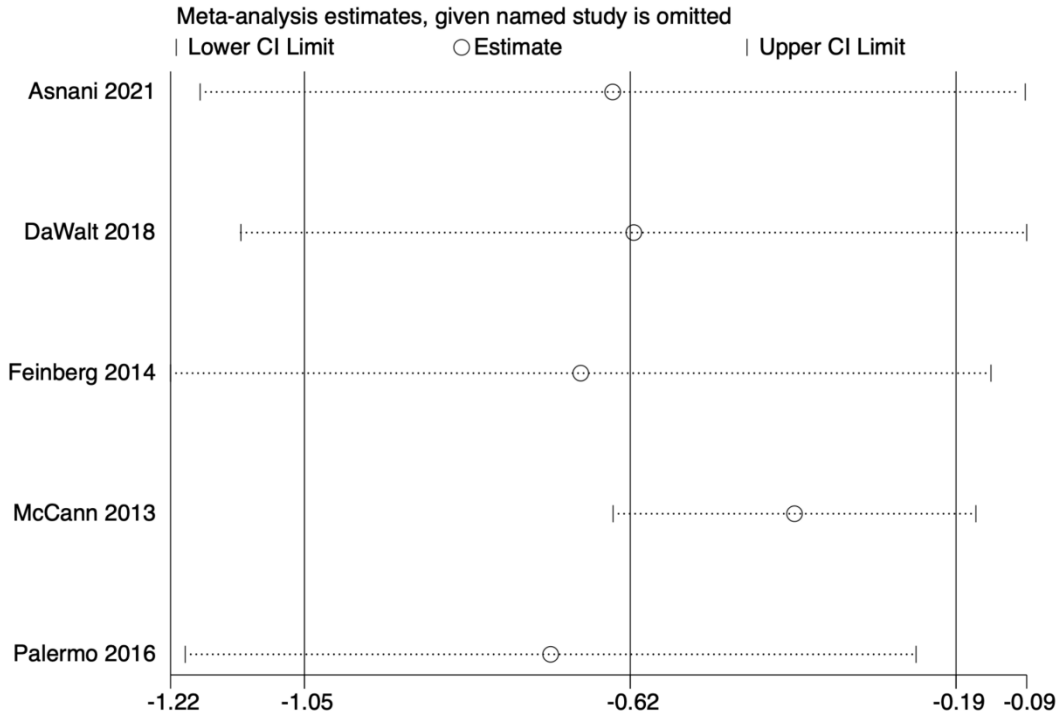
eFigure 4.3 Leave-one-out Sensitivity Analysis for Parental Problem-solving Skills



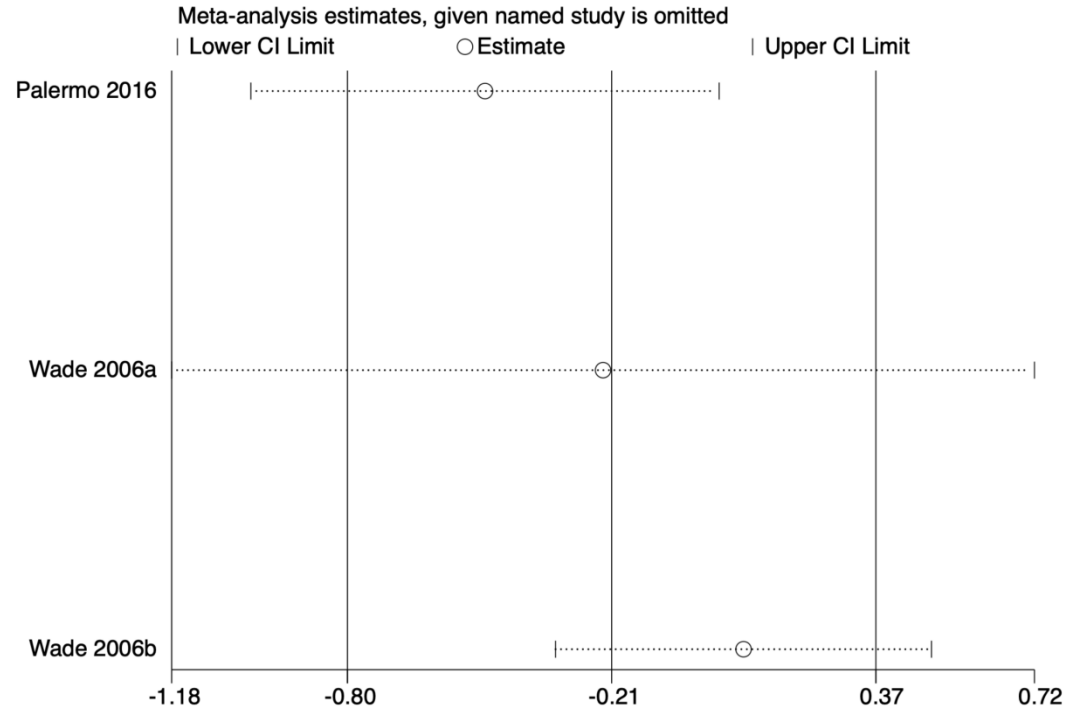
eFigure 4.4 Leave-one-out Sensitivity Analysis for Parental Parental Post-traumatic Stress



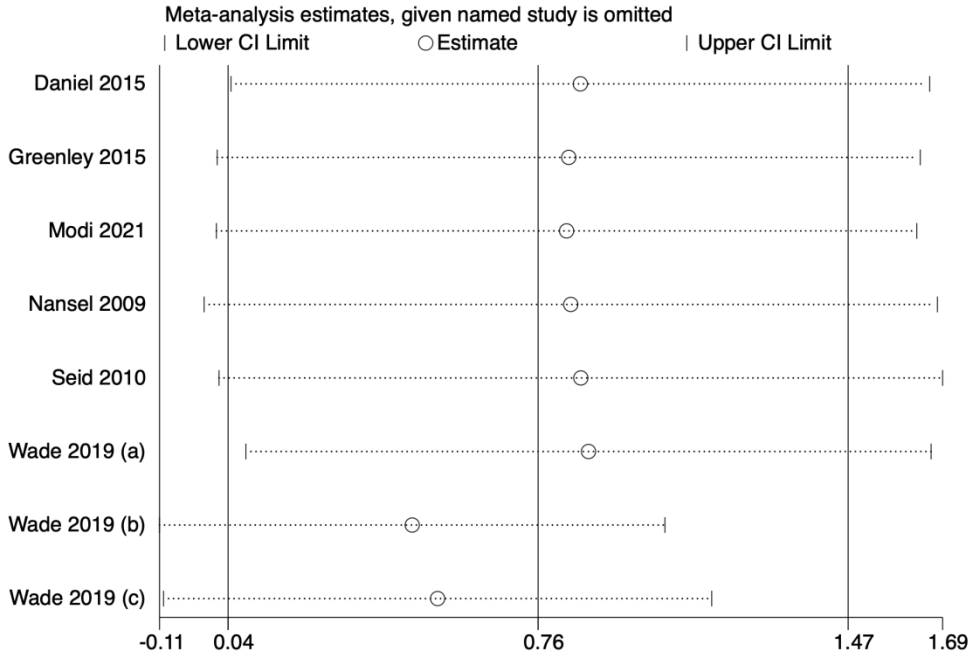
eFigure 4.5 Leave-one-out Sensitivity Analysis for Parenting Stress



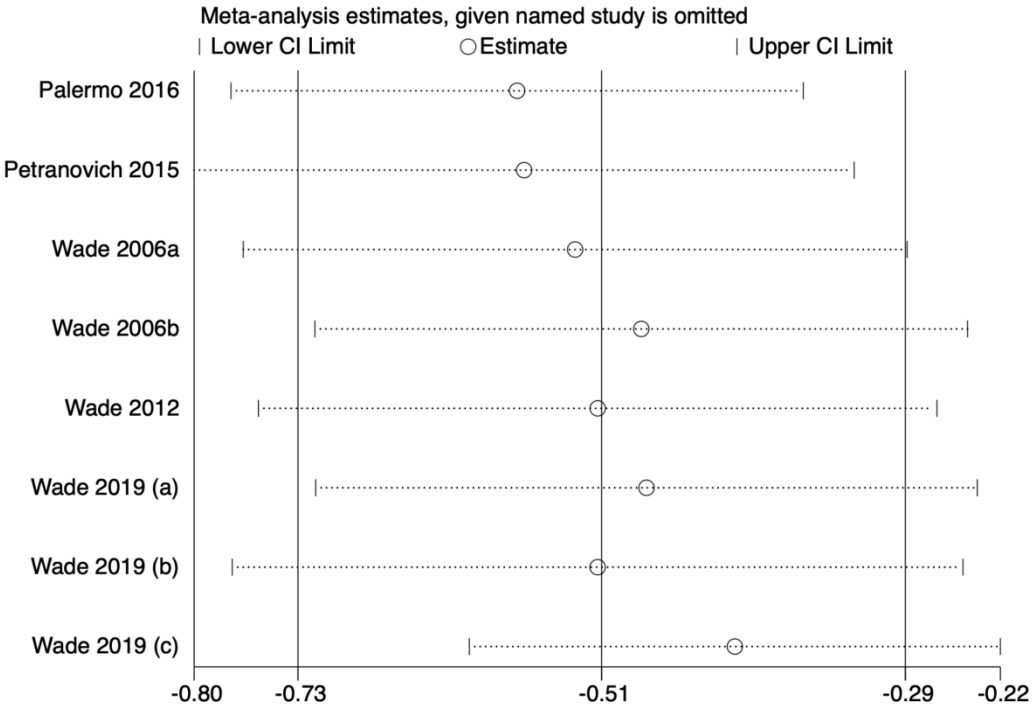
eFigure 4.6 Leave-one-out Sensitivity Analysis for Parental Anxiety



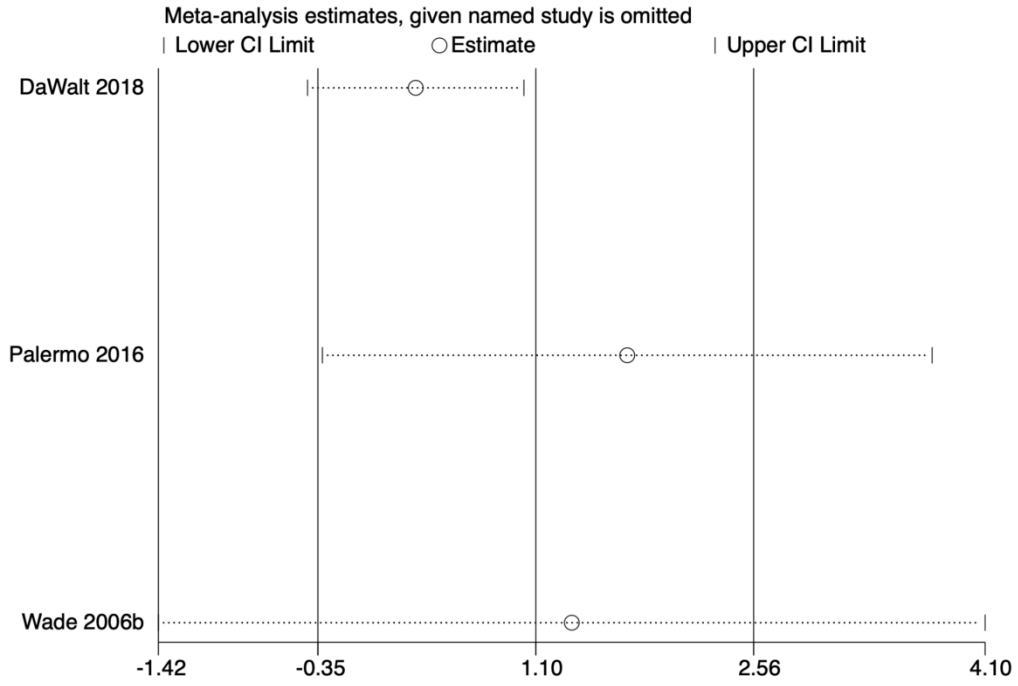
eFigure 4.7 Leave-one-out Sensitivity Analysis for Pediatric Quality of Life



eFigure 4.8 Leave-one-out Sensitivity Analysis for Pediatric Mental Problems



eFigure 4.9 Leave-one-out Sensitivity Analysis for Pediatric Social Functioning



eFigure 4.10 Leave-one-out Sensitivity Analysis for Parent-child Conflict