

### Box S1: Medline search strategy

1. exp infant, premature, diseases/ or exp gestational age/ or exp infant, low birth weight/ or exp infant, premature/ or exp premature birth/
2. exp infant/ or exp child/ or adolescent/ or young adult/
3. 1 and 2
4. exp animals/ not human/
5. 3 not 4
6. exp psychomotor performance/ or brain damage, chronic/ or brain injury, chronic/ or cerebral palsy/ or nervous system/ or central nervous system/ or neural pathways/ or neurologic manifestations/ or dyskinesias/ or dystonia/ or gait disorders, neurologic/ or neurobehavioral manifestations/ or memory disorders/ or intellectual disability/ or psychomotor disorders/ or seizures/ or neuromuscular diseases/ or muscular disorders, atrophic/ or movement disorders/ or dystonic disorders/ or brain/ab, gd, ph [abnormalities, growth & development, Physiology]
7. (((motor or psycho?motor or neur\* or mobil\* or movement\* or physical\* or brain) adj3 (develop\* or impair\* or disabilit\* or disorder? or defect\* or disease? or dysfunction\* or function\* or retard\* or sever\* or abilit\* or assessment? or skill? or performance? or limitation? or co?ordination\* or problem? or difficult\* or manifestation? or abnormalit\* or competenc\* or capacit\*)) or neuro?development\* or cerebral palsy or gait or dyspraxia).ti,ab.
8. exp auditory diseases, central/ or hearing disorders/ or hearing loss/ or deafness/ or hearing loss, sensorineural/ or refractive errors/ or vision disorders/ or blindness/ or retinopathy of prematurity/
9. (((auditory or hearing or vision or visual or sensorineural or sensory or refract\*) adj3 (impair\* or disabilit\* or disorder? or defect\* or dysfunction\* or function\* or abilit\* or assessment? or limitation? or process\* or problem? or difficult\* or abnormalit\* or capacit\*)) or deaf\* or blindness or "retinopathy of prematurity").ti,ab.
10. mental processes/ or cognition/ or executive function/ or attention/ or learning/ or memory/ or cognition disorders/ or mild cognitive impairment/ or language/ or language development/ or verbal behavior/ or language/ or mental competency/ or intelligence/ or intelligence tests/ or aptitude tests/ or language tests/ or cognition/ or executive function/
11. (((mental\* or cogniti\* or verbal\* or language or intelligen\* or learning or memory or spatial\*) adj3 (outcome? or develop\* or impair\* or disabilit\* or disorder? or defect\* or dysfunction\* or function\* or retard\* or sever\* or abilit\* or aptitude\* or quotient\* or assessment? or status or skill\* or performance? or proficien\* or limitation? or process\* or problem\* or difficult\* or manifestation\* or abnormalit\* or competenc\*)) or phonolog\* or recall\* or "executive function" or "word recognition").ti,ab.
12. neurobehavioral manifestations/ or mental disorders diagnosed in childhood/ or exp "attention deficit and disruptive behavior disorders"/ or behavior/ or child behavior disorders/ or exp child development disorders, pervasive/ or developmental disabilities/ or learning disorders/ or intellectual disability/ or motor skills disorders/ or anxiety disorders/ or depressive disorder/ or exp child behavior/ or mental disorders/ or psychological tests/ or neuropsychological tests/
13. (((behavio?r\* or neurobehavio?r\* or neuropsycholog\* or psycholog\* or psychiat\* or emotion\* or internali\* or externali\* or adaptive\*) adj3 (outcome? or morbidit\* or symptom? or diagnos\* or develop\* or disorder\* or defect\* or dysfunction\* or function\* or sequelae or sever\* or assessment\* or status or behavio?r\* or skill\* or problem\* or difficult\* or manifestation\* or abnormalit\* or health or condit\*)) or attention deficit\* or depress\* or anxiety or autis\*).ti,ab.
14. exp education, special/ or achievement/ or educational status/
15. (((education\* or academic or read\* or writ\* or math? or mathematic?) adj3 (outcome? or abilit\* or

aptitude\* or assess\* or skill\* or perform\* or proficien\* or problem? or difficult\* or achieve\* or attain\* or competenc\* or status or develop\* or level? or impact\* or progress\* or capacit\*)) or numeracy or literacy or "special educational needs" or "special needs" or "special education\*").ti,ab.

16. health status/ or quality of life/ or "outcome assessment (health care)"/ or child health services/ or ("heath status" or "quality of life").ti,ab.

17. child development/ or adolescent development/ or disabled persons/ or disabled children/ or hearing impaired persons/ or mentally disabled persons/ or visually impaired persons/ or morbidity/ or severity of illness index/ or survivors/

18. (development\* adj (impair\* or disabilit\* or disorder? or defect\* or retard\* or sever\* or assessment? or quotient or co?ordination\* or problem? or difficult\* or manifestation? or abnormalit\*)).ti,ab.

19. or/6-18

20. 5 and 19

21. limit 20 to yr="1990-2014"

22. (journal article or review or meta analysis or systematic reviews or technical report).pt. or (meta?analys\* or "systematic review").ti,ab.

23. (addresses or autobiography or bibliography or biography or case reports or clinical conference or comment or congresses or dictionary or directory or editorial or festschrift or in vitro or interactive tutorial or interview or lectures or legal cases or legislation or letter or news or newspaper article or overall or patient education handout or periodical index or portraits or published erratum or "scientific integrity review" or video-audio media).pt.

24. (21 and 22) not 23

### Box S2: Embase search strategy

1. exp prematurity/ or exp immaturity/ or exp premature labor/ or exp low birth weight/ or exp gestational age/

2. exp child/ or exp infant/ or newborn/ or child development/ or adolescent development/ or adolescent/ or adult\$.mp.

3. 1 and 2

4. exp animals/ not human/

5. 3 not 4

6. nervous system development/ or developmental coordination disorder/ or mental disease/ or neuromuscular function/ or chronic brain disease/ or cerebral palsy/ or functional disease/ or neurologic disease/ or central nervous system disease/ or physical disability/ or walking difficulty/ or motor dysfunction/ or gait disorder/ or motor retardation/ or motor performance/ or psychomotor retardation/ or psychomotor disorder/ or psychomotor development/

7. (((motor or psycho?motor or neur\* or mobil\* or movement\* or physical\* or brain) adj3 (develop\* or impair\* or disabilit\* or disorder? or defect\* or disease? or dysfunction\* or function\* or retard\* or sever\* or abilit\* or assessment? or skill? or performance? or limitation? or co?ordination\* or problem? or difficult\* or manifestation? or abnormalit\* or competenc\* or capacit\*)) or neuro?development\* or cerebral palsy or gait or dyspraxia).ti,ab.

8. hearing impairment/ or hearing disorder/ or visual disorder/ or visual impairment/ or retinopathy of prematurity/

9. (((auditory or hearing or vision or visual or sensorineural or sensory or refract\*) adj3 (impair\* or disabilit\* or disorder? or defect\* or dysfunction\* or function\* or abilit\* or assessment? or limitation? or process\* or problem?

or difficult\* or abnormalit\* or capacit\*) or deaf\* or blindness or "retinopathy of prematurity").ti,ab.

10. language/ or language development/ or language disability/ or intelligence/ or intelligence quotient/ or intelligence test/ or cognitive defect/ or learning disorder/ or mental function/ or mental deficiency/ or intellectual impairment/ or cognition/ or attention/ or executive function/ or learning/ or memory/ or mental capacity/ or mental development/

11. (((mental\* or cogniti\* or verbal\* or language or intelligen\* or learning or memory or spatial\*) adj3 (outcome? or develop\* or impair\* or disabilit\* or disorder? or defect\* or dysfunction\* or function\* or retard\* or sever\* or abilit\* or aptitude\* or quotient or assessment? or status or skill\* or performance? or proficien\* or limitation? or process\* or problem\* or difficult\* or manifestation\* or abnormalit\* or competenc\*)) or phonolog\* or recall\* or "executive function" or "word recognition").ti,ab.

12. psychiatric diagnosis/ or psychological aspect/ or psychologic test/ or psychosocial development/ or attention deficit disorder/ or child psychiatry/ or child behavior/ or behavior/ or anxiety disorder/ or autism/ or behavior disorder/ or emotional disorder/ or psychosocial environment/ or hyperactivity/

13. (((behavio?r\* or neurobehavio?r\* or neuropsycholog\* or psycholog\* or psychiatr\* or emotion\* or internali\* or externali\* or adaptive\*) adj3 (outcome? or morbidit\* or symptom? or diagnos\* or develop\* or disorder\* or defect\* or dysfunction\* or function\* or sequelae or sever\* or assessment\* or status or behavio?r\* or skill\* or problem\* or difficult\* or manifestation\* or abnormalit\* or health or condit\*)) or attention deficit\* or depress\* or anxiety or autis\*).ti,ab.

14. special education/ or reading/ or educational status/ or ability/ or achievement/ or academic achievement/

15. (((education\* or academic or read\* or writ\* or math? or mathematic?) adj3 (outcome? or abilit\* or aptitude\* or assess\* or skill\* or perform\* or proficien\* or problem? or difficult\* or achieve\* or attain\* or competenc\* or status or develop\* or level? or impact\* or progress\* or capacit\*)) or numeracy or literacy or "special educational needs" or "special needs" or "special education").ti,ab.

16. quality of life/ or health status/ or ("heath status" or "quality of life").ti,ab.

17. child development/ or developmental disorder/ or development/ or handicapped child/ or disability/ or disability severity/ or morbidity/ or newborn morbidity/ or perinatal morbidity/ or survivor/

18. (development\* adj (impair\* or disabilit\* or disorder? or defect\* or retard\* or sever\* or assessment? or quotient or co?ordination\* or problem? or difficult\* or manifestation? or abnormalit\*)).ti,ab.

19. or/6-18

20. 5 and 19

21. limit 20 to yr="1990-2014"

22. limit 21 to (meta analysis or "systematic review")

23. (article or report or review).pt. or (meta?analys\* or "systematic review").ti,ab.

24. (book or book series or conference abstract or conference paper or conference proceeding or "conference review" or editorial or erratum or letter or note).pt.

25. (21 and 23) not 24

26. 22 or 25

### Box S3: Psycinfo search strategy

1. premature birth/ or low birth weight/ or gestation/ or gestational outcomes/ or low birth weight.mp. or prematur\*.mp. or preterm\*.mp. or gestation\*.mp.
2. exp animals/ not human/
3. 1 not 2
4. limit 3 to (100 childhood or 120 neonatal or 140 infancy or 160 preschool age or 180 school age or 200 adolescence or 320 young adulthood )
5. motor development/ or nervous system disorders/ or central nervous system disorders/ or dyspraxia/ or movement disorders/ or motor performance/ or motor coordination/ or motor skills/ or physical mobility/ or physically handicapped/ or gait/ or cerebral palsy/ or neurodevelopmental disorders/ or neuromuscular disorders/ or brain development/ or physical disabilities/ or neural development/
6. (((motor or psycho?motor or neur\* or mobil\* or movement\* or physical\* or brain) adj3 (develop\* or impair\* or disabilit\* or disorder? or defect\* or disease? or dysfunction\* or function\* or retard\* or sever\* or abilit\* or assessment? or skill? or performance? or limitation? or co?ordination\* or problem? or difficult\* or manifestation? or abnormalit\* or competenc\* or capacit\*)) or neuro?development\* or cerebral palsy or gait or dyspraxia).ti,ab,id.
7. sensory system disorders/ or hearing disorders/ or vision disorders/ or refraction errors/
8. (((auditory or hearing or vision or visual or sensorineural or sensory or refract\*) adj3 (impair\* or disabilit\* or disorder? or defect\* or dysfunction\* or function\* or abilit\* or assessment? or limitation? or process\* or problem? or difficult\* or abnormalit\* or capacit\*)) or deaf\* or blindness or "retinopathy of prematurity").ti,ab,id.
9. cognitive ability/ or cognitive impairment/ or cognition/ or intelligence/ or intelligence quotient/ or intellectual development disorder/ or attention/ or language/ or language delay/ or language development/ or language disorders/ or intellectual development disorder/ or memory/ or memory disorders/ or learning disabilities/ or learning disorders/ or executive function/ or spatial memory/ or "recall (learning)"/
10. (((mental\* or cogniti\* or verbal\* or language or intelligen\* or learning or memory or spatial\*) adj3 (outcome? or develop\* or impair\* or disabilit\* or disorder? or defect\* or dysfunction\* or function\* or retard\* or sever\* or abilit\* or aptitude\* or quotient or assessment? or status or skill\* or performance? or proficien\* or limitation? or process\* or problem\* or difficult\* or manifestation\* or abnormalit\* or competenc\*)) or phonolog\* or recall\* or "executive function" or "word recognition").ti,ab,id.
11. emotional development/ or emotional disturbances/ or attention deficit disorder/ or attention deficit disorder with hyperactivity/ or autism/ or anxiety/ or anxiety disorders/ or behavior disorders/ or behavior problems/ or behavior/ or depression/ or emotional development/ or psychosocial development/ or psychological development/ or externalizing problems/ or internalizing problems/ or "resilience (psychological)"/ or psychiatric symptoms/ or psychiatric disorders/ or child psychiatry/ or adaptive behavior/
12. (((behavio?r\* or neurobehavio?r\* or neuropsycholog\* or psycholog\* or psychiatr\* or emotion\* or internali\* or externali\* or adaptive\*) adj3 (outcome? or morbidit\* or symptom? or diagnos\* or develop\* or disorder\* or defect\* or dysfunction\* or function\* or sequelae or sever\* or assessment\* or status or behavio?r\* or skill\* or problem\* or difficult\* or manifestation\* or abnormalit\* or health or condit\*)) or attention deficit\* or depress\* or anxiety or autis\*).ti,ab,id.
13. academic achievement/ or achievement/ or academic aptitude/ or performance/ or ability/ or special education/ or special needs/ or reading skills/ or reading ability/ or reading development/ or mathematical ability/ or verbal ability/ or verbal fluency/ or language proficiency/ or school readiness/
14. (((education\* or academic or read\* or writ\* or math? or mathematic?) adj3 (outcome? or abilit\* or aptitude\* or assess\* or skill\* or perform\* or proficien\* or problem? or difficult\* or achieve\* or attain\* or competenc\* or

status or develop\* or level? or impact\* or progress\* or capacit\*) or numeracy or literacy or "special educational needs" or "special needs" or "special education\*").ti,ab,id.

15. quality of life/ or ("heath status" or "quality of life").ti,ab,id.

16. development/ or neonatal development/ or infant development/ or early childhood development/ or childhood development/ or adolescent development/ or delayed development/ or developmental disabilities/ or morbidity/ or disorders/ or neonatal disorders/ or disabilities/ or survivors/

17. (development\* adj (impair\* or disabilit\* or disorder? or defect\* or retard\* or sever\* or assessment? or quotient or co?ordination\* or problem? or difficult\* or manifestation? or abnormalit\*)).ti,ab.

18. or/5-17

19. 4 and 18

20. limit 19 to yr="1990-2014"

21. limit 20 to (journal article or reviews)

22. (abstract collection or bibliography or chapter or "column/opinion" or "comment/reply" or dissertation or editorial or encyclopedia entry or "erratum/correction" or letter or obituary or poetry or publication information or reprint or review-book or review-media or review-software & other).dt.

23. 21 not 22