APPENDIX 16: COMPLETED METHODOLOGY CHECKLISTS

1.1 EXPERIENCE OF CARE

1.1.1 ALLARD2009

Study ID	ALLARD2009	
Bibliographic reference: Allard A. Transition to adulthood: inquiry into transition to adulthood for young people with autism. The All-Party Parliamentary Group on Autism. London: National Autistic Society; 2009.		
Guideline topic: Autism in children & young people	Key research question/aim: Inquiry into transition to adulthood for young people with autism	
Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Not sure/inadequately reported	Comments: Not applicable

Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Not sure	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not sure/not reported	Comments: Not applicable

1.1.2 ALLGOOD2005

Study ID	ALLGOOD2005
Bibliographic reference: Allgood N. Parents' perceptions of family-based group music therapy for children with autism spectrum disorders. Music Therapy Perspectives. 2005;23:92-99.	
Guideline topic: Autism in children & young people	Key research question/aim: Examined parents' perceptions of a 7-week family-based group music therapy intervention
Checklist completed by: Rachael Lee	

Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable

Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Reliable	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not sure/not reported	Comments: Not applicable

1.1.3 ALTIERE2009B

Study ID	ALTIERE2009B
Bibliographic reference: Altiere MJ, von Kluhe S. Searching for acceptance: challenges encountered while raising a child with autism. Journal of Intellectual and Developmental Disability. 2009;34:142–152.	
Guideline topic: Autism in children & young people	Key research question/aim: Examined the experience of raising a child with autism

Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Reliable	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not sure/not reported	Comments: Not applicable

1.1.4 BEATSON2002

Study ID	BEATSON2002	
Bibliographic reference: Beatson JE, Prelock PA. The Vermont rural autism project: sharing experiences, shifting attitudes. Focus on Autism and Other Developmental Disabilities. 2002;17:48-54.		
Guideline topic: Autism in children & young people	Key research question/aim: Explored parent's understanding of and experience of a specialist autism service	
Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Reliable	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable

5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not sure/not reported	Comments: Not applicable

1.1.5 BENDERIX2007A

Study ID	BENDERIX2007A	
Bibliographic reference: Benderix Y, Nordström B, Sivberg B. Parents' experience of having a child with autism and learning disabilities living in a group home: a case study. Autism. 2007;10:629-641.		
Guideline topic: Autism in children & young people	Key research question/aim: Explored parents' experience of having a child with autism living in a group home	
Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Reliable	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable

5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.6 BENDERIX2007B

Study ID	BENDERIX2007B	
Bibliographic reference: Benderix Y, Sivberg B. Siblings experiences of having a brother or sister with autism and mental retardation: a case study of 14 siblings from five families. International Pediatric Nursing. 2007;22:410-418.		
Guideline topic: Autism in children & young people	Key research question/aim: To describe siblings' experiences of having a brother or sister with autism and mental retardation	
Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Not applicable

4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Reliable	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.7 BERESFORD2007

Study ID	BERESFORD2007	
Bibliographic reference: Beresford B, Tozer R,Rabiee P, Sloper P. Desired outcomes for children and adolescents with autistic spectrum disorders. Children and Society. 2007;21:89-98.		
Guideline topic: Autism in children & young people	Key research question/aim: To identify barriers to accessing services	
Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable

Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Reliable	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Poor	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequat	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.8 BERESFORD2010

Study ID	BERESFORD2010
Bibliographic reference: Beresford B, Stuttard L, Clarke S, Maddison J, Beecham J. Managing behaviour and sleep problems in disabled children: an investigation into the effectiveness and costs of parent-training interventions. Research Report DFE-RR204. London: Department for Education; 2010. Available at: https://www.education.gov.uk/publications/RSG/AllPublications/Page1/DFE-RR204.	
Guideline topic: Autism in children & young people	Key research question/aim: : An investigation into the effectiveness and costs of parent-training interventions for sleep problems
Checklist completed by: Rachael Lee	

Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Not sure/inadequately reported	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not sure/not reported	Comments: Not applicable

1.1.9 BEVANBROWN2010

Study ID	BEVANBROWN2010	
Bibliographic reference: Bevan-Brown J. Messages from parents of children with autism spectrum disorder (ASD). Kairaranga. 2010;11:16-22.		
Guideline topic: Autism in children & young people	Key research question/aim: Sought parental opinion about what content and messages should be included in a DVD about ASD	
Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Not sure/inadequately reported	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable

5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not sure/not reported	Comments: Not applicable

1.1.10 BIRKIN2008

Study ID	BIRKIN2008	
Bibliographic reference: Birkin C, Anderson A, Seymour F, Moore DW. A parent-focused early intervention program for autism: who gets access? Journal of Intellectual and Developmental Disability. 2008;33:108-116.		
Guideline topic: Autism in children & young people	Key research question/aim: Examined access to the EarlyBird program and barriers which may affect uptake	
Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Not sure/inadequately reported	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Not applicable

5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.11 BRAIDEN2010

Study ID	BRAIDEN2010	
Bibliographic reference: Braiden HJ, Bothwell J, Duffy J. Parents' experience of the diagnostic process for autistic spectrum disorders. Child Care in Practice. 2010;16:377-389.		
Guideline topic: Autism in children & young people	Key research question/aim: To document parents' experiences of the diagnostic process for ASD	
Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Not applicable

4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.12 BREWIN2008

Study ID	BREWIN2008	
Bibliographic reference: Brewin BJ, Renwick R, Schormans AF.Parental perspectives of the quality of life in school environments for children with Asperger Syndrome. Focus on Autism and Other Developmental Disabilities. 2008;23:242-252.		
Guideline topic: Autism in children & young people	Key research question/aim: To examine the perspectives of parents of children with Asperger Syndrome (AS) on quality of life at school	
Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable

Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Reliable	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not sure/not reported	Comments: Not applicable

1.1.13 BREWSTER2010

Study ID	BREWSTER2010
Bibliographic reference: Brewster S, Coleyshaw L. Participation or exclusion? perspectives of pupils with autistic spectrum disorders on their participation in leisure activities. British Journal of Learning Disabilities. 2010;39:284-291.	
Guideline topic: Autism in children & young people	Key research question/aim: Explored the perceptions of children with ASD and/or ADHD of their access to leisure,recreational and short-term break provision
Checklist completed by: Rachael Lee	
Section 1: theoretical approach	

Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Reliable	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.14 BUNDY2009

Study ID	BUNDY2009

Bibliographic reference: Bundy MB, Kunce LJ. Parenting stress and high functioning children with autism. International Journal on Disability and Human Development. 2009;8:401–410.		
Guideline topic: Autism in children & young people	Key research question/aim: Explored the experience of stress in parents of children with high functioning autism	
Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		

6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.15 BURROWS2008

Study ID	BURROWS2008	
Bibliographic reference: Burrows KE, Adams CL. Challenges of service-dog ownership for families with autistic children: lessons for veterinary practitioners. Journal of Veterinary Medical Education. 2008;35:559-566.		
Guideline topic: Autism in children & young people	Key research question/aim: To describe the challenges of service-dog ownership for families wlth autistic children	
Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable

5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not sure/not reported	Comments: Not applicable

1.1.16 BURROWS2010

Study ID	BURROWS2010	
Bibliographic reference: Burrows R. Is anyone listening? A report on stress, trauma and resilience and the supports needed by parents of children and individuals with ASD and professionals in the fild of autism in Northern Ireland. Belfast: Autism NI; 2010.		
Guideline topic: Autism in children & young people	Key research question/aim: Document the response of parents to having a child/individual with ASD in Northern Ireland	
Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Not sure/inadequately reported	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable

4.3 Were the methods reliable?	Not sure	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.17CAMARENA2009

Study ID	CAMARENA2009	
Bibliographic reference: Camarena PM, Sarigiani PA. Postsecondary educational aspirations of high-functioning adolescents with autism spectrum disorders and their parents. Focus on Autism and Other Developmental Disabilities. 2009;24:115-128.		
Guideline topic: Autism in children & young people	Key research question/aim: To assess postsecondary educational aspirations and thoughts concerning obstacles of adolescents with autism and their parents	
Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable

Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Reliable	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not sure/not reported	Comments: Not applicable

1.1.18 CARBONE2010

Study ID	CARBONE2010
Bibliographic reference: Carbone PS, Behl DD, Azor V, Murphy N. The medical home for children with autism spectrum disorders: parent and pediatrician perspectives. Journal of Autism and Developemtal Disorders. 2010;40:317–324.	
Guideline topic: Autism in children & young people	Key research question/aim: Examines differences between perceptions of parents and pediatricians regarding the needs of children with autism spectrum disorders and their families
Checklist completed by: Rachael Lee	

Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Reliable	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not sure/not reported	Comments: Not applicable

1.1.19CARRINGTON2003A

Study ID	CARRINGTON2003A	
Bibliographic reference: Carrington S, Papinczak T, Templeton E. A phenomenological study: the social world of five adolescents who have Asperger's syndrome. Australian Journal of Learning Difficulties. 2003;8:15-20.		
Guideline topic: Autism in children & young people	Key research question/aim: Investigated the social experiences and perceptions of friendship among teenagers diagnosed with Asperger's syndrome	
Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable

5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not sure/not reported	Comments: Not applicable

1.1.20 CARTER2004

Study ID	CARTER2004	
Bibliographic reference: Carter C, Meckes L, Pritchard L, Swensen S, Wittman PP, Velde B. The friendship club: an after-school program for children With Asperger syndrome. Family and Community Health. 2004;27:143-150.		
Guideline topic: Autism in children & young people	Key research question/aim: To review participant satisfaction with a friendship club and its outcomes	
Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Not sure/inadequately reported	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Not applicable

5.2 Are the data 'rich'?	Poor	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.21 CASSIDY2008

Study ID	CASSIDY2008	
Bibliographic reference: Cassidy A, McConkey R, Truesdale-Kennedy M, Slevin E. Preschoolers with autism spectrum disorders: the impact on families and the supports available to them. Early Child Development and Care. 2008;178:115-128.		
Guideline topic: Autism in children & young people	Key research question/aim: Aimed to outline the impact of ASD on families and the supports available to them	
Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		

4.1 Is the role of the researcher clearly described?	Clear	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.22 CHELL2006

Study ID	CHELL2006
Bibliographic reference: Chell N. Experiences of parenting young people with a diagnosis of Asperger syndrome: a focus group study. International Journal of Psychiatric Nursing Research. 2006;11:1348-58.	
Guideline topic: Autism in children & young people	Key research question/aim: Aimed to identify parents of children with Asperger syndrome's perspectives and insights in order to inform service development
Checklist completed by: Rachael Lee	
Section 1: theoretical approach	

Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable

Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Reliable	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.23 CONNOR2000

Study ID	CONNOR2000
Bibliographic reference: Connor M. Asperger syndrome (autistic spectrum disorder) and the self-reports of comprehensive school students. Educational Psychology in Practice. 2000;16:285-296.	
Guideline topic: Autism in children & young people	Key research question/aim: to gain insight into the opinions and experiences of a sample of young people

	diagnosed with Asperger syndrome attending their local comprehensive schools	
Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Not sure/inadequately reported	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not sure/not reported	Comments: Not applicable

1.1.24 CULLEN2002A/2002B/2005

Study ID	CULLEN2002A/2002B/2005	
Bibliographic reference: Cullen L, Barlow J. 'Kiss, cuddle, squeeze': the experiences and meaning of touch among parents of children with autism attending a touch therapy programme. Journal of Child Health Care. 2002;6:171-181. Cullen L, Barlow J. Parents' experiences of caring for children with autism and attending a touch therapy programme. Child Care in Practice. 2002;8:35-45. Cullen LA, Barlow JH, Cushway D. Positive touch, the implications for parents and their children with autism: an exploratory study. Complementary Therapies in Clinical Practice. 2005;11:182-189.		
Guideline topic: Autism in children & young people	Key research question/aim: to explore the experiences and meaning of touch between parents and children with autism before and after attending a Touch Therapy Programme	
Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable

5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not sure/not reported	Comments: Not applicable

1.1.25 DANN2011

Study ID	DANN2011	
Bibliographic reference: Dann R. Secondary transition experiences for pupils with autistic spectrum conditions (ASCs). Educational Psychology in Practice. 2011;27:293-312.		
Guideline topic: Autism in children & young people	Key research question/aim: To explore the views and experiences of key stakeholders regarding inclusion into secondary phase schooling for pupils with Autistic Spectrum Conditions	
Checklist completed by: Rachael Lee		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable

4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Reliable	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.26 DILLENBURGER2010

Study ID	DILLENBURGER2010	
Bibliographic reference: Dillenburger K, Keenan M, Doherty A, Byrne , Gallagher S. Living with children diagnosed with autistic spectrum disorder: parental and professional views. British Journal of Special Education. 2010;37:13-23.		
Guideline topic: Autism in children & young people	Key research question/aim: Experience of information and support	
Checklist completed by: Christina Loucas		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable

Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Reliable	Comments: Not applicable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not rigorous	Comments: No clear and consistent method for analysing qualitative responses in the questionnaire described
5.2 Are the data 'rich'?	Not sure/not reported	Comments: Not applicable
5.3 Is the analysis reliable?	Unreliable	Comments: No detail given about how the qualitative data was analysed e.g. no indication of any interater checks
5.4 Are the findings convincing?	Not sure	Comments: Findings appear convincing, however it is difficult to confirm this due to poor methodology
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.27 DILLENBURGER2004

Study ID	DILLENBURGER2004
Bibliographic reference: Dillenburger K, Keenan M, Gallagher S, McElhinney M. Parent education and home-based behaviour analytic intervention: an examination of parents' perceptions of outcome. Journal of Intellectual &	

Developmental Disability. 2004;29:119–130.		
Guideline topic: Autism in children & young people	Key research question/aim: Experience of specific intervention (ABA)	
Checklist completed by: Christina Loucas		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Only one method used: questionnaires
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not rigorous	Comments: No clear and consistent method for analysing qualitative responses in the questionnaire described
5.2 Are the data 'rich'?	Poor	Comments: Data lacks depth and detail
5.3 Is the analysis reliable?	Unreliable	Comments: No detail given about how the data was analysed e.g. no indication of any interater checks
5.4 Are the findings convincing?	Not sure	Comments: Findings appear convincing, however it is difficult to confirm this due to poor methodology
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable

5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.28 DITTRICH2011

Study ID	DITTRICH2011	
Bibliographic reference: Dittrich R, Burgess L, Bartolomeo K. Autism participation-have your say! Responses. Hampshire's pre-consultation: developing a Hampshire autism strategy to meet local needs. Hampshire: Hampshire County Council; 2011. Available from: http://www.hants.gov.uk/pdf/autism-participation-report-september2011.pdf.		
Guideline topic: Autism in children & young people	Key research question/aim: To identify needs of children with autism and ther families in who live in Hampshire, to develop a dedicated service.	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Postal/online survey, so no relationship with participants.
4.2 Is the context clearly described?	Clear	Comments: Study tried to remove any context bias e.g. by ensuring the survey was appropriate for people with different needs/abiltiies.
4.3 Were the methods reliable?	Reliable	Comments: Data collected through focus-groups and

		surveys
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not reported	Comments: Information on how many people coded the surveys not reported
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.29 DONALDSON2011

Study ID	DONALDSON2011
Bibliographic reference: Donaldson SO, Elder JH, Self EH, Christie MB. Fathers' perceptions of their roles during in-home training for children with autism. Journal of Child and Adolescent Psychiatric Nursing. 2011;24:200–207.	
Guideline topic: Autism in children & young people	Key research question/aim: Experience of specific intervention (Father-directed in-home training)
Checklist completed by: Christina Loucas	
Section 1: theoretical approach	
Is a qualitative approach appropriate?	Appropriate Comments: Not applicable
Is the study clear in what it seeks to do?	Clear Comments: Not applicable
Section 2: study design	
2.1 How defensible/rigorous is the research design/methodology?	Defensible Comments: Not applicable
Section 3: data collection	

3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Only one method was used: semi-structured interviews
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.30 DYMOND2007

Study ID	DYMOND2007
Bibliographic reference: Dymond SK, Gilson GL, Myran SP. Services for children with autism spectrum disorders. Journal of Disability Policy Studies. 2007;18:133-147.	
Guideline topic: Autism in children & young people	Key research question/aim: Suggested improvements for education/school and community-based services
Checklist completed by: Christina Loucas	
Section 1: theoretical approach	

Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Only used one method: survey questionnaire
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.31 FISH2006

Study ID	FISH2006

Bibliographic reference: Fish W.W. Perceptions of Parents of Students with Autism towards the IEP Meeting: A Case Study of One Family Support Group Chapter. Education. 2006: 126: 56-68.		
Guideline topic: Autism in children & young people	Key research question/aim: Experience of education/school (IEP)	
Checklist completed by: Christina Loucas		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Only used one method: semi-structured interviews
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		

6.1 How clear and coherent is the reporting of ethical considerations?	Not sure/not reported	Comments: Not applicable

1.1.32 FLYNN2010

Study ID	FLYNN2010	
Bibliographic reference: Flynn K, Tosh J, Hackett L, Todd S, Bond C, Hunter A. Supporting families post-diagnosis: an evaluation of parent workshops. Good Autism Practice. 2010;11:31-35.		
Guideline topic: Autism in children & young people	Key research question/aim: Experience of post-diagnosis information and support (parent workshops)	
Checklist completed by: Christina Loucas		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Only one method was used: questionnaire.
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not rigorous	Comments: No clear and consistent method for analysing qualitative responses in the questionnaire described
5.2 Are the data 'rich'?	Poor	Comments: Findings are clear, however it is difficult to

		classify the data as 'rich' due to poor data analysis
5.3 Is the analysis reliable?	Not sure/not reported	Comments: No detail given regarding reliability checks e.g. no indication of any interater checks
5.4 Are the findings convincing?	Not sure	Comments: Findings appear convincing, however it is difficult to confirm this due to poor methodology
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not sure/not reported	Comments: Not applicable

1.1.33 GREEN2007

Study ID	GREEN2007	
Bibliographic reference: Green VA. Parental experience with treatments for autism. Journal of Developmental and Physical Disabilities. 2007;19:91-101.		
Guideline topic: Autism in children & young people	Key research question/aim: Experience of specific intervention (ABA)	
Checklist completed by: Christina Loucas		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Not sure/inadequately reported	Comments: Not applicable
Section 4: validity		

4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Unclear	Comments: Limited detail provided
4.3 Were the methods reliable?	Unreliable	Comments: Only one method used (interview) and data was not reliably recorded: "responses were typed by the interviewer into Excel spreadsheets during the interview for later coding and analysis"
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not rigorous	Comments: Insufficient detail provided for method of analysis
5.2 Are the data 'rich'?	Not sure/not reported	Comments: Findings are clear, however it is difficult to classify the data as 'rich' due to poor methodology
5.3 Is the analysis reliable?	Unreliable	Comments: No detail given regarding reliability checks e.g. no indication of any interater checks
5.4 Are the findings convincing?	Convincing	Comments: Findings appear convincing, however it is difficult to confirm this due to poor methodology
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not sure/not reported	Comments: Not applicable

1.1.34 GREY2010

Study ID	GREY2010
Bibliographic reference: Grey IM, Lynn E, McClean B. Parents of children with autism: experiences of education service provision in the Republic of Ireland. Irish Journal of Psychology. 2010; 31:111-124.	
Guideline topic: Autism in children & young people	Key research question/aim: Experience of education/school (ABA versus non-ABA schools)

Checklist completed by: Christina Loucas		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Only one method was used: semi-structured interview.
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.35 GRINDLE2009

Study ID	GRINDLE2009	
Bibliographic reference: Grindle CF, Kovshoff H, Hastings RP, Remington B. Parents' experiences of home-based applied behavior analysis programs for young children with autism. Journal of Autism and Developmental Disorders, 2009;39:42-56.		
Guideline topic: Autism in children & young people	Key research question/aim: Experience of specific intervention (EIBI)	
Checklist completed by: Christina Loucas		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Only one method was used: semi-structured interview.
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable

5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.36 HACKETT2009

Study ID	HACKETT2009	
Bibliographic reference: Hackett L, Shaikh S, Theodosiou L. Parental perceptions of the assessment of autistic spectrum disorders in a tier three service. Child and Adolescent Mental Health. 2009;14:127–132.		
Guideline topic: Autism in children & young people	Key research question/aim: Experience of post-diagnosis information and support	
Checklist completed by: Christina Loucas		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Reliable	Comments: Not applicable
Section 5: analysis		

5.1 Is the data analysis sufficiently rigorous?	Not rigorous	Comments: No clear method for how the data was coded/analysed was described
5.2 Are the data 'rich'?	Not sure/not reported	Comments: Findings are clear, however it is difficult to classify the data as 'rich' due to poor methodology
5.3 Is the analysis reliable?	Not sure/not reported	Comments: No detail on whether any reliability checks were taken
5.4 Are the findings convincing?	Not sure	Comments: Findings appear convincing, however it is difficult to confirm this due to poor methodology
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.37 HALL2010

Study ID	HALL2010	
Bibliographic reference: Hall HR, Graff JC. Parenting challenges in families of children with autism: a pilot study. Issues in Comprehensive Pediatric Nursing. 2010;33:187–204.		
Guideline topic: Autism in children & young people	Key research question/aim: Experience of information and support	
Checklist completed by: Christina Loucas		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		

3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Only used one method: focus groups.
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.38 HARE2004

Study ID	HARE2004
Bibliographic reference: Hare DJ, Pratt C, Burton M, Bromley J, Emerson E. The health and social care needs of family carers supporting adults with autistic spectrum disorders. Autism. 2004;8:425-444.	
Guideline topic: Autism in children & young people	Key research question/aim: Experience of transition
Checklist completed by: Lucy Burt	
Section 1: theoretical approach	

Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable

Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Only one method of data collection was adopted; structured interview
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Limited information on data analysis provided. A statitical package was used and this was checked by field supervisor, but no information on methods etc.
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Information on how discrepencies in analysis were resolved were not reported.
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.39 ECOTEC2010

Study ID	ECOTEC2010	
Bibliographic reference: ECOTEC. Research study on age appropriate services for young people with neurodevelopmental disorders: a research study for Big Lottery Fund. Birmingham: ECOTEC Research and Consulting Ltd; 2010.		
Guideline topic: Autism in children & young people	Key research question/aim: Information/support at key transitions	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Reliable	Comments: Data were collected through interview and focus-groups
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Analysis seems rigorous, but coding carried out by one person so no interrater reliability checks
5.2 Are the data 'rich'?	Poor	Comments: A limited amount of data are reported for each cohort of participants and not all topics reported for each cohort.
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Only one person coded data

5.4 Are the findings convincing?	Not sure	Comments: Findings are clearly presented and original extracts are included, but detail very limited.
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.40 HAY2005

Study ID	HAY2005	
Bibliographic reference: Hay I, Winn S. Students with Asperger's syndrome in an inclusive secondary school environment: teachers', parents' and students' perspectives. Australasian Journal of Special Education. 2005;29:140-154.		
Guideline topic: Autism in children & young people	Key research question/aim: Experience of education/school	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable

4.3 Were the methods reliable?	Not sure	Comments: Only one method of data collection was adopted; focus groups
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Only one person coded data
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.41 HUMPHREY2008A/B

Study ID	HUMPHREY2008A/B
Bibliographic reference: Humphrey N, Lewis S. What does 'inclusion' mean for pupils on the autistic spectrum in mainstream secondary schools? Journal of Research in Special Educational Needs. 2008;8:132-140. Humphrey N, Lewis S. 'Make me normal': the views and experiences of pupils on the sutistic spectrum in mainstream secondary schools. Autism. 2008;12:23-46.	
Guideline topic: Autism in children & young people	Key research question/aim: Experience of education/school
Checklist completed by: Lucy Burt	

Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable

Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Although limited detail on data collection and record keeping reported
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Reliable	Comments: Although details on who carried out analysis are lacking
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Although details on who carried out analysis are lacking
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not reported	Comments: No information on who/how many coded
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.42 HURLBUTT2011

Study ID	HURLBUTT2011
Bibliographic reference: Hurlbutt KS. Experiences of parents who homeschool their children with autism spectrum disorders. Focus on Autism and Other Developmental Disabilities. 2011;26:239-249.	
Guideline topic: Autism in children & young people	Key research question/aim: Barriers to accessing services/unmet needs (reasons for homeschooling)
Checklist completed by: Lucy Burt	

Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Context bias consideration not reported
4.3 Were the methods reliable?	Not sure	Comments: Data were only collected by one person, but were double coded.
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: 2 coders; no disagreement between them
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.43 HUTTON2005

Study ID	HUTTON2005	
Bibliographic reference: Hutton AM, Caron SL. Experiences of families with children with autism in rural New England. Focus on Autism and Other Developmental Disabilities.2005;20:180-189.		
Guideline topic: Autism in children & young people	Key research question/aim: What is the impact on the family of having a child with ASD and what is the nature of intervention services they receive?	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Not sure/inadequately reported	Comments: Interviews were not recorded, but notes were taken. Unclear how detailed the notes were or how subjective.
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Context bias consideration not reported
4.3 Were the methods reliable?	Not sure	Comments: Data were clollected via interviews only.
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Limited details regarding data analysis are reported and what is reported is ambiguous.
5.2 Are the data 'rich'?	Not sure	Comments: The results section is descriptive rather than analytic, but for most questions the range of responses are (briefly)

		described.
5.3 Is the analysis reliable?	Not reported	Comments: Interviews were coded by each researcher, but how agreement was reached or how discrepant results were addressed is not reported
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.44 JEGATHEESAN2010/2011

Study ID	JEGATHEESAN2010/2011	
Bibliographic reference: Jegatheesan B, Fowler S, Miller PJ. From symptom recognition to services: how South asian muslim immigrant families navigate autism. Disability and Society. 2010;25:797-811. Jegatheesan B. Multilingual development in children with autism:perspectives of south asian muslim immigrant parents on raising a child with a communicative disorder in multilingual contexts. Bilingual Research Journal. 2011;34:185-200.		
Guideline topic: Autism in children & young people	Key research question/aim: What were the experiences of intervention services of muslim immigrant families with children with autism	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		

3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Context bias consideration not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected by interview only, otherwise reliable
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.45 JINDALSNAPE2005/2006

Study ID	JINDALSNAPE2005/2006
Bibliographic reference: Jindal-Snape D, Douglas W, Topping KJ, Kerr C, Smith EF. Effective education for children with autistic spectrum disorder: perceptions of parents and professionals. International Journal of Special Education. 2005;20:77-87. Jindal-Snape D, Douglas W, Topping KJ, Kerr C, Smith EF. (2006) Autism spectrum disorders and primary-secondary transition. International Journal of Special Education. 2006;21:18-31.	
Guideline topic: Autism in children & young people	Key research question/aim: What services/advice is available to support children with auism in the transition from primary to secondary education?
Checklist completed by: Lucy Burt	

Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Inadequately reported	Comments: Limited information regarding how interviews were carried out, other than the instrument that was used.
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Unclear	Comments: characteristics of the participants/setting were not described. No reference to context bias.
4.3 Were the methods reliable?	Not sure	Comments: Data collected via interviews only. Information on double coding is limited; unclear whether it was applied to all interviews or just specific questions.
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure	Comments: Limited information on analysis reported; it is not clear how themes were identified.
5.2 Are the data 'rich'?	Poor	Comments: Diversity of contexts unclear; the word 'might' is used regularly (e.g. teacher visits might involve talking to staff); lack of detail and depth
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Some double coding was done, but unclear how much and how differences were resolved

5.4 Are the findings convincing?	Not sure	Comments: Generally the responses seem convincing, but some areas lack detail
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.46 JOHNSON2002

Study ID	JOHNSON2002	
Bibliographic reference: Johnson E, Hastings RP. Facilitating factors and barriers to the implementation of intensive home-based behavioural intervention for young children with autism. Child: Care, Health & Development. 2002;28:123-129.		
Guideline topic: Autism in children & young people	Key research question/aim: What are the experiences of families conduting home-based behavioural interventions for children with ASD?	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Postal survey, so no relationship between researcher and participants
4.2 Is the context clearly described?	Clear	Comments: Context bias acknowledged

4.3 Were the methods reliable?	Not sure	Comments: Only one method of data collection was used; postal survey
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure	Comments: Only 28 of 141 questionnaires were double coded.
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.47 JONES2008A

Study ID	JONES2008A	
Bibliographic reference: Jones G, Hack E. Chapter 3. Parent/carer involvement in the commissioning of services for children and young people with autism spectrum disorder in the East Midlands. Journal of Research in Special Educational Needs. 2008;8:167–182.		
Guideline topic: Autism in children & young people	Key research question/aim: To ascertain the extent to which parents of children with ASD are involved in comminssioning services	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Methodology poorly reported; very limited

		information
Section 3: data collection		
3.1 How well was the data collection carried out?	Inadequately reported	Comments: Methodology poorly reported; very limited information
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Methodology poorly reported; very limited information
4.2 Is the context clearly described?	Not sure	Comments: Methodology poorly reported; very limited information
4.3 Were the methods reliable?	Not sure	Comments: Methodology poorly reported; very limited information
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not reported	Comments: Methodology poorly reported; very limited information
5.2 Are the data 'rich'?	Poor	Comments: There is a lack of quotes from interviews, so it is unclear whether many of the statements in results are supported by the interviews
5.3 Is the analysis reliable?	Not reported	Comments: Methodology poorly reported; very limited information
5.4 Are the findings convincing?	Not sure	Comments: There is a lack of extracts from orginal data so unclear whether finding are supported
5.5 Are the findings relevant to the aims of the study?	Partially relevant	Comments: What is reported is relevant to research questions, but not all research questions have been answered
5.6 Are the conclusions adequate?	Not sure	Comments: Links between conclusions and data are not clear; limitations not discussed; unclear if alternate explanations have been explored
Section 6: ethics		

6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.48 JONES2008C

Study ID	JONES2008C	
Bibliographic reference: Jones G, English A, Guldberg K, Jordan R, Richardson P, Waltz M. Educational provision for children and young people on the autism spectrum living in England: a review of current practice, issues and challenges. London: Autism Education Trust; 2008. Available from: http://www.autismeducationtrust.org.uk/resources/research.aspx.		
Guideline topic: Autism in children & young people	Key research question/aim: To review the current practice issues and challenges in educational services for children with autism	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Inadequately reported	Comments: Details are reported on the collection of questionnaires, but are missing in relation to how interviews were arranged and conducted
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Reliable	Comments: Data were collected via questionnaires and interviews.
Section 5: analysis		

5.1 Is the data analysis sufficiently rigorous?	Not reported	Comments: No information on analysis of data reported
5.2 Are the data 'rich'?	Not sure	Comments: Findings are clear and detailed, however it is difficult to classify the data as 'rich' due to lack of information regarding analysis
5.3 Is the analysis reliable?	Not reported	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.49 KEENAN2010

Study ID	KEENAN2010	
Bibliographic reference: Keenan M, Dillenburger K , Doherty A, Byrne T, Gallagher S. The experiences of parents during diagnosis and forward planning for children with autism spectrum disorder. Journal of Applied Research in Intellectual Disabilities. 2010;23: 390–397.		
Guideline topic: Autism in children & young people	Key research question/aim: Examining parental experiences of diagnosis of children with ASD	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		

3.1 How well was the data collection carried out?	Not sure/inadequately reported	Comments: Information provided on the questionniares but not on focus groups
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Context bias considerations not reported
4.3 Were the methods reliable?	Not sure	Comments: Data were collected through questionnaires and focus groups, but very little detail reported regarding the method and analysis for focus groups.
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not reported	Comments: Method of analysis for focus groups not reported
5.2 Are the data 'rich'?	Not sure	Comments: Findings are clear, however it is difficult to classify the data as 'rich' due to lack of methodology
5.3 Is the analysis reliable?	Not reported	Comments: No details on methodology reported
5.4 Are the findings convincing?	Not sure	Comments: Limited information reported
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not clear	Comments: Minimal information reported regarding participant information sheets and data security.

1.1.50 KERRELL2001

Study ID	KERRELL2001

Bibliographic reference: Kerrell H. Service evaluation of an autism diagnostic clinic for children. Nursing Standard. 2001;15:33-37.		
Guideline topic: Autism in children & young people	Key research question/aim: To examine parents experiences of an autism diagnostic clinic for children	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Methods around data collection are reported, but analysis was not described.
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Context bias not considered
4.3 Were the methods reliable?	Not sure	Comments: Data collected through semi-structured interview only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not reported	Comments: Details of analysis not reported
5.2 Are the data 'rich'?	Not rich	Comments: Limited findings reported. Lack of information on analysis of data analysis also makes it difficult to describe as 'rich'.
5.3 Is the analysis reliable?	Not reported	Comments: No details on analysis reported
5.4 Are the findings convincing?	Not sure	Comments: Findings appear convincing, but details is limited and there is also limited information on methods of analysis

5.5 Are the findings relevant to the aims of the study?	Not sure	Comments: Limited findings reported and lack of information on analysis of data analysis makes it difficult to describe as relevent.
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not sure	Comments: Some ethical considerations were made, but details are limited

1.1.51 KIDD2010

Study ID	KIDD2010	
Bibliographic reference: Kidd T, Kaczmarek E. The experiences of mothers home educating their children with autism spectrum disorder. Issues in Educational Research. 2010;20:257-275.		
Guideline topic: Autism in children & young people	Key research question/aim: To identify 'home-educating' experiences of mothers with a child with ASD	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Details on record keeping not reported
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable

4.3 Were the methods reliable?	Not sure	Comments: Only one method of data collection adopted; semi-structured interviews
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Both researchers coded all itnerviews
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.52 KIMURA2010

Study ID	KIMURA2010	
Bibliographic reference: Kimura M, Yamazaki Y, Mochizuki M, Omiya T. Can I have a second child? dilemmas of mothers of children with pervasive developmental disorder: a qualitative study. BMC Pregnancy and Childbirth. 2010;10: 69.		
Guideline topic: Autism in children & young people	Key research question/aim: To identify the experiences of mothers of children with PDD in relation to decisions about having a second-child.	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable

Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Context bias not considered
4.3 Were the methods reliable?	Not sure	Comments: Only one method of data collection used; semi-structured interviews
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not sure	Comments: Some details on ethical considerations reported, but limited.

1.1.53 KOYDEMIROZDEN2010

Study ID	KOYDEMIROZDEN2010
Bibliographic reference: Koydemir-Özden S, Tosun U. A qualitative approach to understanding Turkish mothers of children with autism: implications for counselling. Australian Journal of Guidance and Counselling. 2010;20:55-68.	
Guideline topic: Autism in children & young people	Key research question/aim: To gain an understanding of the experiences of Turkish mothers with a child with autism
Checklist completed by: Lucy Burt	

Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Not sure	Comments: Limited details on participants and settings reported, context bias not considered
4.3 Were the methods reliable?	Not sure	Comments: Only one method of data collection was used; semi-structured interviews
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.54 KUHANECK2010

Study ID	KUHANECK2010	
Bibliographic reference: Kuhaneck HM, Burroughs T, Wright J, Lemanczyk T, Darragh AR. A qualitative study of coping in mothers of children with an autism spectrum disorder. Physical and Occupational Therapy in Pediatrics. 2010;30:340-350.		
Guideline topic: Autism in children & young people	Key research question/aim: To identify the coping strategies of mothers of children with autism	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Context bias not considered
4.3 Were the methods reliable?	Not sure	Comments: Data were collected using one method only; semi-structured interview
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Not sure	Comments: Some themes have limited details attached to them
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable

5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.55 LARSON2010

Study ID	LARSON2010	
Bibliographic reference: Larson E. Ever vigilant: maternal support of participation in daily life for boys with autism. Physical and Occupational Therapy in Pediatrics. 2010;30:16-27.		
Guideline topic: Autism in children & young people	Key research question/aim: Exploring the experiences of care-giving of mothers of children with autism	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Details in methodology are limited; rationale for qualitative approach not given
Section 3: data collection		
3.1 How well was the data collection carried out?	Inadequately reported	Comments: Details in methodology are limited; information lacking on collection methods and record keeping
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Details in methodology are limited
4.2 Is the context clearly described?	Not sure	Comments: Details in methodology are limited

4.3 Were the methods reliable?	Not sure	Comments: Data collection through semi-structured interview ony
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure	Comments: Details in methodology are limited; not clear how many people coded
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Details on ethical considerations not reported

1.1.56 LILLEY2011

Study ID	LILLEY2011	
Bibliographic reference: Lilley R. Maternal intimacies: talking about autism diagnosis. Australian Feminist Studies. 2011;26:207-224.		
Guideline topic: Autism in children & young people	Key research question/aim: Exploring the experience of mothers when their child is diagnosed with autism	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Details on methodology are very limited
Section 3: data collection		

3.1 How well was the data collection carried out?	Inadequately reported	Comments: Details on methodology are very limited
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: The researcher related to the mothers as she too has a child with autism, so was seem as *one of them*.
4.2 Is the context clearly described?	Unclear	Comments: Details on methodology are very limited
4.3 Were the methods reliable?	Not sure	Comments: Details on methodology are very limited. Data were collected through interviews and focus groups.
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not reported	Comments: No details of data analysis reported
5.2 Are the data 'rich'?	Not sure	Comments: Findings are clear, however it is difficult to classify the data as 'rich' due to poor methodology
5.3 Is the analysis reliable?	Not sure/not reported	Comments: No details of data analysis reported
5.4 Are the findings convincing?	Not sure	Comments: Findings appear convincing, however it is difficult to classify this way due to poor methodology
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.57 LILLY2004

Study ID	LILLY2004
Bibliographic reference: Lilly JD, Reed D, Wheeler KG. Perceptions of psychological contract violations in school districts that serve children with autism spectrum disorder. Journal of Applied School Psychology. 2004;20:27-45.	
Guideline topic: Autism in children & young people	Key research question/aim: To identify parents satisfaction with schools in relation to a child with autism.

Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Details of data analysis not reported
Section 3: data collection		
3.1 How well was the data collection carried out?	Inadequately reported	Comments: Some information missing; where interviews conducted, how/if they were recorded etc.
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Data collected via one method; semi-structured interviews
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not reported	Comments: No information on data analysis reported
5.2 Are the data 'rich'?	Not sure	Comments: Data are detailed in response to some questions but not others. Difficult to classify the data as 'rich' due to lack of information on analysis
5.3 Is the analysis reliable?	Not reported	Comments: No information on data analysis reported
5.4 Are the findings convincing?	Convincing	Comments: Although some questions would benefit from more detail being reported
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable

Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.58 LIN2008

Study ID	LIN2008	
Bibliographic reference: Lin C, Tsai Y, Chang H. Coping mechanisms of parents recently diagnosed with autism in Taiwan: a qualitative study. Journal of Clinical Nursing. 2008;17:2733-2740.		
Guideline topic: Autism in children & young people	Key research question/aim: To identify the coping mechanisms of parents of children with autism	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Data collected via semi-structured interview only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure	Comments: Some detail on data analysis reported, but not enough to classify as 'rigorous'

5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure	Comments: An expert in qualitative methods double coded interviews, but unclear how differences were resolved and whether participants fed back on transcripts.
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.59 LUONG2009

Study ID	LUONG2009	
Bibliographic reference: Luong J, Yoder MK, Canham D. Southeast asian parents raising a child with autism: a qualitative investigation of coping styles. The Journal of School Nursing. 2009;25:222-229.		
Guideline topic: Autism in children & young people	Key research question/aim: To identify the coping mechanisms of parents of children with autism	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable

Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected through semi-structured interviews only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure	Comments: Some detail on data analysis reported, but not enough to classify as 'rigorous'
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.60 MANSELL2004

Study ID	MANSELL2004
Bibliographic reference: Mansell W, Morris K. A survey of parent's reactions to the diagnosis of an autistic spectrum disorder by a local service: access to information and use of services. Autism. 2004;8:387-407.	
Guideline topic: Autism in children & young people	Key research question/aim: To investiate parents views on the quality of services that are offered to children with autism
Checklist completed by: Lucy Burt	

Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable

Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Lack of details regarding rationale for data collection and analysis.
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected using open-ended questionnaire only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure	Comments: Detail on data analysis not provided
5.2 Are the data 'rich'?	Not sure	Comments: Findings are clear, however it is difficult to classify the data as 'rich' due to lack of detail on analysis
5.3 Is the analysis reliable?	Not reported	Comments: Detail on data analysis not provided
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.61 MCCABE2008A

Study ID	MCCABE2008A

Bibliographic reference: McCabe H. Autism and family in the People's Republic of China: learning from parents' perspectives. Research and Practice for Persons with Severe Disabilities. 2008;33: 37-47.		
Guideline topic: Autism in children & young people	Key research question/aim: To investigate the impact of an autism diagnosis on families of the children diagnosed	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Reliable	Comments: Data collected via survey and interviews.
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure	Comments: Unclear how whether interviews were double coded or whether participants fed-back on transcripts
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable

5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.62 MCCABE2008B

Study ID	MCCABE2008B	
Bibliographic reference: McCabe H. The importance of parent-to-parent support among families of children with autism in the People's Republic of China. International Journal of Disability, Development and Education. 2008; 55:303-314.		
Guideline topic: Autism in children & young people	Key research question/aim: To investigate the experiences of services offered to parents whose children have been diagnosed with autism	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Reliable	Comments: Data collected though semi-structured interview and survey
Section 5: analysis		

5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.63 MCCONKEY2011

Study ID	MCCONKEY2011	
Bibliographic reference: McConkey R, MacLeod S, Cassidy A. The Keyhole® Rainbow Resource Kit: meeting the needs of parents of newly diagnosed preschoolers with ASD. Early Child Development and Care. 2011; 181:321-334.		
Guideline topic: Autism in children & young people	Key research question/aim: To ascertain parents views on a resource kit for children with autism.	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		

4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Reliable	Comments: Data collected via semi-structured interviews and questionnaires
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not reported	Comments: No details on data analysis reported
5.2 Are the data 'rich'?	Not sure	Comments: Findings are clear, however it is difficult to classify the data as 'rich' due to lack of information regarding analysis
5.3 Is the analysis reliable?	Not reported	Comments: No details on data analysis reported
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.64 MEIRSSCHAUT2010

Study ID	MEIRSSCHAUT2010
Bibliographic reference: Meirsschaut M, Roeyers H, Warreyn P. Parenting in families with a child with autism spectrum disorder and a typically developing child: mother's experiences and cognitions. Research in Autism Spectrum Disorders. 2010;4:661-669.	
Guideline topic: Autism in children & young people	Key research question/aim: To examine the experiences and cognitions of mothers with a child with autism and a typically-developing child
Checklist completed by: Lucy Burt	
Section 1: theoretical approach	

Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable

Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Reliable	Comments: Data collected through semi-structured interview and questionnaires
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure	Comments: Limitied details on data analysis are reported, making it difficult to classify as 'rigorous'.
5.2 Are the data 'rich'?	Not sure	Comments: Some themes are not have limited depth and detail to describe as 'rich'
5.3 Is the analysis reliable?	Not reported	Comments: Limited details on analysis reported; unknown if interviews were doubled-coded or whether participants fed-back on themes.
5.4 Are the findings convincing?	Not sure	Comments: Findings were convincing for some themes, but not those that had limited information
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.65 MIDENCE1999

Study ID	MIDENCE1999	
Bibliographic reference: Midence K, O'Neill M. The experience of parents in the diagnosis of autism: a pilot study. Autism. 1999;3:273-285.		
Guideline topic: Autism in children & young people	Key research question/aim: To explore the experiences of parents whose children are diagnosed with autism	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected via semi-structured interview only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Unclear whether transcripts were double coded, but participants did

		feed back on themes and all were in agreement
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.66 MINNES2009

Study ID	MINNES2009	
Bibliographic reference: Minnes P, Steiner K. Parent views on enhancing the quality of health care for their children with fragile X syndrome, autism or down syndrome. Child: Care, Health & Development. 2009;35:250-256.		
Guideline topic: Autism in children & young people	Key research question/aim: To investigate parent views of the quality of heathcare services for children with autism	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported

4.3 Were the methods reliable?	Not sure	Comments: Data collected through focus groups only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Poor	Comments: Not all themes are discussed; depth and diversity of accounts has not been demonstrated
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Not sure	Comments: Limited detail on findings makes it difficult to rate them as 'reliable'.
5.5 Are the findings relevant to the aims of the study?	Partially relevant	Comments: Further detail is needed to rate as 'relevant'
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.67 MORRISON2009

Study ID	MORRISON2009
Bibliographic reference: Morrison JQ, Sansosti FJ, Hadley WM. Parent perceptions of the anticipated needs and expectations for support for their college-bound students with Asperger's syndrome. Journal of Post-secondary Education and Disability. 2009;22:78-87.	
Guideline topic: Autism in children & young people	Key research question/aim: Parents perceptions of support needed by young people with Asperger's syndrome who are going to university
Checklist completed by: Lucy Burt	

Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		

2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected via focus group only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.68 MOYSON2011

Study ID	MOYSON2011
Bibliographic reference: Moyson T, Roeyers H. The quality of life of siblings of children with autism spectrum disorder. Exceptional Children. 2011;78:41-55.	
Guideline topic: Autism in children & young people	Key research question/aim: To investigate siblings of children with autism's perceptions of their own quality of life
Checklist completed by: Lucy Burt	

Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Reliable	Comments: Data collected through semi-structured interview and focus groups
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not sure	Comments: Some ethical considerations are reported

1.1.69 MULLIGAN2010

Study ID	MULLIGAN2010	
Bibliographic reference: Mulligan J, Steel L, Macculloch R, Nicholas D. Evaluation of an information resource for parents of children with autism spectrum disorder. Autism. 2010;14:113-126.		
Guideline topic: Autism in children & young people	Key research question/aim: To ascertain parents views on an information resource for those who have children with autism.	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected through focus groups only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Although some themes use a limited number of extracts of original data

5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.70 MYERS2009

Study ID	MYERS2009	
Bibliographic reference: Myers BJ, Mackintosh VH, Goin-Kochel RP. "My greatest joy and my greatest heart ache:" parents' own words on how having a child in the autism spectrum has affected their lives and their families' lives. Research in Autism Spectrum Disorders. 2009;3:670-684.		
Guideline topic: Autism in children & young people	Key research question/aim: To investigate parents perceptions of the affect of their child's diagnosis of autism on family life	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Participants completed an online survey so there was no relationship with the researcher
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected via online survey only

Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.71 NASUNO2003

Study ID	NASUNO2003	
Bibliographic reference: Nasuno M, Takeuchi K, Yamamoto J. Feasibility of parents of children with autism using an applied behaviour analytic early treatment program: a preliminary study in Malaysia. Japanese Journal of Special Education. 2003;40:723-732.		
Guideline topic: Autism in children & young people	Key research question/aim: To ascertain parents on formal and informal support resources for children with autism	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Data collection relating to interviews and data analysis has been reported in limited detail and therefore may not be defensible

Section 3: data collection		
3.1 How well was the data collection carried out?	Inadequately reported	Comments: Limited details reported on how interviews were conducted and data were recorded
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Reliable	Comments: Data collected through survey and semi-structured itnerview
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not reported	Comments: Unclear how analysis was carried out due to lack of detail reported
5.2 Are the data 'rich'?	Poor	Comments: Detail and depth of responses are not reported; lack of quotes from interviews are used; unclear how data were analysed and results obtained
5.3 Is the analysis reliable?	Not reported	Comments: Unclear how analysis was carried out due to lack of detail reported
5.4 Are the findings convincing?	Not sure	Comments: Findings are clear, however it is difficult to classify findings as convincing due to lack of details on analysis
5.5 Are the findings relevant to the aims of the study?	Partially relevant	Comments: Findings seem relevant, however it is difficult to classify the data as 'rich' due to lack of detail on analysis
5.6 Are the conclusions adequate?	Not sure	Comments: Limitation of the study are not discussed
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.72NASUNPUBLISHED

Study ID	NASUNPUBLISHED	
Bibliographic reference: National Autistic Society. Child mental health research report; Unpublished.		
Guideline topic: Autism in children & young people	Key research question/aim: To compare the perceptions of children with autism and their families with those of mental health staff around CAMHS provision for children and young people with autism	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Design is appropriate to research question, but there are no clear accounts of the rationale/justification for the data analysis techniques.
Section 3: data collection		
3.1 How well was the data collection carried out?	Inadequately reported	Comments: Data collection briefly described, but details are limited
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Unclear	Comments: Participant characteristics or settings not described
4.3 Were the methods reliable?	Not sure	Comments: Data were collected through interviews and focus groups, which do investigate what they set out to investigate. However, it is difficult to classify as 'reliable' due to the lack of detail in the methods.
Section 5: analysis		

5.1 Is the data analysis sufficiently rigorous?	Not reported	Comments: Data were thematically analysed. No further detail reported.
5.2 Are the data 'rich'?	Not sure	Comments: Findings are clear, however it is difficult to classify the data as 'rich' due to lack of detail regarding methodology and analysis
5.3 Is the analysis reliable?	Not reported	Comments: Details of analysis not reported
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.73 NICHOLS2010

Study ID	NICHOLS2010	
Bibliographic reference: Nichols S, Blakeley-Smith A. "I'm not sure we're ready for this…": working with families toward facilitating healthy sexuality for individuals with autism spectrum disorders. Social Work in Mental Health. 2010;8:72-91.		
Guideline topic: Autism in children & young people	Key research question/aim: To investigate parent views on service requirements relating to sexulaity in young people with autism	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		

3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Consideration of context bias not reported
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Data collected through focus-groups only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not reported	Comments: Reliability checks not reported
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.74 NISSENBAUM2002

Study ID	NISSENBAUM2002
Bibliographic reference: Nissenbaum MS, Tollefson N, Reese RM. The interpretative conference: sharing a diagnosis of autism with families. Focus on Autism and Other Developmental Disabilities. 2002;17:30-43.	
Guideline topic: Autism in children & young people	Key research question/aim: To investigate professionals and parents experiences of giving and receiving a child's diagnosis of autism
Checklist completed by: Lucy Burt	
Section 1: theoretical approach	

Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable

Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected through unstructured interviews only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Unclear if the data were double-coded, but member checks were completed
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.75 OLIVIER2009

Study ID	OLIVIER2009

Bibliographic reference: Olivier MA, Hing ADA. Autistic spectrum disorder (ASD): parental challenges and strategies. Vulnerable Children and Youth Studies. 2009;4:58-66.		
Guideline topic: Autism in children & young people	Key research question/aim: To investigate the views of parents of children with autism around how they can be supported more effectively.	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Design is approriate, but no rationale is offered for the methods of data collection or analysis
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Unclear	Comments: Characteristics of participants not clearly defined; Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected through semi-structured interview only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not reported	Comments: Details relating to data analysis are limited; unclear how themes/patterns were derived from data
5.2 Are the data 'rich'?	Poor	Comments: Data are descriptive; depths and diversity of perspective have not been reported; responses to not appear to have been compared
5.3 Is the analysis reliable?	Not reported	Comments: Details relating to data analysis are limited

5.4 Are the findings convincing?	Not sure	Comments: The findings are clear, but due to the lack of detail on analysis methods and the poor quality, cannot be rated as 'convincing'.
5.5 Are the findings relevant to the aims of the study?	Partially relevant	Comments: The limited findings appear relevant to the study, but lack of detail means they cannot be rated as 'relevant'.
5.6 Are the conclusions adequate?	Inadequate	Comments: Lack of details means that conclusions cannot be considered as plausible and coherent; implications and limitations of research are not addressed.
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.76 OSBORNE2008

Study ID	OSBORNE2008	
Bibliographic reference: Osborne LA, Reed P. Parents' perceptions of communication with professionals during the diagnosis of autism. Autism. 2008;12:309-324.		
Guideline topic: Autism in children & young people	Key research question/aim: To examine parent experiences of receiving their child's diagnosis of autism and how this experience can be improved	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable

Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data were collected through structured focus groups only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure	Comments: Methods of analysis are not explicitly reported
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure	Comments: Double coding was only carried out on 40% of data
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.77 PARSONS2009A

Study ID	PARSONS2009A
Bibliographic reference: Parsons S, Lewis A, Ellins J. The views and experiences of parents of children with autistic spectrum disorder about educational provision: comparisons with parents of children with other disabilities from an online survey. European Journal of Special Needs Education. 2009;24:37-58.	
Guideline topic: Autism in children & young people	Key research question/aim: To investigate parents views on education services for children with autism
Checklist completed by: Lucy Burt	

Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable

Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Online survey, so researcher had no role
4.2 Is the context clearly described?	Clear	Comments: Context bias is considered
4.3 Were the methods reliable?	Not sure	Comments: Data were collected through online survey only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not reported	Comments: No details on how qualitative data were analysed
5.2 Are the data 'rich'?	Not sure	Comments: Findings are clear, however it is difficult to classify the data as 'rich' due to lack of detail regarding analysis
5.3 Is the analysis reliable?	Not reported	Comments: No details on how qualitative data were analysed
5.4 Are the findings convincing?	Not sure	Comments: Findings are clear, however it is difficult to classify the data as 'convincing' due to lack of detail regarding analysis
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.78 PATTERSON2011

Study ID	PATTERSON2011	
Bibliographic reference: Patterson SY, Smith V. The experience of parents of toddlers diagnosed with autism spectrum disorder in the More Than Words parent education program. Infants and Young Children. 2011;24:329-343.		
Guideline topic: Autism in children & young people	Key research question/aim: Experience of specific intervention (Hanen More than Words)	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Reliable	Comments: Data collected through indivudal interview and focus groups
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Unclear if transcripts were double-coded, but all interviews were member checked
5.4 Are the findings convincing?	Convincing	Comments: Not applicable

5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.79 PETALAS2009

Study ID	PETALAS2009	
Bibliographic reference: Petalas MA, Hastings RP, Nash S, Dowey A, Reilly D. "I like that he always shows who he is": the perceptions and experiences of siblings with a brother with autism spectrum disorder. International Journal of Disability, Development and Education. 2009;56:381-399.		
Guideline topic: Autism in children & young people	Key research question/aim: To investigate the experiences of typically developing children who have a brother with autism	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Data collected through semi-structured interview only

Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Limitations not reported
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.80 PHELPS2009

Study ID	PHELPS2009	
Bibliographic reference: Phelps KW, Hodgson JL, McCammon SL, Lamson AL. Caring for an individual with autism disorder: a qualitative analysis. Journal of Intellectual and Developmental Disability. 2009;34:27-35.		
Guideline topic: Autism in children & young people	Key research question/aim: To examine the experiences of care-givers with a child with autism	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable

Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected through open-ended survey only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Limitations not discussed
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.81 PICKERING2005

Study ID	PICKERING2005
Bibliographic reference: Pickering A, Goode S. Family-centred approach to information provision for families with a child diagnosed with an autistic spectrum disorder. Clinical Psychology Forum. 2005;155:12-15.	
Guideline topic: Autism in children & young people	Key research question/aim: to investigate the views of parents of children with autism regarding the utility of information packs
Checklist completed by: Lucy Burt	

Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable

Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Limited information regarding methodology reported
Section 3: data collection		
3.1 How well was the data collection carried out?	Inadequately reported	Comments: Method of data collection seems appropriate, but unclear how systematic this and the record keeping was.
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Unclear	Comments: Characteristics of participants and settings not reported; consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected via surveys only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure	Comments: Limited information on data analysis reported
5.2 Are the data 'rich'?	Poor	Comments: Detail and depth of responses has not been reported; no quotes from raw data included
5.3 Is the analysis reliable?	Not reported	Comments: Limited information on data analysis reported
5.4 Are the findings convincing?	Not sure	Comments: No extacts from original data included
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Limitations of study are not discussed
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.82 PREECE2009A

Study ID	PREECE2009A	
Bibliographic reference: Preece D, Jordan R. Obtaining the views of children and young people with autism spectrum disorders about their experience of daily life and social care support. British Journal of Learning Disabilities. 2009;38:10-20.		
Guideline topic: Autism in children & young people	Key research question/aim: To explore the experiences of daily life in children and young people with autism	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Reliable	Comments: Data collected via semi-structured interviews and observations
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure	Comments: A sample of transcripts (but not all) were double coded

5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: some limitations are discussed throughout the discussion section
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.83 PRUNTY2011

Study ID	PRUNTY2011	
Bibliographic reference: Prunty A. Implementation of children's rights: what is in 'the best interests of the child' in relation to the individual education plan (IEP) process for pupils with autistic spectrum disorders (ASD)? Irish Educational Studies. 2011;30:23-44.		
Guideline topic: Autism in children & young people	Key research question/aim: To ascertain what children with autism, parents and teachers feel about the IEP development process for children with autism	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported

4.3 Were the methods reliable?	Not sure	Comments: Data collected via focus groups only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure	Comments: Double-coding of transcripts not reported
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Although some themes are lacking extracts from the original data
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.84 REID2011

Study ID	REID2011	
Bibliographic reference: Reid B. Great expectations: the chance of a lifetime for children with autism. London: National Autistic Society; 2011.		
Guideline topic: Autism in children & young people	Key research question/aim: To identify the views of children and young people with autism, their parents and professionals on the special education needs support available	
Checklist completed by:		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Unclear	Comments: Limited information on aims of the research reported
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Very limited information on methodology

		reported
Section 3: data collection		
3.1 How well was the data collection carried out?	Inadequately reported	Comments: Very limited information on methodology reported
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Very limited information on methodology reported
4.2 Is the context clearly described?	Not sure	Comments: Very limited information on methodology reported
4.3 Were the methods reliable?	Not sure	Comments: Very limited information on methodology reported
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not reported	Comments**:** Information on data analysis not reported
5.2 Are the data 'rich'?	Not sure	Comments: Findings are clear, however it is difficult to classify the data as 'rich' due to lack of detail around methodology
5.3 Is the analysis reliable?	Not reported	Comments: Information on data analysis not reported
5.4 Are the findings convincing?	Not sure	Comments: Findings are clear, however it is difficult to classify the data as 'convincing' due to lack of detail around methodology
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Not sure	Comments: Conclusions are clear, however it is difficult to classify the data as 'adequate' due to lack of detail around methodology
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.85 RENTY2006A

Study ID		RENTY2006A
Bibliographic reference: Renty J, Roeyers H. Satisfaction with formal support and education for children with autism spectrum disorder: the voices of the parents. Child: Care, Health & Development. 2006;32:371-385.		
Guideline topic: Autism in children & young people		Key research question/aim: To ascertain how satisifed parents of children with autism are with support and education services their child receives
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: The method of analysis is not detailed in full, however, overall would still classify as 'defensible'.
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Reliable	Comments: Data were collected through survey and semi-structured interviews
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure	Comments: General informtaion on the method of analysis are reported, howver, it is not enough to demostrate how themes/codes are derived from the data
5.2 Are the data 'rich'?	Rich	Comments: Not applicable

5.3 Is the analysis reliable?	Not reported	Comments: Double coding and participant feedback on transcripts not reported
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.86 RYAN2009

Study ID	RYAN2009	
Bibliographic reference: Ryan S, Cole SR. From advocate to activist? mapping the experiences of mothers of children on the autism spectrum. Journal of Applied Research in Intellectual Disabilities. 2009;22:43-53.		
Guideline topic: Autism in children & young people	Key research question/aim: Exploring the advocacy and activist roles of mothers with a child with autism	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Not sure	Comments: Characteristics of participants are described;

		settings not described and consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected through semi-structured interview only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Some details of analysis are reported, but the mothod used is not explicit and it is not clear how themes were derived from the data
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure/not reported	Comments: The number of times data were coded is not reported
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.87 SELKIRK2009

Study ID	SELKIRK2009
Bibliographic reference: Selkirk CG, McCarthy Veach P, Lian F, Schimmenti L, LeRoy BS. Parents' perceptions of autism spectrum disorder etiology and recurrence risk and effects of their perceptions on family planning: recommendations for genetic counselors. Journal of Genetic Counselling. 2009;18:507-519.	
Guideline topic: Autism in children & young people	Key research question/aim: Identifying parents' beliefs of the aetiology of their child's ASD
Checklist completed by: Lucy Burt	

Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable

Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Online survey, so there was no relationship between research and participant; how study was introduced to participants is described
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Data were collected through online survey online
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Data were double coded
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.88 SERPENTINE2011

Study ID	SERPENTINE2011	
Bibliographic reference: Serpentine EC, Tarnai B, Drager KDR, Finke EH. Decision making of parents of children with autism spectrum disorder concerning augmentative and alternative communication in Hungary. Communication Disorders Quarterly. 2011;32:221-231.		
Guideline topic: Autism in children & young people	Key research question/aim: To explore the decisions of parents of children with autism from Hungary, in relation to to seeking communication interventions for their child	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected through semi-structured interview only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure	Comments: Double coding was only carried out on 20% of the data

5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.89 SHYU2010

Study ID	SHYU2010	
Bibliographic reference: Shyu YL, Tsai J, Tsai W. Explaining and selecting treatments for autism: parental explanatory models in Taiwan. Journal of Autism and Developmental Disorders. 2010;40:1323-1331.		
Guideline topic: Autism in children & young people	Key research question/aim: To explore the beliefs of parents of children with autism in Taiwan, regarding the causes of the disorder and how they make treatment choices for their child	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported

4.3 Were the methods reliable?	Not sure	Comments: Data collected through semi-structured interview only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Double coding not reported, but member checks were completed
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Limitations not reported
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.90 ROSE2009

Study ID	ROSE2009	
Bibliographic reference: Rose R, Anketell C. The benefits of social skills groups for young people with autism spectrum disorder: a pilot study. Child Care in Practice. 2009;15:127-144.		
Guideline topic: Autism in children & young people	Key research question/aim: To evaluate the possible benefits of a social skills group for children on the autistic spectrum	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable

Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Reliable	Comments: Data collected via focus groups and questionnaires
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Some details of analysis are reported, but the mothod used is not explicit and it is not clear how themes were derived from the data
5.2 Are the data 'rich'?	Not sure	Comments: The themes are each discussed to an extent; however, because quantitative data were also collected, there less detail reported from the qualitative data, so depth of responses is not demonstrated.
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Some ethical considerations were made

1.1.91 SMYTH2010

Study ID	SMYTH2010

Bibliographic reference: Smyth C, Slevin E. Experiences of family life with an autism assistance dog. Learning Disability Practice. 2010;13:12-17.		
Guideline topic: Autism in children & young people	Key research question/aim: To explore the experiences of families of children with autism who live with an assistance dog	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Some detail on data collection and analysis, but not enough to be considered 'definsible'.
Section 3: data collection		
3.1 How well was the data collection carried out?	Inadequately reported	Comments: Unclear how long inerviews lasted, how they were conducted and how they were recorded (taping or field notes – unclear)
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected through semi-structured interview only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Data were formulated into themes, but not reported in enough detail to understand *how* themes were derived from data
5.2 Are the data 'rich'?	Not sure	Comments: Findings are clear, however it is difficult to classify the data as 'rich' due to lack of detail on methodology and analysis

5.3 Is the analysis reliable?	Not sure/not reported	Comments: Reliability checks (e.g. double coding) not reported
5.4 Are the findings convincing?	Not sure	Comments: Findings are clear, however it is difficult to classify the data as 'convincing' due to lack of detail on methodology and analysis
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.92 SPANN2003

Study ID	SPANN2003	
Bibliographic reference: Spann SJ, Kohler FW, Soenksen D. Families in a parent support group examining parents' involvement in and perceptions of special education services : an interview with families in a parent support group. Focus on Autism and Other Developmental Disabilities. 2003;18:228-237.		
Guideline topic: Autism in children & young people	Key research question/aim: To explore the perceptions of parents of children with autism of special education services and their involvement in them	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Not enough detail on data analysis reported
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable

Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected through telephone interviews only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not reported	Comments: Method of data analysis not reported
5.2 Are the data 'rich'?	Rich	Comments: Even though method of analysis not reported, tables are provided to show how often responses were endorsed by parents.
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Double coding carried out on 25% of interview transcripts, but without detail on analytic method, cannot be classified as 'reliable'.
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.93 SPERRY1999

Study ID	SPERRY1999
Bibliographic reference: Sperry LA, Whaley KT, Shaw E, Brame K. Services for young children with autism spectrum disorder: voices of parents and providers. Infants and Young Children. 1999;11:17-33.	
Guideline topic: Autism in children & young people	Key research question/aim: To explore the perceptions of parents and service providers around services that are offered to children with autism
Checklist completed by: Lucy Burt	

Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected via focus groups only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.94 STARR2001

Study ID	STARR2001	
Bibliographic reference: Starr EM, Foy JB, Cramer KM. Parental perceptions of the education of children with pervasive developmental disorders. Education and Training in Mental Retardation and Developmental Disabilities. 2001;36:55-68.		
Guideline topic: Autism in children & young people	Key research question/aim: To explore the views of parents of children with Pervasive Developmental Disorder in relation to education	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Detail relating to the instrument are reported, but analysis of qualitative data is not described
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected via questionnaire only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not reported	Comments: No details on qualitative data analysis reported
5.2 Are the data 'rich'?	Not sure	Comments: Diversity of perspective and depth of responses is not demonstrated in the report. Findings are clear, however it is difficult to classify the data

		as 'rich' due to lack of information regarding analysis
5.3 Is the analysis reliable?	Not sure/not reported	Comments: No details on qualitative data analysis reported
5.4 Are the findings convincing?	Convincing	Comments: Findings are clear, however it is difficult to classify the data as 'convincing' due to poor lack of detail regarding analysis
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.95 STIRLING1999

Study ID	STIRLING1999	
Bibliographic reference: Stirling A, Prior A. Opening the door: a report on diagnosis and assessment of autism and Asperger syndrome based on personal experiences. London: National Autistic Society; 1999.		
Guideline topic: Autism in children & young people	Key research question/aim: To examine parents experiences of obtaining a diagnosis of ASD for their child	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Details of methodology are very limited. Method of analysis not reported at all.
Section 3: data collection		

3.1 How well was the data collection carried out?	Not sure/inadequately reported	Comments: Details of data collection are very limited; unknown if data collection and record keeping were systematic
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected through questionnaires only, no further information reported
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Detail on data analysis not reported
5.2 Are the data 'rich'?	Not sure	Comments: Findings show depth and perspective have been explored, however it is difficult to classify the data as 'rich' due to lack of detail about methodology
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Detail on data analysis not reported
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Not sure	Comments: Limited conclusions are drawn outside of the findings
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.96 STONER2005/2006/2007

Study ID	STONER2005/2006/2007
Bibliographic reference: Stoner JB, Bock SJ, Thompson JR, Angell ME, Heyl BS, Crowley EP. Welcome to our world: parent perceptions of interactions between parents of young children with ASD and education professionals. Focus on Autism and Other Developmental Disabilities. 2005;20:39-51	

Stoner JB, Angell ME. Parent perspectives on role engagement:an investigation of parents of children with ASD and their self-reported roles with education professionals. Focus on Autism and Other Developmental Disabilities,2006;20:39-51 Stoner JB, Angell ME, House JJ, Bock SJ. Transitions: perspectives from parents of young children with autism spectrum disorder (ASD). Journal of Developmental and Physical Disabilities. 2007;19:23-39.		
Guideline topic: Autism in children & young people	Key research question/aim: To explore the perspectives of parents of children with autism on their interactions with education professionals	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected through interview only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable

5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.97 STUART2006

Study ID	STUART2006	
Bibliographic reference: Stuart SK, Flis LD, Rinaldi C. Connecting with familes: parents speak up about preschool services for their children with autism spectrum disorders. Teaching Exceptional Children. 2006;39:46-51.		
Guideline topic: Autism in children & young people	Key research question/aim: To investigate parents perceptions of a preschool programme for children with autism	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Unclear	Comments: Participant characteristics/settings not described; consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data were collected through questionnaire only
Section 5: analysis		

5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure/not reported	Comments: No reliability checks reported
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.98 TIPPETT2004

Study ID	TIPPETT2004	
Bibliographic reference: Tippett J. The educational experiences of students with Asperger syndrome. Kairaranga. 2004;5:12-18.		
Guideline topic: Autism in children & young people	Key research question/aim: To explore the issues that students with Asperger's Syndrome experience, from the students', their parents and their teachers perspectives.	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Limited detail on methodology reported; no detail on analysis reported
Section 3: data collection		
3.1 How well was the data collection carried out?	Not sure/inadequately reported	Comments: Limited detail on methodology reported

Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Unclear	Comments: Characteristics of participants and setting not described; consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected via interview only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: No detail on analysis reported
5.2 Are the data 'rich'?	Not sure	Comments: Findings are clear, however it is difficult to classify the data as 'rich' due to lack of detail on methodology/analysis
5.3 Is the analysis reliable?	Not sure/not reported	Comments: No detail on analysis reported
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.99 TISSOT2006/2011

Study ID	TISSOT2006/2011
Bibliographic reference: Tissot C, Evans R. Securing provision for children with autistic spectrum disorders: the views of parents. Perspectives in Education. 2006;24:73-86. Tissot C. Working together? parent and local authority views on the process of obtaining appropriate educational provision for children with autism spectrum disorders. Educational Research. 2011;53:1–15.	
Guideline topic: Autism in children & young people	Key research question/aim: To explore the views of parents of children with autism and the local authorities on the provision of special education

	services	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Limited details of analysis are provided
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Unclear	Comments: Characteristics of participants/settings not described; Consideration of context bias not reported
4.3 Were the methods reliable?	Reliable	Comments: Data collected via interviews and questionnaires
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Limited details of analysis are provided
5.2 Are the data 'rich'?	Not sure	Comments: Findings are clear, however it is difficult to classify the data as 'rich' due to limited details of analysis
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Limited details of analysis are provided
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Limitations are not discussed
Section 6: ethics		

6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.100 TOBIAS2009

Study ID	TOBIAS2009	
Bibliographic reference: Tobias A. Supporting students with autistic spectrum disorder (ASD) at secondary school: a parent and student perspective. Educational Psychology in Practice. 2009;2:151-165.		
Guideline topic: Autism in children & young people	Key research question/aim: To explore the views of students with autism and their parents on the support they receive while at secondary school	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data were collected through focus groups only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable

5.3 Is the analysis reliable?	Not sure/not reported	Comments: Reliability measures not reported
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Limitations are not discussed
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.101 TRUDGEON2007

Study ID	TRUDGEON2007	
Bibliographic reference: Trudgeon C, Carr D. The impacts of home-based early behavioural intervention programmes on families of children with autism. Journal of Applied Research in Intellectual Disabilities. 2007;20:285-296.		
Guideline topic: Autism in children & young people	Key research question/aim: To explore the experiences of parents of children with autism who are involved in early intensive behaviour interventions	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Unclear	Comments: The relationship between researcher and participant not reported, but how the study was

		introduced to participants was reported
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected via semi-structured interview only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Only one theme of 5 discussed
5.3 Is the analysis reliable?	Reliable	Comments: Some transcripts were double coded and themes were member-checked
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Limitations not discussed
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.102 VALENTINE2010

Study ID	VALENTINE2010
Bibliographic reference: Valentine K. A consideration of medicalisation: choice, engagement and other responsibilities of parents of children with autism spectrum disorder. Social Science and Medicine. 2010;71:950-957.	
Guideline topic: Autism in children & young people	Key research question/aim: To explore the experiences of families of children with autism, following diagnosis
Checklist completed by: Lucy Burt	
Section 1: theoretical approach	
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable

Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected through semi-structured interview only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.103 WADDINGTON2006

Study ID	WADDINGTON2006
Bibliographic reference: Waddington EM, Reed P. Parents' and local education authority officers' perceptions of the factors affecting the success of inclusion of pupils with autistic spectrum disorders. International Journal of Special Education. 2006;21:151-164.	

Guideline topic: Autism in children & young people	Key research question/aim: To ascertain the views of parents of children with autism and the professional working with them on inclusion of these children into mainstream schools	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Unclear	Comments: Relatiosnhsip between researcher and participants not reported, but how the study was introduced is reported
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected through focus-groups only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable

Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.104 WEBSTER2003/2004

Study ID	WEBSTER2003/2004	
Bibliographic reference: Webster A, Feiler A, Webster V. Early intensive family intervention and evidence of effectiveness: lessons from the South West autism programme. Early Child Development and Care. 2003;173:383-398. Webster A, Feiler A, Webster V, Lovell C. Parental perspectives on early intensive intervention for children diagnosed with autistic spectrum disorder. Journal of Early Childhood Research. 2004;2:25-49.		
Guideline topic: Autism in children & young people	Key research question/aim: To explore the experiences of parents of children with autism in administering a home-based early intervention programme	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Not sure/inadequately reported	Comments: Limited detail on how interviews were conducted are reported
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected through semi-structured interviews only
Section 5: analysis		

5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: With concerns over lack of reliability measures for analysis
5.3 Is the analysis reliable?	Not sure/not reported	Comments: No reliability checks reported
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.105 WEIDLE2006

Study ID	WEIDLE2006	
Bibliographic reference: Weidle B, Bolme B, Hoeyland AL. Are peer support groups for adolescents with Asperger's syndrome helpful? Clinical Child Psychology and Psychiatry. 2006;11:45-67.		
Guideline topic: Autism in children & young people	Key research question/aim: To explore the views of adolescents with Asperger's Syndrome and their family around a peer suppport group	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Data collection is clearly detailed, but no details on analysis are provided
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable

Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected through questionnaires only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: No information on analysis reported
5.2 Are the data 'rich'?	Not sure	Comments: Findings are clear, however it is difficult to classify the data as 'rich' due to lack of information regarding analysis
5.3 Is the analysis reliable?	Not sure/not reported	Comments: No information on analysis reported
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.106 WELSHASSEMBLY2006

Study ID	WELSHASSEMBLY2006
Bibliographic reference: Welsh Assembly Government New Ideas Research Fund. Identifying and supporting people with autistic spectrum disorders within the youth justice system in Wrexham and Flintshire. Wales: Wales' National Charity for Autism; 2006.	
Guideline topic: Autism in children & young people	Key research question/aim: To ascertain the views of young people with autism, their families and their teachers on the value of Attention Cards.
Checklist completed by: Lucy Burt	
Section 1: theoretical approach	

Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Limited details of methodology are reported; no details on analysis of data reported.
Section 3: data collection		
3.1 How well was the data collection carried out?	Not sure/inadequately reported	Comments: How interviews were conducted not described; data collection and record keeping processes are not described
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Not sure	Comments: Lack of detail regarding participants; Consideration of context bias not reported
4.3 Were the methods reliable?	Reliable	Comments: Data collected through questionnaires and interviews
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: No details on analysis reported
5.2 Are the data 'rich'?	Not sure/not reported	Comments: Details are not provided on how many participants there were in each group e.g. teachers, so not clear what the level of concensus for outcomes was. Findings are clear, however it is difficult to classify the data as 'rich' due to lack of information on analysis
5.3 Is the analysis reliable?	Not sure/not reported	Comments: No details on analysis reported
5.4 Are the findings convincing?	Not sure	Comments: Findings are clear, however it is difficult to classify the data as 'convincing' due to lack of information on analysis

5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Not sure	Comments: Few conclusions are drawn; limitations are not discussed
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.107 WHITAKER2002

Study ID	WHITAKER2002	
Bibliographic reference: Whitaker P. Supporting families of preschool children with autism: what parents want and what helps. Autism. 2002;6:411-426.		
Guideline topic: Autism in children & young people	Key research question/aim: To explore the experiences of parents of children with autism who have been part of a local education authority project that aimed to provide support to preschoolers	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Details on methodology (data collection, analysis) are very limited
Section 3: data collection		
3.1 How well was the data collection carried out?	Not sure/inadequately reported	Comments: Details on data collection are very limited
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Not sure	Comments: Participant charateristics not described; consideration of context bias not reported

4.3 Were the methods reliable?	Not sure	Comments: Data collected through interviews only;limited information reported
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: No details on data analysis reported
5.2 Are the data 'rich'?	Not sure	Comments: Findings are clear, however it is difficult to classify the data as 'rich' due to lack of information on methodology
5.3 Is the analysis reliable?	Not sure/not reported	Comments: No details on data analysis reported
5.4 Are the findings convincing?	Not sure	Comments: Findings are clear, however it is difficult to classify the data as 'convincing' due to lack of information on methodology; lack of extracts from original data included
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.108 WHITAKER2007

Study ID	WHITAKER2007
Bibliographic reference: Whitaker P. Provision for youngsters with autistic spectrum disorders in mainstream schools: what parents say - and what parents want. British Journal of Special Education. 2007;34:170-178.	
Guideline topic: Autism in children & young people	Key research question/aim: To explore the views of parents with autism on education provisions their child has received
Checklist completed by: Lucy Burt	
Section 1: theoretical approach	
Is a qualitative approach appropriate?	Appropriate / Comments: Not applicable

Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable
4.3 Were the methods reliable?	Not sure	Comments: Data collected via questionnaire only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Reliability measures not reported
5.4 Are the findings convincing?	Not sure	Comments: Few extractsf rom original data are used to support statements
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.109 WHITTINGHAM2006

Study ID	WHITTINGHAM2006

Bibliographic reference: Whittingham K, Sofronoff K, Sheffield JK. Stepping Stones Triple P: a pilot study to evaluate acceptability of the program by parents of a child diagnosed with an autism spectrum disorder. Research in Developmental Disabilities. 2006;27:364-380.		
Guideline topic: Autism in children & young people	Key research question/aim: To explore the views of parents of children with autism in relation to the Stepping Stones parenting strategies.	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Information on the process of the focus group not reported, limited detail on analysis were reported so it is not clear how themes were derived from the data.
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Reliable	Comments: Data collected trhough questionnaires and focus groups
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Not enough detail on how analysis was conducted to rate as 'rigorous'.
5.2 Are the data 'rich'?	Not sure/not reported	Comments: Findings are clear, however lacking in depth. It is difficult to classify the data as 'rich' due to lack of information regarding methodology

5.3 Is the analysis reliable?	Not sure/not reported	Comments: All data were double coded, but as the method of analysis is not clearly described, cannot be considered 'reliabile'.
5.4 Are the findings convincing?	Not sure	Comments: : Findings are clear, however it is difficult to classify the data as 'convincing' due to lack of information regarding methodology
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.110 WHITTINGHAM2009

Study ID	WHITTINGHAM2009	
Bibliographic reference: Whittingham K, Sofronoff K, Sheffield J, Sanders MR. Behavioural family intervention with parents of children with ASD: what do they find useful in the parenting programme stepping stones triple p? Research in Autism Spectrum Disorders. 2009;3:702-713.		
Guideline topic: Autism in children & young people	Key research question/aim: To explore the views of parents of children with autism on what are the most useful strategies in the Stepping Stones Triple P Parenting programme	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: No information about data analysis were reported
Section 3: data collection		

3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected through questionnaires only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: No information on analysis reported
5.2 Are the data 'rich'?	Not sure	Comments: Depth and diversity of responses are not demonstrated. Findings are clear, however it is difficult to classify the data as 'rich' due to lack of information on analytic method
5.3 Is the analysis reliable?	Not sure/not reported	Comments: No information on analysis reported
5.4 Are the findings convincing?	Not sure	Comments: Extracts from original data are not included. Findings are clear, however it is difficult to classify the data as 'convincing' due to lack of information on analytic method
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Some ethical considerations were made

1.1.111 WILLIAMS2003

Study ID	WILLIAMS2003

Bibliographic reference: Williams KR, Wishart JG. The Son-Rise Program intervention for autism: an investigation into family experiences. Journal of Intellectual Disability Research. 2003;47:291-299.		
Guideline topic: Autism in children & young people	Key research question/aim: To explore the experiences of families of children with autism who have used the Son-Rise Program.	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Not sure	Comments: Limited detail on the method of analysis reported, so unclear method used
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Unclear	Comments: Few characteristics of participants are reported; consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected through questionnaire only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Not sure/not reported	Comments: Limited details of data analysis are reported, so unclear how themes were derived from the data
5.2 Are the data 'rich'?	Not sure/not reported	Comments: Findings are clear, however it is difficult to classify the data as 'rich' due to lack of information on method of analysis
5.3 Is the analysis reliable?	Not sure/not reported	Comments: Data were double coded, however limited details reported on method of data analysis make it difficult

		to rate as 'reliable'.
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.1.112 WITTEMEYER2011

Study ID	WITTEMEYER2011	
Bibliographic reference: Wittemeyer K, Charman T, Cusak J, Guldberg K, Hastings R, Howlin P, et al. Educational provision and outcomes for people on the autism spectrum: Full technical report. London: Autism Education Trust; 2011.		
Guideline topic: Autism in children & young people	Key research question/aim: Experience of unmet needs and education/school	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Not applicable

4.3 Were the methods reliable?	Reliable	Comments: Data collected through online surveys and focus groups
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Transcripts were double-coded
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.113 WOODGATE2008

Study ID	WOODGATE2008	
Bibliographic reference: Woodgate RL, Ateah C, Secco L. Living in a world of our own: the experience of parents who have a child with autism. Qualitative Health Research. 2008;18:1075-1083.		
Guideline topic: Autism in children & young people	Key research question/aim: Experience of support	
Checklist completed by: Lucy Burt		
Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		

3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Clear	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected through semi-structured interview only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Double-coding not reported, but transcripts were member-checked
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Clear	Comments: Not applicable

1.1.114 WRIGHT2011

Study ID	WRIGHT2011
Bibliographic reference: Wright C, Diener ML, Dunn L, Wright SD, Linnell L, Newbold K, et al. SketchUp™: A technology tool to facilitate intergenerational family relationships for children with autism spectrum disorders (ASD). Family and Consumer Sciences Research Journal. 2011;40:135-149.	
Guideline topic: Autism in children & young people	Key research question/aim: To examine the effects of an intervention programme on families of children with autism, from parents and grandparents perspectives.
Checklist completed by:	

Section 1: theoretical approach		
Is a qualitative approach appropriate?	Appropriate	Comments: Not applicable
Is the study clear in what it seeks to do?	Clear	Comments: Not applicable
Section 2: study design		
2.1 How defensible/rigorous is the research design/methodology?	Defensible	Comments: Not applicable
Section 3: data collection		
3.1 How well was the data collection carried out?	Appropriate	Comments: Not applicable
Section 4: validity		
4.1 Is the role of the researcher clearly described?	Not described	Comments: Not applicable
4.2 Is the context clearly described?	Clear	Comments: Consideration of context bias not reported
4.3 Were the methods reliable?	Not sure	Comments: Data collected through focus groups only
Section 5: analysis		
5.1 Is the data analysis sufficiently rigorous?	Rigorous	Comments: Not applicable
5.2 Are the data 'rich'?	Rich	Comments: Not applicable
5.3 Is the analysis reliable?	Reliable	Comments: Not applicable
5.4 Are the findings convincing?	Convincing	Comments: Not applicable
5.5 Are the findings relevant to the aims of the study?	Relevant	Comments: Not applicable
5.6 Are the conclusions adequate?	Adequate	Comments: Not applicable
Section 6: ethics		
6.1 How clear and coherent is the reporting of ethical considerations?	Not reported	Comments: Not applicable

1.2 PSYCHOSOCIAL INTERVENTIONS AIMED AT CORE FEATURES OF AUTISM

1.2.1 ALDRED2001/2004

Study ID		ALDRED2001/2004
Bibliographic reference: Aldred C, Pollard C, Phillips R, Adams C. Multidisciplinary social communication intervention for children with autism and pervasive developmental disorder: the Child's Talk project. Educational and Child Psychology. 2001;18:76-87. Aldred C, Green J, Adams C. A new social communication intervention for children with autism: pilot randomised controlled treatment study suggesting effectiveness. Journal of Child Psychology and Psychiatry. 2004;45:1420-1430.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes

B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes

Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Different for different outcome measures: Unclear for behavioural observation outcome measures as they lacked independent reliability or validity data
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Different for different outcome measures: No for CDI as parent-completed Unclear for VABS as based on interviewwith non-blind parent rather than direct behaviour observation
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcome measures: No for CDI as parent-completed Unclear for VABS as based on interviewwith non-blind parent rather than direct behaviour observation
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcome measures: Low risk for ADOS and behavioural observations Unclear/unknown risk for VABS High risk for CDI		
Likely direction of effect: Effect size bigger, where high risk		

1.2.2 BASS2009

Study ID		BASS2009
Bibliographic reference: Bass MM, Duchowny CA, Llabre MM. The effect of therapeutic horseback riding on social functioning in children with autism. Journal of Autism and Developmental Disorders. 2009;39:1261-1267.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (insufficient detail reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		

High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	No (outcome measures parent-rated and parents non-blind)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (outcome measures parent-rated and parents non-blind)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.2.3 BEAUMONT2008

Study ID		BEAUMONT2008
Bibliographic reference: Beaumont R, Sofronoff K. A multi-component social skills intervention for children with Asperger syndrome: the Junior Detective Training Program. Journal of Child Psychology and Psychiatry. 2008;49:743-753.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes for SSQ; Unclear for Assessment of Perception of Emotion from Facial Expression and Posture Cues; No for James and the Maths Test, Dylan is Being Teased and ERSSQ

D4	Investigators were kept 'blind' to participants' exposure to the intervention	Blinding was different for different outcome measures: SSQ - Parent-rated so outcome assessors were not blind to participants exposure to intervention or confounding factors. ERSSQ - Parent-rated and parents participated in the intervention Assessment of Perception of Emotion from Facial Expression - Rater not reported Assessment of Perception of Emotion from Posture Cues - Rater not reported James and the Maths Test - Blind double-coding was only performed for 33% of responses and scoring was performed by the chief investigator Dylan is Being Teased - Blind double-coding was only performed for 33% of responses and scoring was performed by the chief investigator
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Blinding was different for different outcome measures: SSQ - Parent-rated so outcome assessors were not blind to participants exposure to intervention or confounding factors. ERSSQ - Parent-rated and parents participated in the intervention Assessment of Perception of Emotion from Facial Expression - Rater not reported Assessment of Perception of Emotion from Posture Cues - Rater not reported James and the Maths Test - Blind double-coding was only performed for 33% of responses and scoring was performed by the chief investigator Dylan is Being Teased - Blind double-coding was only performed for 33% of responses and scoring was performed by the chief investigator

Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?
The risk of detection bias is different for different outcomes: SSQ - High risk ERSSQ - High risk Assessment of Perception of Emotion from Facial Expression - Unclear risk Assessment of Perception of Emotion from Posture Cues - Unclear risk James and the Maths Test - High risk Dylan is Being Teased - High risk
Likely direction of effect: Effect size bigger, where high risk

1.2.4 BEGEER2011

Study ID		BEGEER2011
Bibliographic reference: Begeer S, Gevers C, Clifford P, Verhoeve M, Kat K, Hoddenbach E, et al. Theory of mind training in children with autism: a randomized controlled trial. Journal of Autism and Developmental Disorders. 2011;41:997-1006.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (an independent researcher drew up the randomisation schedule, but no further details of method of concealment of allocation are reported)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 1; Control group N: 3	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 1; Control group N: 3	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes

D4	Investigators were kept 'blind' to participants' exposure to the intervention	Blinding was different for different outcome measures: ToM - Rater not reported, but no blinding of outcome assessors reported LEAS-C - Rater not reported, but no blinding of outcome assessors reported Index of Empathy for Children and Adolescents - Self-rated so not blind to intervention or confounding factors CSBQ: Parent rated and parents were not blind to intervention or confounding factors.
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Blinding was different for different outcome measures: ToM - Rater not reported, but no blinding of outcome assessors reported LEAS-C - Rater not reported, but no blinding of outcome assessors reported Index of Empathy for Children and Adolescents - Self-rated so not blind to intervention or confounding factors CSBQ: Parent rated and parents were not blind to intervention or confounding factors.
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Risk of detection bias different for different measures: ToM - Unknown/unclear risk LEAS-C - Unknown/unclear risk Index of Empathy for Children and Adolescents - High risk CSBQ - High risk		
Likely direction of effect: Effect size bigger, where high risk		

1.2.5 CARTER2011

Study ID		CARTER2011
Bibliographic reference: Carter AS, Messinger DS, Stone WL, Celimli S, Nahmias AS, Yoder P. A randomized controlled trial of Hanen's 'more than words' in toddlers with early autism symptoms. Journal of Child Psychology and Psychiatry. 2011;52:741-752.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer random number generator)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 7; Control group N: 5	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 3; Control group N: 4	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes (with the exception of the Parent-Child Free Play Procedure [PCFP] for which reliability and validity was unclear)

D4	Investigators were kept 'blind' to participants' exposure to the intervention	Different for different outcome measures: Unclear/unknown for PCFP as only a subsection (20%) of observations were coded blind, for MSEL and ADOS as identity and blinding of outcome assessor not reported and for VABS as based on parental interview rather than direct behavioural observation No for PIA-CV as parent-completed and parents non-blind
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcome measures: Unclear/unknown for PCFP as only a subsection (20%) of observations were coded blind, for MSEL and ADOS as identity and blinding of outcome assessor not reported and for VABS as based on parental interview rather than direct behavioural observation No for PIA-CV as parent-completed and parents non-blind
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcome measures: Low risk for ESCS Unclear/unknown risk for PCFP, MSEL, VABS and ADOS High risk for PIA-CV		
Likely direction of effect: Effect size bigger, where high risk		

1.2.6 DEROSIER2011

Study ID		DEROSIER2011
Bibliographic reference: DeRosier ME, Swick DC, Ornstein Davis N, Sturtz McMillen J, Matthews R. The efficacy of a social skills group intervention for improving social behaviors in children with high functioning autism spectrum disorders. Journal of Autism and Developmental Disorders. 2011;41:1033-1043.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (there was a statistically significant group difference at baseline with the experimental group showing higher scores on the Social Responsiveness Scale [SRS]-Social Communication domain relative to the control group [means of 69.6 and 66.0 respectively])
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No

B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 3; Control group N: 2	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 3; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	No (outcome measures were non-blind self- or parent-report)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (outcome measures were non-blind self- or parent-report)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.2.7 DREW2002

Study ID		DREW2002
Bibliographic reference: Drew A, Baird G, Baron CS, Cox A, Slonims V, Wheelwright S, et al. A pilot randomised control trial of a parent training intervention for pre-school children with autism. Preliminary findings and methodological challenges. European Child and Adolescent Psychiatry. 2002;11:266-272.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (random number table)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (the experimental group had a higher NVIQ than the control group, 88.1 compared to 66, p<0.001)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	No (three participants in the control group [25%] commenced an EIBI program during the intervention period and there was a trend for a statistically significant difference in the number of hours of other intervention with the control group receiving 8.4 hours and the experimental group receiving 0.3 hours, p=0.07)
B2	Participants receiving care were kept 'blind' to treatment allocation	No

B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes

D4	Investigators were kept 'blind' to participants' exposure to the intervention	No
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.2.8 FRANKEL2010

Study ID		FRANKEL2010
Bibliographic reference: Frankel F, Myatt R, Sugar C, Whitham C, Gorospe CM, Laugeson E. A randomized controlled study of parent-assisted children's friendship training with children having autism spectrum disorders. Journal of Autism and Developmental Disorders. 2010;40:827-842.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer random number generator)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 14; Control group N: 5	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	No
C3	For how many participants in each group were no outcome data available? Experimental group N: 5; Control group N: 3	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Different for different outcome measures: Unclear for Loneliness Scale as inconsistent results with this scale in ASD populations No for PHS and PEI as scales not validated in an ASD population

D4	Investigators were kept 'blind' to participants' exposure to the intervention	No (outcome measures based on non-blind self-, parent- and teacher-report)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (outcome measures based on non-blind self-, parent- and teacher-report)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.2.9 GOLAN2010

Study ID		GOLAN2010
Bibliographic reference: Golan O, Ashwin E, Granader Y, McClintock S, Day K, Leggett V, et al. Enhancing emotion recognition in children with autism spectrum conditions: an intervention using animated vehicles with real emotional faces. Journal of Autism and Developmental Disorders. 2010;40:269-279.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes (groups were matched for sex, age and verbal ability)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 1	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 1	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes

Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	No EmoVoc - No validity or reliability is reported for this measure SEM - The researchers investigated the reliability of this measure, but there have been no external reports of validity or reliability

D4	Investigators were kept 'blind' to participants' exposure to the intervention	No (non-blind investigator-rated)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (non-blind investigator-rated)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.2.10 GREEN2010

Study ID		GREEN2010
Bibliographic reference: Green J, Charman T, McConachie H, Aldred C, Slonims V, Howlin P, et al. Parent-mediated communication-focused treatment in children with autism (PACT): a randomised controlled trial. Lancet. 2010;375:2152-2160.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (minimisation)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (socioeconomic status and proportion of parents with qualifications gained after age 16 years were higher in the experimental than in the control group with cohen's d effect sizes of 0.14 and 0.48 respectively)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	No

B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 3; Control group N: 3	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Yes with the exception of the behavioural observation outcome measures as no independent reliability or validity data for this outcome measure and a standardized coding scheme was not used
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Different for different outcome measures: No for CSBS-DP and CDI as parent-reported and parents were non-blind and involved in the intervention Unclear for VABS aas teacher-rated as unclear if teacher blinded
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcome measures: No for CSBS-DP and CDI as parent-reported and parents were non-blind and involved in the intervention Unclear for VABS as teacher-rated and unclear if teacher blinded
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcome measures: Low risk for ADOS, PLS-3 and behavioural observations Unclear/unknown risk for VABS High risk for CSBS-DP and CDI		
Likely direction of effect: Effect size bigger, where high risk		

1.2.11 HOPKINS2011

Study ID		HOPKINS2011
Bibliographic reference: Hopkins IM, Gower MW, Perez TA, Smith DS, Amthor FR, Wimsatt FC, et al. Avatar assistant: improving social skills in students with an ASD through a computer-based intervention. Journal of Autism and Developmental Disorders. 2011;41:1543-1555.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes (due to inclusion to an attention-placebo condition)
B3	Individuals administering care were kept 'blind' to treatment allocation	No

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias (low risk for response bias and high risk for performance bias)		
Likely direction of effect: Effect size bigger for performance bias		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: Not reported; Control group N: Not reported	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Validity and reliability are different for different measures: Ekman emotion recognition photographs: Yes Study-specific emotion recognition in drawings test: No Benton Facial Recognition Test (short form): Yes Benton Facial Recognition Test (long form): Unclear SSRS: Yes Behavioural observation: Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Blinding was different for different outcome measures: Ekman emotion recognition photographs: rater not reported so blinding is unclear Study-specific emotion recognition in drawings test: rater not reported so blinding is unclear Benton Facial Recognition Test: rater not reported so blinding is unclear SSRS: Rated by parents who were blind to intervention allocation Behavioural observation: Rated by research assistants who were blind to intervention allocation
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Blinding was different for different outcome measures: Ekman emotion recognition photographs: rater not reported so blinding is unclear Study-specific emotion recognition in drawings test: rater not reported so blinding is unclear Benton Facial Recognition Test: rater not reported so blinding is unclear SSRS: No, rated by parents who are aware of confounding factors Behavioural observation: Unclear, rated by research assistants who may have been aware of other confounding factors
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
The risk of detection bias is different for different outcomes: Unmaking the Face: unknown/unclear risk Study-specific emotion recognition in drawings test: High risk		

Benton Facial Recognition Test: unknown/unclear risk SSRS: unknown/unclear risk Behaviour observation: low risk
Likely direction of effect: Effect size bigger, where high risk

1.2.12INGERSOLL2012

Study ID		INGERSOLL2012
Bibliographic reference: Ingersoll B. Brief report: effect of a focused imitation intervention on social functioning in children with autism. Journal of Autism and Developmental Disorders. 2012;42:1768-1773.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (coin tossing)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		

High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 1; Control group N: 1	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 1; Control group N: 1	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes

D4	Investigators were kept 'blind' to participants' exposure to the intervention	No
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.2.13 JOCELYN1998

Study ID		JOCELYN1998
Bibliographic reference: Jocelyn LJ, Casiro OG, Beattie D, Bow J, Kneisz J. Treatment of children with autism: a randomized controlled trial to evaluate a caregiver-based intervention program in community day-care centers. Journal of Developmental and Behavioral Pediatrics. 1998;19:326-334.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (random number table)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (performed by independent research assistant using sealed, opaque envelopes)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (higher percentage of single parents in the control group, p=0.047)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 1; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 1; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear (unclear if 12 weeks duration sufficient follow-up length to detect significant treatment effects but as this is likely to result in conservative estimates of effect the study was not downgraded on this basis)
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes (with the exception of the Stress-Arousal Checklist for which reliability and validity is unclear)
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes (primary outcome measures assessed by blinded psychologist, however, impact on family outcome measures are parent-completed and non-blind)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Yes (primary outcome measures assessed by blinded psychologist, however, impact on family outcome measures are parent-completed and non-blind)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.2.14 KAALE2012

Study ID	KAALE2012
Bibliographic reference: Kaale A, Smith L, Sponheim E. A randomized controlled trial of preschool-based joint attention intervention for children with autism. Journal of Child Psychology and Psychiatry. 2012;53:97-105.	
Guideline topic: Management and support of children and young people on the autism spectrum	Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars	

A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (random number table)

A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (central allocation)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (statistically significant group difference at baseline with the experimental group showing a lower expressive language age than the control group [18.8 relative to 24.9 months, p=0.047])
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	

	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear (unclear if the intervention duration of 8 weeks was a sufficient length of time to detect significant treatment effects)
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Different for different outcomes: Unclear for behavioural observation and preschool teacher-child play as no independent reliability or validity data and a standardized coding scheme was not used
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.2.15 KASARI2006&2008/LAWTON2012

Study ID		KASARI2006&2008/LAWTON2012
Bibliographic reference: Kasari C, Freeman S, Paparella T. Joint attention and symbolic play in young children with autism: a randomized controlled intervention study. Journal of Child Psychology and Psychiatry. 2006;47:611-620. Kasari C, Paparella T, Freeman, S, Jahromi LB. Language outcome in autism: randomized comparison of joint attention and play interventions. Journal of Consulting and Clinical Psychology. 2008;76:125-137. Lawton K, Kasari C. Brief report: longitudinal improvements in the quality of joint attention in preschool children with autism. Journal of Autism and Developmental Disorders. 2012;42:307-312.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail is reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	No

B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 2; Control group N: 5	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 2; Control group N: 4	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.2.16 KASARI2010

Study ID		KASARI2010
Bibliographic reference: Kasari C, Gulsrud AC, Wong C, Kwon S, Locke J. Randomized controlled caregiver mediated joint engagement intervention for toddlers with autism. Journal of Autism and Developmental Disorders. 2010;40:1045-1056.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (random number table)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail is reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 3	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear (not clear if 8 weeks sufficient duration to see significant treatment effects but as this would result in conservative effect estimate quality is not downgraded on this basis)

D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.2.17KASARI2012

Study ID		KASARI2012
Bibliographic reference: Kasari C, Rotherham-Fuller E, Locke J, Gulsrud A. Making the connection: randomized controlled trial of social skills at school for children with autism spectrum disorders. Journal of Child Psychology and Psychiatry. 2012;53:431-439.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail is reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (statistically significant baseline differences with 83% of the female participants randomised to the peer-mediated condition)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 1; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear (not clear if 12 weeks sufficient duration to see significant treatment effects but as this would result in conservative effect estimate quality is not downgraded on this basis)

D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Unclear (no independent reliability or validity data for most of the outcome measures)
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (with the exception of the behavioural observation outcome measure the blinding of outcome assessors was unclear)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (with the exception of the behavioural observation outcome measure the blinding of outcome assessors was unclear)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

1.2.18 KOENIG2010

Study ID		KOENIG2010
Bibliographic reference: Koenig K, Williams White S, Pachler M, Lau M, Lewis M, Klin A, et al. Promoting social skill development in children with pervasive developmental disorders: a feasibility and efficacy study. Journal of Autism and Developmental Disorders. 2010;40:1209-1218.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (random number table)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (central allocation)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	No (statistically significant difference in the number of participants in each group receiving psychotropic medication with N=6 [24%] in the treatment group and N=10 (53%] in the waitlist control group)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 2; Control group N: 1	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 2; Control group N: 1	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes

D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Different for different outcome measures: Unclear for SCI as insufficient detail reported about this outcome measure
D4	Investigators were kept 'blind' to participants' exposure to the intervention	No (although blinded rater for CGI outcome measures relied on non-blind parental report and SCI was parent-completed)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (although blinded rater for CGI outcome measures relied on non-blind parental report and SCI was parent-completed)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.2.19 LANDA2011

Study ID		LANDA2011
Bibliographic reference: Landa RJ, Holman KC, O'Neill AH, Stuart EA. Intervention targeting development of socially synchronous engagement in toddlers with autism spectrum disorder: a randomized controlled trial. Journal of Child Psychology and Psychiatry. 2011;52:13-21.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 1; Control group N: 1	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 1; Control group N: 1	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes

D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.2.20 LAUGESON2009

Study ID		LAUGESON2009
Bibliographic reference: Laugeson EA, Frankel F, Mogil C, Dillon AR. Parent-assisted social skills training to improve friendships in teens with autism spectrum disorders. Journal of Autism and Developmental Disorders. 2009;39:596-606.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		

High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: Not reported; Control group N: Not reported N=3 dropped out but group assignment for these participants is not reported	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: Not reported; Control group N: Not reported N=3 dropped out but group assignment for these participants is not reported	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes (with the exception of the study-specific questionnaire which lacks external reliability and validity data)

D4	Investigators were kept 'blind' to participants' exposure to the intervention	No (non-blind self- or parent-rated)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (non-blind self- or parent-rated)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.2.21 LOPATA2010

Study ID		LOPATA2010
Bibliographic reference: Lopata C, Thomeer ML, Volker MA, Toomey JA, Nida RE, Lee GK, et al. RCT of a manualized social treatment for high-functioning autism spectrum disorders. Journal of Autism and Developmental Disorders. 2010;40:1297-1310.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (random number table)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Different for different outcome measures: Yes for: Social Responsiveness Scale (SRS): Total; Behavior Assessment System for Children, 2nd ed., parent rated (BASC-2-PRS): Withdrawal and Social Skills subscales No for: Study-specific questionnaires - the Adapted Skillstreaming Checklist (ASC) designed as a direct measure of skills taught and Skillstreaming Knowledge Assessment (SKA); Diagnostic Analysis of Nonverbal Accuracy 2 (DANVA2): Child faces; Comprehensive Assessment of Spoken Language (CASL): Idiomatic Language
D4	Investigators were kept 'blind' to participants' exposure to the intervention	No (non-blind parent- and researcher-rated)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (non-blind parent- and researcher-rated)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.2.22 OWENS2008

Study ID		OWENS2008
Bibliographic reference: Owens G, Granader Y, Humphrey A, Baron-Cohen S. LEGO therapy and the social use of language programme: an evaluation of two social skills interventions for children with high functioning autism and Asperger syndrome. Journal of Autism and Developmental Disorders. 2008;38:1944-1957.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail is reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes (matched pairs)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 7; Control group N: 7	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 7; Control group N: 7	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Different for different outcome measures: Unclear/unknown for behavioural observations as no reliability or validity data reported and no standardized coding scheme used

D4	Investigators were kept 'blind' to participants' exposure to the intervention	Different for different outcome measures: Unclear/unnown for GARS as parent-completed and unclear if blinded to group assignment and for VABS as although the interviewer was a blinded research assistant, the outcome measure was based on non-blind parent report No for behavioural observations as outcome assessor was non-blind investigator
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcome measures: Unclear/unknown for VABS as although the interviewer was a blinded research assistant, the outcome measure was based on non-blind parent report No for GARS and behavioural observations as rated by parents or investigator who would be non-blind to other potentially important confounding factors
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcome measures: Unclear/unknown risk for GARS and VABS High risk of bias for behavioural observations		
Likely direction of effect: Effect size bigger, where high risk		

1.2.23 ROEYERS1996

Study ID		ROEYERS1996
Bibliographic reference: Roeyers H. The influence of nonhandicapped peers on the social interactions of children with a pervasive development disorder. Journal of Autism and Developmental Disorders. 1996;26:303-320.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail is reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		

High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes

D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes (assumption based on the statement "observers not familiar with the purposes of the project")
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Yes (assumption based on the statement "observers not familiar with the purposes of the project")
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.2.24 RUBLE2010

Study ID		RUBLE2010
Bibliographic reference: Ruble LA, Dalrymple NJ, McGrew JH. The effects of consultation on individualized education program outcomes for young children with autism: the collaborative model for promoting competence and success. Journal of Early Intervention. 2010;32:286-301.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes (no significant differences between experimental and control group for number or hours of other services received during the intervention period)
B2	Participants receiving care were kept 'blind' to treatment allocation	Unclear (paper states 'single-blind' but gives no further detail with regards to whether it is the participants who are blinded)
B3	Individuals administering care were kept 'blind' to treatment allocation	No (investigators were intervention administrators)

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 1; Control group N: 2	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 1; Control group N: 2	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Unclear (only 20% of observations were double-coded and a standardized observation measure was not used the reliability and validity of this outcome measure is unclear)
D4	Investigators were kept 'blind' to participants' exposure to the intervention	No (primary outcome assessor was the non-blind investigator with a blinded secondary outcome assessor only rating 20% of behavioural observations)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (primary outcome assessor was the non-blind investigator with a blinded secondary outcome assessor only rating 20% of behavioural observations)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.2.25 RYAN2010

Study ID		RYAN2010
Bibliographic reference: Ryan C, Charragain CN. Teaching emotion recognition skills to children with autism. Journal of Autism and Developmental Disorders. 2010;40:1505-1511.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes

Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: Not reported; Control group N: Not reported N=5 participants were lost at follow-up, but group allocation of these participants were not reported	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Unclear

C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 1	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear - Post-group measures were taken one week after the intervention and it is not clear if 5 weeks is long enough to see treatment effects
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	No - Validity and reliability are not reported for the only measure used in the study; the Ekman emotion recognition photographs
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear - Investigators were kept blind to participants pre-test scores but it is not reported if they were blind to treatment allocation
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear - The investigator was a psychologist who was blind to pre-test scores, but it is unclear how much information they had about confounding and prognostic factors
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.2.26 SCHERTZ2013

Study ID		SCHERTZ2013
Bibliographic reference: Schertz HH, Odom SL, Baggett KM, Sideris JH. Effects of joint attention medication learning for toddlers with autism spectrum disorders: an initial randomised controlled study. Early Childhood Research Quarterly. 2013;28:249-258.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (weekly hours of intervention [combined across sites] were 38 hours for the experimental group and 31 hours for the control group but the paper does not report any statistical testing of the significance of this difference)
B2	Participants receiving care were kept 'blind' to treatment allocation	No

B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes (duration of the intervention was variable, but there were no significant differences in the pre-post assessment time difference between the groups)
C2	a. How many participants did not complete treatment in each group? Experimental group N: Not reported; Control group N: Not reported	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Unclear
C3	For how many participants in each group were no outcome data available? Experimental group N: Not reported; Control group N: Not reported	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Unclear
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Different blinding for different outcomes: Yes - behavioural observations No - MSEL and VABS (MSEL rated by non-blind research assistants and VABS rated by non-blind research assistants and based on interview with parents who were non-blind and involved in the intervention)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different bias for different outcomes: High risk for MSEL and VABS		
Likely direction of effect: Effect size bigger, where high risk		

1.2.27 STRAIN2011

Study ID		STRAIN2011
Bibliographic reference: Strain PS, Bovey II EH. Randomized, controlled trial of the LEAP model of early intervention for young children with autism spectrum disorders. Topics in Early Childhood Special Education. 2011;31:133-154.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (random number table)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)

A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 1 classroom; Control group N: 5 classrooms	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes

C3	For how many participants in each group were no outcome data available? Experimental group N: 1 classroom; Control group N: 5 classrooms	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (identity and blinding of outcome assessors not reported)

D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (identity and blinding of outcome assessors not reported)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

1.2.28 TANAKA2010

Study ID		TANAKA2010
Bibliographic reference: Tanaka JW, Wolf JM, Klaiman C, Koenig K, Cockburn J, Herlihy L, et al. Using computerized games to teach face recognition skills to children with autism spectrum disorder: the Let's Face It! program. Journal of Child Psychology and Psychiatry. 2010;51:944-952.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (method of randomisation is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 14; Control group N: 7	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	No
C3	For how many participants in each group were no outcome data available? Experimental group N: 23; Control group N: 15	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes

Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?
Unclear/unknown risk of bias
Likely direction of effect: Unknown direction

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Unclear
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (blinding of outcome assessors not reported)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (blinding of outcome assessors not reported)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.2.29YOUNG2012

Study ID		YOUNG2012
Bibliographic reference: Young RL, Posselt M. Using The Transporters DVD as a learning tool for children with autism spectrum disorders (ASD). Journal of Autism and Developmental Disorders. 2012;42:984-991.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (method of randomisation is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes (due to inclusion of an attention-placebo condition)
B3	Individuals administering care were kept 'blind' to treatment allocation	No (parents were care administrators as this was a home-based intervention and were provided with a user-guide so were presumably non-blind to treatment allocation)

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias (low risk for response bias and high risk for performance bias)		
Likely direction of effect: Effect size bigger, where high risk		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes

D4	Investigators were kept 'blind' to participants' exposure to the intervention	Blinding was different for different outcome assessors: NEPSY-II: Affect Recognition subscale - No. Outcome assessors were researchers. No blinding of researchers reported The Faces Task - No. Outcome assessors were researchers. No blinding of researchers reported SCQ - Yes. Parent rated and parents were blind to treatment allocation
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No - No blinding of investigators reported and parents are not blind to confounding factors
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.3 PHARMACOLOGICAL INTERVENTIONS AIMED AT CORE AUTISM FEATURES

1.3.1 HOLLANDER2005

Study ID		HOLLANDER2005
Bibliographic reference: Hollander E, Phillips A, Chaplin W, Zagursky K, Novotny S, Wasserman S, et al. A placebo controlled crossover trial of liquid fluoxetine on repetitive behaviors in childhood and adolescent autism. Neuropsychopharmacology. 2005;30:582-589.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes (matching placebo)

B3	Individuals administering care were kept 'blind' to treatment allocation	Yes
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 3; Control group N: 2	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 3; Control group N: 2	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.3.2 KING2009

Study ID		KING2009
Bibliographic reference: King BH, Hollander E, Sikich L, McCracken JT, Scahill L, Bregman JD, et al. Lack of efficacy of citalopram in children with autism spectrum disorders and high levels of repetitive behavior: citalopram ineffective in children with autism. Archives of General Psychiatry. 2009;66:583-590.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method was unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 13; Control group N: 13	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes (analysed according to intent-to-treat principle)

Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes (initially unclear if 12 weeks duration a sufficient follow-up length to detect significant treatment effects, particularly adverse events. However, as this study failed to find significant positive treatment effects and did find evidence for adverse events, this concern was shown to be misplaced)
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcomes: No for RBS as parent-rated Unclear for ABC as identity of outcome assessor not reported
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.3.3 LUBY2006

Study ID		LUBY2006
Bibliographic reference: Luby J, Mrakotsky C, Stalets MM, Belden A, Heffelfinger A, Williams M, et al. Risperidone in preschool children with autistic spectrum disorders: an investigation of safety and efficacy. Journal of Child and Adolescent Psychopharmacology. 2006;16:575-587.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (random number table)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	No (Open random allocation schedule)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (the risperidone group showed significantly greater severity of autism symptoms as measured by the CARS and significantly poorer language skills as measured by the PLS-3 and poorer motor skill development as measured by the VABS Motor Skills Scale)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes

B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 1; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 1; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes

Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.3.4 MIRAL2008

Study ID		MIRAL2008
Bibliographic reference: Miral S, Gencer O, Inal-Emiroglu FN, Baykara B, Baykara A, Dirik E. Risperidone versus haloperidol in children and adolescents with AD. European Child and Adolescent Psychiatry. 2008;17:1-8.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method was unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (no baseline statistical comparisons between groups reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Unclear (paper states 'Double-blind' but gives no further detail with regards to who is blinded, i.e. participant, parent, investigator, intervention administrator, outcome assessor)
B3	Individuals administering care were kept 'blind' to treatment allocation	Unclear (paper states 'Double-blind' but gives no further detail with regards to who is blinded, i.e. participant, parent,

		investigator, intervention administrator, outcome assessor)
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 2; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 2; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear (unclear if follow-up duration of 12 weeks is sufficient to detect significant treatment effects, in particular, adverse events)
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (paper states 'Double-blind' but gives no further detail with regards to who is blinded, i.e. participant, parent, investigator, intervention administrator, outcome assessor)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (paper states 'Double-blind' but gives no further detail with regards to who is blinded, i.e. participant, parent, investigator, intervention administrator, outcome assessor)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

1.3.5 NAGARAJ2006

Study ID		NAGARAJ2006
Bibliographic reference: Nagaraj R, Singhi P, Malhi P. Risperidone in children with autism: randomized, placebo-controlled, double-blind study. Journal of Child Neurology. 2006;21:450-455.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (random number table)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (sealed envelopes)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		

Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 1	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 1	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes

D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.4 BIOMEDICAL INTERVENTIONS AIMED AT CORE AUTISM FEATURES

1.4.1 ADAMS2009A/2009B

Study ID		ADAMS2009A/2009B
Bibliographic reference: Adams JB, Baral M, Geis E, Mitchell J, Ingram J, Hensley A, et al. Safety and efficacy of oral DMSA therapy for children with autism spectrum disorders: part A-medical results. BMC Clinical Pharmacology. 2009a;9:16. Adams JB, Baral M, Geis E, Mitchell J, Ingram J, Hensley A, et al. Safety and efficacy of oral DMSA therapy for children with autism spectrum disorders: part B - behavioral results. BMC Clinical Pharmacology. 2009b;9:17.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (insufficient detail reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)

B2	Participants receiving care were kept 'blind' to treatment allocation	Yes (placebo matched on appearance and smell)
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: Not reported; Control group N: Not reported N=8 dropped out of phase 2 but not clear how many of these were in experimental group and how many in control group	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Unclear
C3	For how many participants in each group were no outcome data available? Experimental group N: Not reported; Control group N: Not reported N=8 dropped out of phase 2 but not clear how many of these were in experimental group and how many in control group	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Unclear

Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias (dropout due to adverse events is reported and was comparable between groups)		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes (parent-completed and parents were blinded to treatment assignment)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (parent-completed and parents non-blind to other potentially confounding factors)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.4.2 ADAMS2011

Study ID		ADAMS2011
Bibliographic reference: Adams JB, Audhya T, McDonough-Means S, Rubin RA, Quig D, Geis E, et al. Effect of a vitamin/mineral supplement on children and adults with autism. BMC Pediatrics. 2011;11:111.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (randomisation performed by study coordinator and all other study staff were blinded)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (insufficient detail reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (percentage of participants currently receiving psychosocial interventions in each group not reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes (placebo and supplement matched on taste)
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes (parents were intervention administrators and were blinded)
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		

Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 8; Control group N: 11	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 19; Control group N: 18	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Different for different outcomes: No for Parent Global Impressions-Revised (PGI-R) as revised scale and no independent reliability and validity ratings; Unclear/unknown for Severity of Autism Scale (SAS) as reliability and validity of this outcome measure is not reported and unclear; and unclear/unknown for adverse event outcomes as unclear outcome measure for recording adverse events
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcomes: No for most outcomes (with the exception of adverse events) as parent-rated and parents non-blind to other potentially confounding factors
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcomes: Unclear/unknown risk for Parent Global Impressions-Revised (PGI-R) scale and Severity of Autism Scale (SAS)		
Likely direction of effect: Where risk unclear/unknown, direction unknown		

1.4.3 BAHRAMI2012

Study ID		BAHRAMI2012
Bibliographic reference: Bahrami F, Movahedi A, Marandi SM, Abedi A. Kata techniques training consistently decreases stereotypy in children with autism spectrum disorder. Research in Developmental Disabilities. 2012;33:1183-1193.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes (matched on age, gender and autism severity and no baseline group difference on the outcome measure)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		

High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (outcome measure based on interview with carers and teachers who were non-blind and blinding of examiner not reported)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (outcome measure based on interview with carers and teachers who were non-blind and blinding of examiner not reported)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.4.4 CHAN2009

Study ID		CHAN2009
Bibliographic reference: Chan AS, Cheung M-C, Sze SL, Leung WW. Seven-star needle stimulation improves language and social interaction of children with autistic spectrum disorders. American journal of Chinese Medicine. 2009;37:495-504.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	No (all outcomes are based on a questionnaire designed specifically for this study and no information on reliability or validity was reported)
D4	Investigators were kept 'blind' to participants' exposure to the intervention	No (outcome measures completed by parents who were not blind)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (outcome measures completed by parents who were not blind)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.4.5 CHEZ2002

Study ID		CHEZ2002
Bibliographic reference: Chez MG, Buchanan CP, Aimonovitch MC, Becker M, Schaefer K, Black C, et al. Double-blind, placebo-controlled study of L-carnosine supplementation in children with autistic spectrum disorders. Journal of Child Neurology. 2002;17:833-837.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (nurse-controlled randomisation)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (significant baseline group difference [p=0.02] on the communication subscale of the Gilliam Autism Rating Scale with the experimental group showing greater severity [mean: 21.64] than the control group [mean: 15.23])
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (42% of participants currently receiving anticonvulsants [valproic acid] but group assignment for these participants not reported and no detail reported with regards to other current medication or psychosocial interventions)

B2	Participants receiving care were kept 'blind' to treatment allocation	Yes (placebo matched on appearance, taste and smell)
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes (parents were intervention administrators and were blinded)
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes

Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcomes: No for parent-rated as parents non-blind to other potentially confounding factors; Unclear/unknown for other outcome measures as blinded outcome assessment but identity of outcome assessor (and blinding to other potentially confounding factors) not reported
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.4.6 CONIGLIO2001

Study ID		CONIGLIO2001
Bibliographic reference: Coniglio SJ, Lewis JD, Lang C, Burns TG, Subhani-Siddique R, Weintraub A, et al. A randomized, double-blind, placebo-controlled trial of single-dose intravenous secretin as treatment for children with autism. Journal of Pediatrics. 2001;138:649-655.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (significant differences were found on measures of: frequency of abnormal development from birth onwards; 3 of 15 [unspecified] characteristics of DSM-IV criteria for autism; PLS language age score)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes

B3	Individuals administering care were kept 'blind' to treatment allocation	Unclear (paper reports that it was 'double-blind' but unclear if intervention adminsitrator was blinded)
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (paper reports that it was 'double-blind' but unclear if outcome assessor/s blinded)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (paper reports that it was 'double-blind' but unclear if outcome assessor/s blinded)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

1.4.7 DUNNGEIER2000

Study ID		DUNNGEIER2000
Bibliographic reference: Dunn-Geier J, Ho HH, Auersperg E, Doyle D, Eaves L, Matsuba C, et al. Effect of secretin on children with autism: a randomized controlled trial. Developmental Medicine and Child Neurology. 2000;42:796-802.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer random number generator)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (randomisation sequence generated by an independent statistician)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (placebo group had a higher PLS-3 score)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		

Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Different validity and reliability for different outcomes: Yes - CARS; PLS-3; ABC Unclear - parent-rated number of gastrointestinal problems
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes (parents and clinicians were blind to treatment allocation)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different blinding for different outcomes: No - ABC; parent-rated number of gastrointestinal problems - parent rated and parents are not blind to confounding factors Unclear - CARS; PLS-3 - clinician rated and although clinicians were blind to treatment allocation, blinding to confounding variables is unclear
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.4.8 FAHMY2013

Study ID		FAHMY2013
Bibliographic reference: Fahmy SF, El-hamamsy MH, Zaki OK, Badary OA. L-Carnitine supplementation improves the behavioural symptoms in autistic children. Research in Autism Spectrum Disorder. 2013;7:159-166.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (coin tossing)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		

Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 1; Control group N: 4	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 1; Control group N: 4	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.4.9 GRANPEESHEH2010

Study ID		GRANPEESHEH2010
Bibliographic reference: Granpeesheh D, Tarbox J, Dixon DR, Wilke AE, Allen MS, Bradstreet JJ. Randomized trial of hyperbaric oxygen therapy for children with autism. Research in Autism Spectrum Disorders. 2010;4:268-275.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (coin tossing)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (randomisation was done by an investigator blind to all participant details except participant number, age and number of ABA treatment hours being received but method of allocation concealment not specified)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (statistically significant baseline group difference in ABC Irritability and RBS Self-injurious behaviour with higher scores in the control group)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (no differences in number of hours of ABA treatment but no detail reported with regards to any pharmacological interventions participants might have been receiving)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes (attention-placebo condition)

B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk (low risk for response bias and high risk for performance bias)		
Likely direction of effect: Effect size bigger, where high risk		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: Not reported; Control group N: Not reported N=12 dropped out but the paper does not report the groups these participants were assigned to	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Unclear
C3	For how many participants in each group were no outcome data available? Experimental group N: Not reported; Control group N: Not reported N=12 dropped out but the paper does not report the groups these participants were assigned to	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Unclear
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes

D2	The study used a precise definition of outcome	Different for different outcomes: Unclear for dichotomous measures of positive treatment response based on the ADOS as definition of 'improvement' on the ADOS is under-specified in the paper
D3	A valid and reliable method was used to determine the outcome	Different for different outcomes: Unclear for dichotomous measures of positive treatment response based on the ADOS as definition of 'improvement' on the ADOS is under-specified in the paper. Also unclear for behavioural observation outcome measures as only 30-46% of behavioural observations were double-coded and no standardized observation schedule used so reliability and validity of this outcome measure unclear
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (outcome assessors were trained assessors blinded to group assignment but blinding to other potentially confounding factors unclear)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.4.10 KNIVSBERG2002/2003

Study ID		KNIVSBERG2002/2003
Bibliographic reference: Knivsberg AM, Reichelt KL, Høien T, Nødland M. A randomised, controlled study of dietary intervention in autistic syndromes. Nutritional Neuroscience. 2002;5:251-261. Knivsberg AM, Reichelt KL, Høien T, Nødland M. Effect of dietary intervention on autistic behavior. Focus on Autism and Other Developmental Disabilities. 2003;18:247-256.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (random assignment performed by independent professionals)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes (pairwise matching on severity of autistic symptoms, age and PIQ)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No (intervention administrators were non-blind parents)

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (for TOMI identity and blinding of outcome assessors unclear, and for DIPAB although investigator blinded to group assignment outcome measure based on parental interview)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (for TOMI identity and blinding of outcome assessors unclear, and for DIPAB although investigator blinded to group assignment outcome measure based on parental interview)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcomes: Unclear/unknown for TOMI and high risk for DIPAB		
Likely direction of effect: Effect size bigger, where high risk		

1.4.11 KOUIJZER2010

Study ID		KOUIJZER2010
Bibliographic reference: Kouijzer MEJ, van Schie HT, de Moor JMH, Gerrits BJL, Buitelaar JK. Neurofeedback treatment in autism. preliminary findings in behavioral, cognitive, and neurophysiological functioning. Research in Autism Spectrum Disorders. 2010;4:386-399.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (group difference in diagnoses - in the experimental group 60% had autism and 40% had PDD-NOS and no participants had Asperger's disorder and in the control group 20% had autism, 40% had PSS-NOS and 40% had Asperger's disorder)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No

B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	No (outcomes were either rated by non-blind parents or teachers who would not have been blinded as intervention took place in school or after school)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (outcomes were either rated by non-blind parents or teachers who would not have been blinded as intervention took place in school or after school)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.4.12 MOLLOY2002

Study ID		MOLLOY2002
Bibliographic reference: Molloy CA, Manning-Courtney P, Swayne S, Bean J, Brown JM, Murray DS, et al. Lack of benefit of intravenous synthetic human secretin in the treatment of autism. Journal of Autism and Developmental Disorders. 2002;32:545-551.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (outcome assessments were clinician-rated, but unclear if they were blind to confounding factors)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.4.13 OWLEY1999/2001

Study ID		OWLEY1999/2001
Bibliographic reference: Owley T, Steele E, Corsello C, Risi S, McKaig K, Lord C, et al. A double-blind, placebo-controlled trial of secretin for the treatment of autistic disorder. Medscape General Medicine. 1999;1(3). Available from: http://www.medscape.com/viewarticle/715516. Owley T, McMahon W, Cook EH, Laulhere T, South M, Mays LZ, et al. Multisite, double-blind, placebo-controlled trial of porcine secretin in autism. Journal of the American Academy of Child and Adolescent Psychiatry. 2001;40:1293-1299.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (allocation was carried out by investigational pharmacy at each site)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (the groups were significantly different on the ADOS: social interaction and the ADOS: stereotypy)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes

B3	Individuals administering care were kept 'blind' to treatment allocation	Unclear (care administrators were not reported, but care administrators were not involved in outcome measures)
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes (parents and outcome assessors were blind to treatment allocation)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different blinding for different outcomes: No - GARS; VABS - parent rated and parents are not blind to confounding factors Unclear - ADOS; ABC; CGI-S; Mullen/DAS/PPVT/DTVP-2 - outcome assessors not reported so unclear whether they are blind to treatment allocation
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.4.14 SAMPANTHAVIVAT2012

Study ID		SAMPANTHAVIVAT2012
Bibliographic reference: Sampanthavivat M, Singkhwa W, Chaiyakul T, Karoonyawanich S, Ajpru H. Hyperbaric oxygen in the treatment of childhood autism: a randomised controlled trial. Diving and Hyperbaric Medicine. 2012;42:128-133.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (random number table)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (only the hyperbaric technicians were aware of allocation)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes (no significant group differences in the number of participants currently receiving risperidone, other medications, nutritional supplements or behavioural therapy)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes
B3	Individuals administering care were kept 'blind' to treatment allocation	No (intervention administrators were hyperbaric technicians who were not blind to treatment allocation, but were not involved in outcome assessments and did

		not reveal allocation to parents, participants or researchers)
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk (High risk for performance bias and low risk for response bias)		
Likely direction of effect: Effect size bigger, where high risk		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 1; Control group N: 1	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 1; Control group N: 1	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		

D1	The study had an appropriate length of follow-up	Different for different outcome measures: Yes for positive treatment effect measures Unclear for adverse events (unclear if 4 weeks sufficient follow-up duration to detect potential longer-term adverse events)
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Different for different outcome measures: Yes for positive treatment effect measures Unclear for adverse events as outcome measure not reported
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Different for different outcome measures: Yes for positive treatment effect measures Unclear for adverse events as identity and blinding of outcome assessors not reported
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcome assessors: No for parents and unclear for clinicians for positive treatment outcomes Unclear for adverse event outcomes as identity and blinding of outcome assessors not reported
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcomes: Low risk for positive treatment effect outcomes Unclear/unknown risk for adverse event outcomes		
Likely direction of effect: Effect size smaller (for adverse event outcomes)		

1.4.15 SANDLER1999

Study ID	SANDLER1999
Bibliographic reference: Sandler AD, Sutton KA, DeWeese J, Girardi A, Sheppard V, Bodfish JW. Lack of benefit of a single dose of synthetic human secretin in the treatment of autism and pervasive developmental disorder. New England Journal of Medicine. 1999;341:1801-1806.	
Guideline topic: Management and support of children and young people on the autism spectrum	Review question number: 4.1
Checklist completed by: Lucy Burt	
A. Selection bias (systematic differences between the comparison groups)	

A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes

C2	a. How many participants did not complete treatment in each group? Experimental group N: 2; Control group N: 2	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 2; Control group N: 2	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (outcome assessors were parents and teachers who were not blind to confounding factors)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.4.16 UNIS2002

Study ID		UNIS2002
Bibliographic reference: Unis AS, Munson JA, Rogers SJ, Goldson E, Osterling J, Gabriels R, et al. A randomized, double-blind, placebo-controlled trial of porcine versus synthetic secretin for reducing symptoms of autism. Journal of the American Academy of Child and Adolescent Psychiatry. 2002;41:1315-1321.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: Unclear; Control group N: Unclear	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Unclear
C3	For how many participants in each group were no outcome data available? Experimental group N: Unclear; Control group N: Unclear	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Unclear
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Different validity and reliability for different measures: Yes - ADOS; EOWPVT; CDI; Aberrant Behaviour Checklist; Unclear - SOS
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different blinding for different measures: No - CDI; Aberrant Behaviour Checklist; SOS: outcome assessors are parents and teachers who are not blind to confounding factors Unclear - ADOS; EOWPVT: outcome assessors not reported so unclear if they are blind to confounding variables
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.4.17WHITELEY2010

Study ID		WHITELEY2010
Bibliographic reference: Whiteley P, Haracopos D, Knivsberg A-M, Reichelt KL, Parlar S, Jacobsen J, et al. The ScanBrit randomised, controlled, single-blind study of a gluten- and casein-free dietary intervention for children with autism spectrum disorders. Nutritional Neuroscience. 2010;13:87-100.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (allocation performed by independent statistician)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (insufficient detail reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No (intervention administrators were non-blind parents)

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 12; Control group N: 5	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	No
C3	For how many participants in each group were no outcome data available? Experimental group N: 12; Control group N: 5	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	No
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Different for different outcomes: Yes for most outcome measures but unclear for adverse events as outcome measure for recording adverse events not reported so reliability and validity unclear
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Different for different outcomes: Unclear for GARS as identity and blinding of outcome assessors not reported; No for VABS and the ADHD-IV as parent-reported and non-blind to treatment allocation and other potentially confounding factors; No for adverse events as monitored by study nutritionist who was non-blind
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcomes: Unclear for GARS as identity and blinding of outcome assessors not reported; No for VABS and the ADHD-IV as parent-reported and non-blind to treatment allocation and other potentially confounding factors; No for adverse events as monitored by study nutritionist who was non-blind
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcomes: Unclear/unknown risk for GARS and adverse events; High risk for VABS and ADHD-IV		
Likely direction of effect: Effect size bigger, where high risk		

1.4.18WONG2002/CHEUK2011

Study ID		WONG2002/CHEUK2011
Bibliographic reference: Wong V, Sun JG. Research on tongue acupuncture in children with autism. The 9th International Child Neurology Congress and the 7th Asian and Oceanian Congress of Child Neurology; 2002. Cheuk DKL, Wong V, Chen WX. Acupuncture for autism spectrum disorders (ASD)(Review). The Cochrane Database of Systematic Reviews. 2011;9:Art. No CD007849. Available from: DOI: 10.1002/14651858.CD007849.pub2.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer generated randomisation)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (random computerised group allocation for each case)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (insufficient detail reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No

B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Different validity and reliability for different outcomes: Yes: RLRS; CGI-S Unclear: WeeFIM
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (outcome assessors were blind, but some outcomes [not reported which ones] had involvement from the parents who were not blind)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (outcome assessors were blind, but some outcomes [not reported which ones] had involvement from the parents who were not blind)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

1.4.19WONG2008/CHEUK2011

Study ID		WONG2008/CHEUK2011
Bibliographic reference: Wong CL. Acupuncture and autism spectrum disorders - an assessor-blinded randomised controlled trial (M Phil). Hong Kong: University of Hong Kong; 2008. Cheuk DKL, Wong V, Chen WX. Acupuncture for autism spectrum disorders (ASD)(Review). The Cochrane Database of Systematic Reviews. 2011;9:Art. No CD007849. Available from: DOI: 10.1002/14651858.CD007849.pub2.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 4.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer generated randomisation)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reoprted with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (insufficient detail reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	No (the conventional education programme differed for each participant which may introduce bias)
B2	Participants receiving care were kept 'blind' to treatment allocation	No

B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 4; Control group N: 2	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 4; Control group N: 2	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Different validity and reliability for different measures: Unclear - WeeFIM Yes - all other measures
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (outcome assessors were blind, but some outcomes [not reported which ones] had involvement from the parents who were not blind)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (outcome assessors were blind, but some outcomes [not reported which ones] had involvement from the parents who were not blind)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

1.5 PSYCHOSOCIAL INTERVENTIONS AIMED AT BEHAVIOUR THAT CHALLENGES

1.5.1 AMAN2009/ARNOLD2012/SCAHILL2012

Study ID		AMAN2009/ARNOLD2012/SCAHILL2012
Bibliographic reference: Aman MG, McDougle CJ, Scahill L, Handen B, Arnold LE, Johnson C, et al. Medication and parent training in children with pervasive developmental disorders and serious behavior problems: results from a randomized clinical trial. Journal of the American Academy of Child and Adolescent Psychiatry. 2009;48:1143-1154. Arnold LE, Aman MG, Li X, Butter E, Humphries K, Scahill L, et al. Research Units of Pediatric Psychopharmacology (RUPP) autism network randomized clinical trial of parent training and medication: one-year follow-up. Journal of the American Academy of Child and Adolescent Psychiatry. 2012;51:1173-1184. Scahill L, McDougle CJ, Aman MG, Johnson C, Handen B, Bearss K, et al. Effects of risperidone and parent training on adaptive functioning in children with pervasive developmental disorders and serious behavioral problems. Journal of American Academy of Child and Adolescent Psychiatry. 2012;51:136-146.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (the control group had significantly higher scores on ABC-Stereotypy and lower scores on Vineland Adaptive Behavior Scale subscales and fewer participants with average IQ than the experimental group at baseline)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		

Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 20; Control group N: 9	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	No
C3	For how many participants in each group were no outcome data available? Experimental group N: 20; Control group N: 9	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	No

Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Unclear (no independent measures of reliability or validity reported for the primary outcome measure of Home Situations Questionnaire [HSQ])
D4	Investigators were kept 'blind' to participants' exposure to the intervention	No (outcome measures relied on non-blind parent-report and parents were involved in the intervention)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (outcome measures relied on non-blind parent-report and parents were involved in the intervention)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.5.2 CARR2006

Study ID		CARR2006
Bibliographic reference: Carr EG, Blakeley-Smith A. Classroom intervention for illness-related problem behavior in children with developmental disabilities. Behavior Modification. 2006;30:901-924.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (coin tossing)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (the mean severity of illness was greater for the experimental group than the control group. However, reported ANOVAs control for symptom severity)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 1; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 1; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	No

D3	A valid and reliable method was used to determine the outcome	No (study-specific outcome measure with no independent reliability or validity data)
D4	Investigators were kept 'blind' to participants' exposure to the intervention	No (outcome assessors were intervention administrators)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (outcome assessors were teaching assistants)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.5.3 SOFRONOFF2004

Study ID		SOFRONOFF2004
Bibliographic reference: Sofronoff K, Leslie A, Brown W. Parent management training and Asperger syndrome: a randomized controlled trial to evaluate a parent based intervention. Autism. 2004;8:301-317.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear, the paper simply states that participants were randomised as questionnaires were returned)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (insufficient detail reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		

High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Unclear (the timing of assessments is not entirely clear from the paper but post-intervention assessments are described as occurring at 1-month and 3-months post-intervention, and if this is accurate, namely that the follow-up periods were calculated from the end of intervention, then the follow-up durations are different for the two active interventions, and unclear for the waitlist control group, as the workshop intervention duration is only one day compared to the six week individual sessions intervention)
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	No (outcome measures were parent-reported and parents were the participants in the intervention and were non-blind)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (outcome measures were parent-reported and parents were the participants in the intervention and were non-blind)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.5.4 SOFRONOFF2007

Study ID		SOFRONOFF2007
Bibliographic reference: Sofronoff K, Attwood T, Hinton S, Levin I. A randomized controlled trial of a cognitive behavioural intervention for anger management in children diagnosed with Asperger syndrome. Journal of Autism and Developmental Disorders. 2007;37:1203-1214.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (insufficient detail reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: Not reported; Control group N: Not reported Following randomization, five families left the study, but information on group allocation of these families is not reported	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Unclear
C3	For how many participants in each group were no outcome data available? Experimental group N: Not reported; Control group N: Not reported Following randomization, five families left the study, but information on group allocation of these families is not reported	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Unclear
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	No (study-specific outcome measure with no independent reliability or validity data)
D4	Investigators were kept 'blind' to participants' exposure to the intervention	No (parent-rated and parents were non-blind)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (parent-rated and parents were non-blind)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.6 PHARMACOLOGICAL INTERVENTIONS AIMED AT BEHAVIOUR THAT CHALLENGES

1.6.1 AKHONDZADEH2004

Study ID		AKHONDZADEH2004
Bibliographic reference: Akhondzadeh S, Erfani S, Mohammadi MR, Tehrani-Doost M, Amini H, Gudarzi SS, et al. Cyproheptadine in the treatment of autistic disorder: a double-blind placebo-controlled trial. Journal of Clinical Pharmacy and Therapeutics. 2004;29:145-150.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer-generated code)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (sealed opaque envelopes)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes

B3	Individuals administering care were kept 'blind' to treatment allocation	Yes
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear (not clear if 8 weeks is sufficient duration to detect adverse events)
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcomes: No for parent-rated ABC and CARS; Unclear for clinician-rated adverse events
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcomes: Low risk for positive treatment response outcomes and unclear/unknown risk for adverse event outcomes		
Likely direction of effect: Unknown direction were risk of bias was unclear		

1.6.2 AKHONDZADEH2008

Study ID		AKHONDZADEH2008
Bibliographic reference: Akhondzadeh S, Tajdar H, Mohammadi M-R, Mohammadi M, Nouroozinejad G-H, Shabstari OL, et al. A double-blind placebo controlled trial of piracetam added to risperidone in patients with autistic disorder. Child Psychiatry and Human Development. 2008;39:237-245.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer-generated code)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (sealed opaque envelopes)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes

Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes (placebo identical in appearance in terms of shape, size, colour, and taste)
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes

C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear (unclear if 10 weeks sufficient duration to observe significant treatment effects, in particular, adverse events)
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk (low risk for primary outcome of behaviour that challenges but for adverse events outcome rating unclear/unknown due to concerns with regards to follow-up duration)		
Likely direction of effect: Not applicable		

1.6.3 AKHONDZADEH2010

Study ID		AKHONDZADEH2010
Bibliographic reference: Akhondzadeh S, Fallah J, Mohammadi M-R, Imani R, Mohammadi M, Salehi B, et al. Double-blind placebo-controlled trial of pentoxifylline added to risperidone: effects on aberrant behavior in children with autism. Progress in Neuro -Psychopharmacology and Biological Psychiatry. 2010;34:32-36.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer-generated code)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (sealed opaque envelopes)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes (participants did not receive any neuroleptic or psychotropic drug treatment within 6 months prior to recruitment and participants did not receive any psychosocial therapies during the trial)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes (placebo was identical in shape, size, colour and taste)
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes (drugs dispensed by a blinded investigational drug pharmacist)

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes for positive treatment effects as, if anything, will result in a conservative estimate of effect but for adverse events it is unclear if 10 weeks is a sufficient follow-up duration to observe potential longer-term side effects
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear for ABC as there was a blind outcome rater (and independent outcome rater for positive treatment outcomes and side effects) but the ABC was completed based on parental report and parents will be non-blind to other potentially confounding factors
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk		
Likely direction of effect: Unknown direction		

1.6.4 CAMPBELL1993

Study ID		CAMPBELL1993
Bibliographic reference: Campbell M, Anderson LT, Small AM, Adams P, Gonzalez NM, Ernst M. Naltrexone in autistic children: behavioral symptoms and attentional learning. Journal of the American Academy of Child and Adolescent Psychiatry. 1993;32:1283-1291.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method was unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail was reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (there was a significant group difference at baseline [t=2.41, p=0.02] in mean adaptive developmental quotients, as measured by the Gesell Developmental Schedules, with significantly higher mean DQ in the experimental group [mean: 56.8] relative to the control group [mean: 44.9])
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes (matching placebo and naltrexone tablets)

B3	Individuals administering care were kept 'blind' to treatment allocation	Unclear (identity and blinding of intervention administrators not reported)
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: Not reported Control group N: Not reported Number of people assigned and dropout is not reported	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Unclear
C3	For how many participants in each group were no outcome data available? Experimental group N: Not reported Control group N: Not reported Number of people assigned and dropout is not reported	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Unclear
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Different for different outcomes: Unclear for adverse event outcomes as 6 weeks might not be a sufficient follow-up duration to observe potential longer-term adverse events
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Different for different outcomes: No for adverse event outcomes as the outcome measure was designed by an author specifically for the study with no independent reliability or validity ratings
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Different for different outcomes: Unclear for adverse event outcomes as the identity and blinding of the outcome assessor was not reported
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcomes: Unclear for adverse event outcomes as the identity and blinding of the outcome assessor was not reported
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcomes: High risk for adverse event outcomes		
Likely direction of effect: Effect size smaller (for high risk adverse event outcomes)		

1.6.5 HARDAN2012

Study ID		HARDAN2012
Bibliographic reference: Hardan AY, Fung LK, Libove RA, Obukhanych TV, Nair S, Herzenberg LA, et al. A randomized controlled pilot trial of oral N-acetylcysteine in children with autism. Biological Psychiatry. 2012;71:956-961.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer random number generator)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (pharmacy-controlled randomization)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes (drug and placebo were matched on appearance, smell and taste)
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes (parents were intervention administrators and were blinded)
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		

Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 2; Control group N: 6	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 1; Control group N: 3	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes (Last Observation Carried Forward)

Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear for investigator-rated outcome measures and no for parent-rated outcome measures
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.6.6 HELLINGS2005

Study ID		HELLINGS2005
Bibliographic reference: Hellings JA, Weckbaugh M, Nickel EJ, Cain SE, Zarcone JR, Reese M, et al. A double-blind, placebo-controlled study of valproate for aggression in youth with pervasive developmental disorders. Journal of Child and Adolescent Psychopharmacology. 2005;15:682-692.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (pharmacy-controlled randomisation)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 3; Control group N: 2	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes (Last Observation Carried Forward)

Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear (unclear if 8 weeks sufficient follow-up duration to detect significant treatment effects, particularly for adverse events)
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (some outcome measures parent-rated and so non-blind to other potentially confounding factors)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.6.7 HOLLANDER2010

Study ID		HOLLANDER2010
Bibliographic reference: Hollander E, Chaplin W, Soorya L, Wasserman S, Novotny S, Rusoff J, et al. Divalproex sodium vs placebo for the treatment of irritability in children and adolescents with autism spectrum disorders. Neuropsychopharmacology. 2010;35:990-998.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (statistically significant [p=0.017] group difference in baseline IQ with the placebo group having a significantly higher IQ [76.1] than the experimental group [52.9])
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 2; Control group N: 1	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes (mixed regression models based on available values used to impute missing data)
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear (unclear if 12 weeks sufficient follow-up duration to detect significant treatment effects, particularly for adverse events)
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (some outcome measures parent-rated and so non-blind to other potentially confounding factors)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.6.8 JOHNSON&JOHNSON2011/KENT2012

Study ID		JOHNSON&JOHNSON2011/KENT2012
Bibliographic reference: Johnson & Johnson Pharmaceutical Research & Development, L. L. C. Risperidone in the Treatment of Children and Adolescents With Autistic Disorder: A Double-Blind, Placebo-Controlled Study of Efficacy and Safety, Followed by an Open-Label Extension Study of Safety. ClinicalTrials.gov NCT00576732; 2011. Avaialble from: http://clinicaltrials.gov/ct2/show/results/NCT00576732. Kent JM, Kushner S, Ning X, Karcher K, Ness S, Aman M, et al. Riseridone dosing in children and adolescents with autistic disorder: a double-blind, placebo-controlled study. Journal of Autism and Developmental Disorders. 2012; Epub available ahead of print. Available from: http://link.springer.com/article/10.1007%2Fs10803-012-1723-5.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (insufficient detail reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	No (statistically significant group difference in the number of participants receiving concomitant antihistamines with a higher percentage of participants in the placebo group [20%; N=7] receiving these drugs

		relative to the active treatment groups [low-dose group: 7%, N=2; high dose group: 3%, N=1])
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 11; Control group N: 8	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 1; Control group N: 1	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes (Last Observation Carried Forward)
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Different for different outcomes: Yes for positive treatment outcomes Unclear for adverse event outcomes (unclear if 6 weeks is sufficient follow-up duration to observe potential longer-term adverse events)
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (the rater of the ABC is not reported and if parent-completed it will be non-blind to other important confounding and prognostic factors)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcomes: Low risk for positive treatment outcomes Unclear/unknown risk for adverse event outcomes		
Likely direction of effect: Effect size smaller (for adverse event outcomes)		

1.6.9 KING2001

Study ID		KING2001
Bibliographic reference: King BH, Wright M, Handen BL, Sikich L, Zimmerman AW, McMahon W, et al. Double-blind, placebo-controlled study of amantadine hydrochloride in the treatment of children with autistic disorder. Journal of the American Academy of Child and Adolescent Psychiatry. 2001;40:658-665.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes (taste- and colour-matched placebo)
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear (5 weeks may not be a sufficient duration to observe adverse events)
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Different for difference outcome measures: For parent-rated ABC outcome assessors were blind to treatment assignment but not to other potentially confounding factors, for investigator-rated CGI the blinding of the outcome assessor is not reported and for adverse event outcome measures neither the identity nor the blinding of outcome assessors is reported
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for difference outcome measures: For parent-rated ABC outcome assessors were blind to treatment assignment but not to other potentially confounding factors, for investigator-rated CGI the blinding of the outcome assessor is not reported and for adverse event outcome measures neither the identity nor the blinding of outcome assessors is reported
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear for ABC and CGI outcome measures and high risk for adverse events		
Likely direction of effect: Where high risk, effect size smaller (adverse events)		

1.6.10MARCUS2009/VARNI2012

Study ID		MARCUS2009/VARNI2012
Bibliographic reference: Marcus RN, Owen R, Kamen L, Manos G, McQuade RD, Carson WH, et al. A placebo-controlled, fixed-dose study of aripiprazole in children and adolescents with irritability associated with autistic disorder. Journal of the American Academy of Child and Adolescent Psychiatry. 2009;48:1110-1119. Varni JW, Handen BL, Corey-Lisle PK, Guo Z, Manos G, Ammerman DK, et al. Effect of aripiprazole 2 to 15 mg/d on health-related quality of life in the treatment of irritability associated with autistic disorder in children: a post-hoc analysis of two controlled trials. Clinical Therapeutics. 2012;34:980-992.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (no baseline statistical comparisons between groups reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Unclear (paper states 'Double-blind' but gives no further detail with regards to who is blinded, i.e. participant, parent,

		investigator, intervention administrator, outcome assessor)
B3	Individuals administering care were kept 'blind' to treatment allocation	Unclear (paper states 'Double-blind' but gives no further detail with regards to who is blinded, i.e. participant, parent, investigator, intervention administrator, outcome assessor)
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 9; Control group N: 14	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 1; Control group N: 3	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes (Last Observation Carried Forward)
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear (unclear if follow-up duration of 8 weeks is sufficient to detect significant treatment effects, in particular, adverse events)
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (paper states 'Double-blind' but gives no further detail with regards to who is blinded, i.e. participant, parent, investigator, intervention administrator, outcome assessor)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (paper states 'Double-blind' but gives no further detail with regards to who is blinded, i.e. participant, parent, investigator, intervention administrator, outcome assessor)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

1.6.11 OWEN2009/AMAN2010/VARNI2012

Study ID		OWEN2009/AMAN2010/VARNI12012
Bibliographic reference: Owen R, Sikich L, Marcus RN, Corey-Lisle P, Manos G, McQuade RD, et al. Aripiprazole in the treatment of irritability in children and adolescents with autistic disorder. Pediatrics. 2009;124:1533-1540. Aman MG, Kasper W, Manos G, Mathew S, Marcus R, Owen R, et al. Line-item analysis of the aberrant behavior checklist: results from two studies of aripiprazole in the treatment of irritability associated with autistic disorder. Journal of Child and Adolescent Psychopharmacology. 2010;20:415-422. Varni JW, Handen BL, Corey-Lisle PK, Guo Z, Manos G, Ammerman DK, et al. Effect of aripiprazole 2 to 15 mg/d on health-related quality of life in the treatment of irritability associated with autistic disorder in children: a post-hoc analysis of two controlled trials. Clinical Therapeutics. 2012;34:980-992.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer random number generator)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (pharmacy-controlled randomization)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)

B2	Participants receiving care were kept 'blind' to treatment allocation	Unclear (paper states 'Double-blind' but gives no further detail with regards to who is blinded, i.e. participant, parent, investigator, intervention administrator, outcome assessor)
B3	Individuals administering care were kept 'blind' to treatment allocation	Unclear (paper states 'Double-blind' but gives no further detail with regards to who is blinded, i.e. participant, parent, investigator, intervention administrator, outcome assessor)
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 8; Control group N: 15	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	No (but as the greater dropout rate is in the placebo condition there is not the concern that dropout is due to adverse events)
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 1	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes (Last Observation Carried Forward)
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear (unclear if follow-up duration of 8 weeks sufficient to detect significant treatment effects, in particular, adverse events)
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (paper states 'Double-blind' but gives no further detail with regards to who is blinded, i.e. participant, parent, investigator, intervention administrator, outcome assessor)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (paper states 'Double-blind' but gives no further detail with regards to who is blinded, i.e. participant, parent, investigator, intervention administrator, outcome assessor)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

1.6.12 REZAEI2010

Study ID		REZAEI2010
Bibliographic reference: Rezaei V, Mohammadi M-R, Ghanizadeh A, Sahraian A, Tabrizi M, Rezazadeh S-A, et al. Double-blind, placebo-controlled trial of risperidone plus topiramate in children with autistic disorder. Progress in Neuro-Psychopharmacology and Biological Psychiatry. 2010;34:1269-1272.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer random number generator)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (sealed, opaque envelopes)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear (unclear if 8 weeks follow-up duration a sufficient length of time to detect significant treatment effects, however if this is true it will lead to a conservative estimate of treatment effects, and thus study quality was not downgraded on this basis)
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (parents did input into the outcome assessment. However, completion of the scale by a blinded rater was considered sufficient to ensure reduction of the risk of detection bias)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.6.13 RUPPRISPERIDONE2001

Study ID	RUPPRISPERIDONE2001

Bibliographic reference:

Aman MG, Holloway JA, McDougle CJ, Scahill L, Tierney E, McCracken JT, et al. Cognitive effects of risperidone in children with autism and irritable behavior. Journal of Child and Adolescent Psychopharmacology. 2008;18:227-236.

Anderson GM, Scahill L, McCracken JT, McDougle CJ, Aman MG, Tierney E, et al. Effects of short- and long-term risperidone treatment on prolactin levels in children with autism. Biological Psychiatry. 2007;61:545-550.

Arnold LE, Vitiello B, McDougle C, Scahill L, Shah B, Gonzalez NM, et al. Parent-defined target symptoms respond to risperidone in RUPP autism study: customer approach to clinical trials. Journal of the American Academy of Child and Adolescent Psychiatry. 2003;42:1443-1450.

Arnold LE, Farmer C, Kraemer HC, Davies M, Witwer A, Chuang S, et al. Moderators, mediators, and other predictors of risperidone response in children with autistic disorder and irritability. Journal of Child and Adolescent Psychopharmacology. 2010;20:83-93.

McDougle CJ, Scahill L, Aman MG, McCracken JT, Tierney E, Davies M, et al. Risperidone for the core symptom domains of autism: results from the study by the autism network of the research units on pediatric psychopharmacology. American Journal of Psychiatry. 2005;162:1142-1148.

Research Units on Pediatric Psychopharmacology Autism Network. Risperidone in children with autism and serious behavioral problems. New England Journal of Medicine. 2002;347:314-321.

Research Units on Pediatric Psychopharmacology Autism Network. Risperidone treatment of autistic disorder: longer-term benefit and blinded discontinuation after 6 months. American Journal of Psychiatry. 2005;162:1361-1369.

Scahill L, McCracken J, McDougle CJ, Aman M, Arnold LE, Tierney E, et al. Methodological issues in designing a multisite trial of risperidone in children and adolescents with autism. Journal of Child and Adolescent Psychopharmacology. 2001;11:377-388.

Guideline topic: Management and support of children and young people on the autism spectrum	Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars	

A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported)

A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (significantly greater scores on ABC Inappropriate speech subscale [p=0.03] in the control group and a trend for significantly lower scores on VABS Daily Living subscale [p=0.07] and ABC Stereotypy [p=0.09] in the control group [RUPP2002])
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 3; Control group N: 18	

	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	No (higher dropout in placebo group)
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes (Last Observation Carried Forward)

Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear (follow-up duration of 8 weeks may not be sufficient to detect significant treatment effects, in particular, adverse events. For instance, 6-month follow-up in 43 participants followed longitudinally [ANDERSON2007] showed weight gain increased from 2.7kg at 8 weeks to 5.6kg at 6 months)
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (the ABC outcome measure is parent-completed)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcomes: Low risk for positive treatment outcomes and unclear/unknown risk for adverse event outcomes		
Likely direction of effect: Unknown direction where risk of bias is unclear		

1.6.14 SHEA2004/PANDINA2007

Study ID		SHEA2004/PANDINA2007
Bibliographic reference: Shea S, Turgay A, Carroll A, Schulz M, Orlik H, Smith I, et al. Risperidone in the treatment of disruptive behavioral symptoms in children with autistic and other pervasive developmental disorders. Pediatrics. 2004;114:e634-e641. Pandina GJ, Bossie CA, Youssef E, Zhu Y, Dunbar F. Risperidone improves behavioral symptoms in children with autism in a randomized, double-blind, placebo-controlled trial. Journal of Autism and Developmental Disorders. 2007;37:367-373.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	No (more participants in the experimental group received concomitant medications for other medical conditions [N=36; 90%] than participants in the placebo group [N=26; 66.7%])
B2	Participants receiving care were kept 'blind' to treatment allocation	Unclear (paper states 'Double-blind' but gives no further detail with regards to who is blinded, i.e. participant, parent,

		investigator, intervention administrator, outcome assessor)
B3	Individuals administering care were kept 'blind' to treatment allocation	Unclear (paper states 'Double-blind' but gives no further detail with regards to who is blinded, i.e. participant, parent, investigator, intervention administrator, outcome assessor)
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 2 (SHEA2004); 2 (PANDINA2007); Control group N: 5 (SHEA2004); 4 (PANDINA2007)	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 1 (SHEA2004); 0 (PANDINA2007); Control group N: 0 (SHEA2004); 0 (PANDINA2007)	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes

Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear (unclear if follow-up duration of 8 weeks sufficient to detect significant treatment effects, in particular, adverse events)
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (paper states 'Double-blind' but gives no further detail with regards to who is blinded, i.e. participant, parent, investigator, intervention administrator, outcome assessor)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (paper states 'Double-blind' but gives no further detail with regards to who is blinded, i.e. participant, parent, investigator, intervention administrator, outcome assessor)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

1.6.15 TROOST2005

Study ID		TROOST2005
Bibliographic reference: Troost PW, Lahuis BE, Steenhuis M-P, Ketelaars CEJ, Buitelaar JK, van Engeland H, et al. Long-term effects of risperidone in children with autism spectrum disorders: a placebo discontinuation study. Journal of American Academy of Child and Adolescent Psychiatry. 2005;44:1137-1144.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (although the randomisation sequence was generated externally, it is not clear if allocation was concealed from investigators)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes
B3	Individuals administering care were kept 'blind' to treatment allocation	Unclear (although the paper states that drugs were supplied by the pharmacist as matching capsules in identical packages it is

		not clear who the pharmacist was supplying to, i.e. investigators, participants, parents, and thus it is not clear whether the intervention administrator was blinded)
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0 Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (the ABC outcome measures are based on parent-report and thus are non-blind to other potentially confounding factors)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.7 BIOMEDICAL INTERVENTIONS AIMED AT BEHAVIOUR THAT CHALLENGES

1.7.1 BENT2011

Study ID		BENT2011
Bibliographic reference: Bent S, Bertoglio K, Ashwood P, Bostrom A, Hendren RL. A pilot randomized controlled trial of omega-3 fatty acids for autism spectrum disorder. Journal of Autism and Developmental Disorders. 2011;41:545-554.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer-generated randomisation list)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (study reports that the randomisation list was prepared by persons not involved in the study but gives no further detail)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (significant baseline group difference [p=0.03] for Clinical Global Impression-Severity [CGI-S] scores with greater severity in the experimental group [mean=4.6] than in the control group [mean=4.2])
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)

B2	Participants receiving care were kept 'blind' to treatment allocation	Yes (placebo had same texture, taste and appearance)
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes (parents were intervention administrators and paper tested adequacy of blinding by asking carers at the end of the study: "do you think your child was taking omega-3 fatty acids or placebo?" and no statistically significant group differences were found in the percentage of carers who believed their child had been receiving omega-3 [40% in the omega-3 group and 64% in the placebo group, p=0.39])
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 5; Control group N: 3	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 1; Control group N: 1	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes (participants who discontinued medication were asked to return for outcome assessments and where participants did their data was included in the analysis)

Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?
Low risk of bias
Likely direction of effect: Not applicable

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Different for different outcomes: Unclear/unknown for adverse events as unclear outcome measure for recording adverse events
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcomes: No for Aberrant Behaviour Checklist (ABC) and Behavior Assessment System for Children (BASC) as parent-rated; and Unclear/unknown for Peabody Picture Vocabulary Test (PPVT), Expressive Vocabulary Test (EVT), and adverse events as identity of outcome assessors (and blinding to other potentially confounding factors) not reported
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.7.2 HASANZADEH2012

Study ID		HASANZADEH2012
Bibliographic reference: Hasanzadeh E, Mohammadi M-R, Ghanizadeh A, Rezazadeh S-A, Tabrizi M, Rezaei F, et al. A double-blind placebo controlled trial of ginkgo biloba added to risperidone in patients with autistic disorders. Child Psychiatry and Human Development. 2012;43:674–682.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer-generated code)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (sealed, opaque envelopes)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes (participants did not receive any neuroleptic or psychotropic drug treatment within 6 months prior to recruitment and participants did not receive any psychosocial therapies during the trial)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear for adverse event outcomes as 10 weeks may not be a sufficient follow-up duration to observe potential longer-term adverse events
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Unclear for adverse event outcomes as no reliability or validity data for the checklist used
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear as outcome measures included parental report and parents would be non-blind to other potentially confounding factors
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcomes: Unclear/unknown risk for adverse event outcomes		
Likely direction of effect: Unknown direction where unclear risk		

1.7.3 JOHNSON2010

Study ID		JOHNSON2010
Bibliographic reference: Johnson CR, Handen BL, Zimmer M, Sacco K. Polyunsaturated fatty acid supplementation in young children with autism. Journal of Developmental and Physical Disabilities. 2010;22:1-10.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (insufficient detail reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No (open label)
B3	Individuals administering care were kept 'blind' to treatment allocation	No (open label)
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		

High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Different for different outcomes: Unclear/unknown for behavioural observation outcome measures as only 20% of behavioural observations were double-coded and no standardized coding schedule used so reliability and validity of this outcome measure unclear
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Different for different outcome measures: No for CBCL/1.5-5 and MSEL
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcome measures: No for CBCL/1.5-5 and MSEL
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcomes: High risk for CBCL/1.5-5 and MSEL		
Likely direction of effect: Effect size bigger, where high risk		

1.7.4 KERN2001

Study ID		KERN2001
Bibliographic reference: Kern JK, Miller VS, Cauller L, Kendall R, Mehta J, Dodd M. Effectiveness of N,N-dimethylglycine in autism and pervasive development disorder. Journal of Child Neurology. 2001;16:169-173.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (pharmacy-controlled randomisation)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (statistically significant [p=0.0003] baseline group differences for the Lethargy subscale of the Aberrant Behavior Checklist [ABC] with the experimental group showing greater severity than the control group)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Unclear (insufficient detail reported)

B3	Individuals administering care were kept 'blind' to treatment allocation	Unclear (identity and blinding of intervention administrator unclear)
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 2; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 1; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	No (outcome and outcome measure under-specified)

D3	A valid and reliable method was used to determine the outcome	No (non-standardized outcome measure with no reliability or validity data)
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes (parents were blinded to treatment assignment)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (parents non-blind to other potentially confounding factors)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

1.7.5 PIRAVEJ2009

Study ID		PIRAVEJ2009
Bibliographic reference: Piravej K, Tangtrongchitr P, Chandarasiri P, Paothong L, Sukprasong S. Effects of Thai traditional massage on autistic children's behavior. Journal of Alternative and Complementary Medicine. 2009;15:1355-1361.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (unclear method of randomisation)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (the treatment group had lower scores of hyperactivity, hyperactivity index, and sleep-related problems at baseline)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	Different blinding for different care administrators. The sensory integration teacher was blind to treatment allocation, the masseuse was not blind to treatment allocation

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Different for different outcomes: CPRS and CTRS - Yes Sleep observations - Unclear
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Different blinding for different outcomes: CTRS - teacher rated and the sensory integration teacher was blind to treatment allocation CPRS and sleep observations - parent rated and parents were not blind to treatment allocation
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different blinding for different outcomes: CTRS - teacher rated and it is unclear whether the sensory integration teacher was blind to confounding factors CPRS and sleep observations - parent rated and parents were not blind to confounding factors
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcomes: CTRS - Low risk CPRS and sleep observations - High risk		
Likely direction of effect: Effect size bigger, where high risk		

1.7.6 ROSSIGNOL2009

Study ID		ROSSIGNOL2009
Bibliographic reference: Rossignol DA, Rossignol LW, Smith S, Schneider C, Logerquist S, Usman A, et al. Hyperbaric treatment for children with autism: a multicenter, randomized, double-blind, controlled trial. BMC Pediatrics. 2009;9:21.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 5.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (paper states that allocation was concealed [from all investigators, participants, parents, nursing staff, and all other clinical staff] but no details on method of allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes (no significant baseline group differences in age, gender, number of participants using medications, nutritional supplements or ABA, or on any of the outcome measures)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes (no significant baseline group differences in number of participants using medications, nutritional supplements or ABA and participants were not allowed to begin any new therapies or stop any current therapies during the trial)

B2	Participants receiving care were kept 'blind' to treatment allocation	Yes (procedures were developed and applied in order to as closely match the two conditions as possible, including using matching equipment, covering control switches, inflating and deflating the chambers in the control condition to simulate pressure changes, and masking the sounds from the chambers)
B3	Individuals administering care were kept 'blind' to treatment allocation	No (intervention administered by non-blind hyperbaric technician)
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk (low risk for response bias and high risk for performance bias)		
Likely direction of effect: Effect size bigger, where high risk		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 4; Control group N: 3	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 3; Control group N: 3	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes

Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?
Low risk of bias
Likely direction of effect: Not applicable

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear for adverse event outcome (unclear if 4 weeks is a sufficient follow-up duration to detect potential longer-term adverse events)
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes for most outcomes, no for adverse event outcome where a standardized outcome measure was not used
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes for most outcomes, no for adverse event outcome where the outcome assessor was the intervention administrator who was non-blind to treatment assignment
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No for most outcomes as parent-rated and parents would be non-blind to other potentially confounding factors; no for the adverse event outcome measure as rated by the intervention administrator; unclear for CGI as unclear if the clinician was blinded to other potentially confounding factors
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcomes: Low risk for all positive treatment effects and high risk for adverse event outcome		
Likely direction of effect: Effect size smaller, where high risk for adverse event outcome		

1.8 PSYCHOSOCIAL INTERVENTIONS AIMED AT ADAPTIVE BEHAVIOUR

1.8.1 DAWSON2010

Study ID		DAWSON2010
Bibliographic reference: Dawson G, Rogers S, Munson J, Smith M, Winter J, Greenson J, et al. Randomized, controlled trial of an intervention for toddlers with autism: the early start denver model. Pediatrics. 2010;125:e17-e23.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	No (the experimental] group reported an average of 5.2 hours/week in other therapies, whereas the control group reported an average of 9.1 hours/week of individual therapy and an average of 9.3 hours/week of group interventions)

B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 3	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 1	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Different for different outcomes: No for RBS as parent-completed and unclear/unknown for DSM-IV clinical diagnosis as blinding of outcome assessors not reported
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear for most outcomes, no for RBS as parent-completed
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcomes: Unclear/unknown for the Vineland Adaptive Behaviour Scale (VABS), high risk for Repetitive Behavior Scale (RBS) and high risk for DSM-IV clinical diagnosis		
Likely direction of effect: Effect size bigger, where high risk		

1.8.2 PAJAREYA2011

Study ID		PAJAREYA2011
Bibliographic reference: Pajareya K, Nopmaneejumruslers K. A pilot randomized controlled trial of DIR/Floortime parent training intervention for pre-school children with autistic spectrum disorders. Autism. 2011;15:563-577.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes (equivalent number of children in each group were on medication and attended a preschool programme. There were also no significant difference in the number of hours of other psychosocial interventions [including speech therapy, behavioural therapy and occupational therapy] with the control group receiving 3.3 hours and the intervention group receiving 3.1 hours)
B2	Participants receiving care were kept 'blind' to treatment allocation	No

B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 1; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes (Last Observation Carried Forward)
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Different for different outcome measures: Unclear for the parent-rated FEDQ as no independent reliability and validity data for the Thai-version of this outcome measure
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Different for different outcome measures: No for the FEDQ as the questionnaire was parent-rated and parents were involved in the intervention so the outcome assessment was non-blind
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcome measures: No for the FEDQ as the questionnaire was parent-rated and parents were involved in the intervention so the outcome assessment was non-blind
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcomes: High risk for parent-rated FEDQ		
Likely direction of effect: Effect size bigger, where high risk		

1.8.3 RICKARDS2007/2009

Study ID		RICKARDS2007/2009
Bibliographic reference: Rickards AL, Walstab JE, Wright-Rossi RA, Simpson J, Reddihough DS. A randomized, controlled trial of a home-based intervention program for children with autism and developmental delay. Journal of Developmental and Behavioral Pediatrics. 2007;28:308-316. Rickards AL, Walstab JE, Wright-Rossi RA, Simpson J, Reddihough DS. One-year follow-up of the outcome of a randomized controlled trial of a home-based intervention programme for children with autism and developmental delay and their families. Child: Care, Health and Development. 2009;35:593-602.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (drawing of lots)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (blind selection of folded cards from bowl with an independent observer for validation)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No

B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 2; Control group N: 4	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 2; Control group N: 4	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (although some outcome measures were assessed by a blinded psychologist, many outcome measures relied on non-blind parent- or teacher- report)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (although some outcome measures were assessed by a blinded psychologist, many outcome measures relied on non-blind parent- or teacher- report)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

1.8.4 ROBERTS2011

Study ID		ROBERTS2011
Bibliographic reference: Roberts J, Williams K, Carter M, Evans D, Parmenter T, Silove N, et al. A randomised controlled trial of two early intervention programs for young children with autism: centre-based with parent program and home-based. Research in Autism Spectrum Disorders. 2011;5:1553-1566.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer random number generator)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (central allocation)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (experimental group had a higher proportion of children with a diagnosis of autistic disorder than the control group, 87.5% relative to 69%, and the control group had a higher proportion of non-ASD diagnoses, 17.2% relative to 0%. The experimental group also had a lower Griffiths developmental quotient score than the control group, 57 relative to 66.5)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes

B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 7; Control group N: 4	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 7; Control group N: 4	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias (only one participant dropped out after the start of the intervention)		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes (with the exception of the Parent Perception Questionnaire as this was a study-specific, and non-standardized, measure)
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (despite blinding outcome assessors, all but one of the outcome measures relies on interview with parent and parents were non-blind to group assignment and other potentially confounding factors and were also part of the intervention so problems with self-assessment)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (despite blinding outcome assessors, all but one of the outcome measures relies on interview with parent and parents were non-blind to group assignment and other potentially confounding factors and were also part of the intervention so problems with self-assessment)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias (with the exception of the RDLS)		
Likely direction of effect: Effect size bigger		

1.8.5 SMITH2000

Study ID		SMITH2000
Bibliographic reference: Smith T, Groen AD, Wynn JW. Randomized trial of intensive early intervention for children with pervasive developmental disorder. American Journal on Mental Retardation. 2000;105:269-285.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (random number table)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (group assignment performed by independent statistician)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		

High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes

D3	A valid and reliable method was used to determine the outcome	Different for different outcome measures: Unclear/unknown for the Reynell Developmental Language Scale as although this outcome measure is commonly administered to children with autism it has not been validated in an autistic population and participants fall outside the age range for this test at endpoint. Also unclear/unknown for the Achenbach Child Behavior Checklist as this outcome measure not validated in autism population. No for the Family Satisfaction Questionnaire as the psychometric properties of outcome measure not tested
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Different for different outcomes: No for Achenbach Child Behavior Checklist and Family Satisfaction Questionnaire as parent- or teacher-completed and parents and teachers non-blind
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcomes: Unclear/unknown for the Vineland Adaptive Behaviour Scale (VABS) as although administered by blinded outcome assessor based on interview with non-blind parent rather than direct behavioural observation and no for Achenbach Child Behavior Checklist and Family Satisfaction Questionnaire as parent- or teacher-completed and parents and teachers non-blind
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcomes: Unclear/unknown for the Vineland Adaptive Behaviour Scale (VABS), high risk for Achenbach Child Behavior Checklist and Family Satisfaction Questionnaire and unclear/unknown for the Reynell Developmental Language Scale		
Likely direction of effect: Effect size bigger, where high risk		

1.9 PSYCHOSOCIAL INTERVENTIONS AIMED AT SPEECH AND LANGUAGE

1.9.1 GATTINO2011

Study ID		GATTINO2011
Bibliographic reference: Gattino GS, Riesgo RDS, Longo D, Leite JCL, Faccini LS. Effects of relational music therapy on communication of children with autism: a randomized controlled study. Nordic Journal of Music Therapy. 2011;20:142-154.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer random number generator)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (central allocation - conducted by external investigator, concealed from study investigators and delivered directly to intervention administrators)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (insufficient detail reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No

B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Unclear for CARS social communication outcome measure as no independent reliability/validity data for this composite score
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes (blinded external outcome assessors)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Yes (blinded external outcome assessors)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.9.2 HOWLIN2007/GORDON2011

Study ID	HOWLIN2007/GORDON2011
Bibliographic reference: Howlin P, Gordon RK, Pasco G, Wade A, Charman T. The effectiveness of picture exchange communication system (PECS) training for teachers of children with autism: a pragmatic, group randomised controlled trial. Journal of Child Psychology and Psychiatry. 2007;48:473-481. Gordon K, Pasco G, McElduff F, Wade A, Howlin P, Charman T. A communication-based intervention for nonverbal children with autism: what changes? who benefits? Journal of Consulting and Clinical Psychology. 2011;79:447-457.	
Guideline topic: Management and support of children and young people on the autism spectrum	Review question number: 6.1
Checklist completed by: Odette Megnin-Viggars	

A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors	Yes (randomised using online randomisation programme)

	equally across groups)	
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (DTG children had a significantly higher ADOS language impairment score [mean=3.4] than those in the ITG [2.7] and NTG [2.5] and children in the ITG had a significantly higher nonverbal developmental quotient [25.9] than children in the DTG [22.7])
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		

C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 5 (ITG); 7 (DTG); Control group N: 1	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	No
C3	For how many participants in each group were no outcome data available? Experimental group N: 4 (ITG); 0 (DTG); Control group N: 1	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes (Last Observation Carried Forward)

Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Unclear for behavioural observations as these outcome measures were assessed using an observation schedule designed specifically for this study and only 10% of observations were double-coded so reliability and validity is unclear
D4	Investigators were kept 'blind' to participants' exposure to the intervention	No (rated by non-blind investigators)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (rated by non-blind investigators)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.9.3 LIM2010

Study ID	LIM2010
Bibliographic reference: Lim HA. Effect of "developmental speech and language training through music" on speech production in children with autism spectrum disorders. Journal of Music Therapy. 2010;47:2-26.	
Guideline topic: Management and support of children and young people on the autism spectrum	Review question number: 6.1
Checklist completed by: Odette Megnin-Viggars	
A. Selection bias (systematic differences between the comparison groups)	

A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (insufficient detail reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes

C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	No (unclear if 4 days is a sufficient follow-up duration to observe significant treatment effects)
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Unclear (outcome measure was designed by the investigator for the study with no independent reliability/validity data, however, video recordings of assessment sessions were double-coded with high inter-rater reliability)

D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes (blinded outcome assessors)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Yes (blinded outcome assessors)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.9.4 WELTERLIN2012

Study ID		WELTERLIN2012
Bibliographic reference: Welterlin A, Turner-Brown LM, Harris S, Mesibov G, Delmolino L. The home TEACCHing program for toddlers with autism. Journal of Autism and Developmental Disorders. 2012;42:1827-1835.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (insufficient detail reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		

High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear (unclear if 12 weeks a sufficient follow-up duration to detect significant treatment effects)
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes

D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (identity and blinding of outcome assessor/s are not reported)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (identity and blinding of outcome assessor/s are not reported)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

1.9.5 WHALEN2010

Study ID		WHALEN2010
Bibliographic reference: Whalen C, Moss D, Ilan AB, Vaupel M, Fielding P, Macdonald K, et al. Efficacy of TeachTown: Basics computer-assisted intervention for the Intensive Comprehensive Autism Program in Los Angeles unified school district. Autism. 2010;14:179-197.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (insufficient detail reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes (all participants receiving Intensive Comprehensive Autism Program [ICAP] for 27-30 hours a week)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: Not reported; Control group N: Not reported	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Unclear
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 1	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Unclear for the Brigance Inventory of Child Development scale as there are no independent reliability and/or validity data reported

D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (identity and blinding of outcome assessors not reported)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (identity and blinding of outcome assessors not reported)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

1.9.6 YODER2006B/2010

Study ID		YODER2006B/2010
Bibliographic reference: Yoder P, Stone WL. A randomized comparison of the effect of two prelinguistic communication interventions on the acquisition of spoken communication in preschoolers with ASD. Journal of Speech, Language, and Hearing Research. 200b6;49:698-711. Yoder PJ, Lieberman RG. Brief report: randomized test of the efficacy of picture exchange communication system on highly generalized picture exchanges in children with ASD. Journal of Autism and Developmental Disorders. 2010;40:629-632.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer random number generator)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (authors state that assignment was concealed but provide no detail about the method for concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (although some baseline differences were controlled for, such as baseline group differences in the Mullen expressive language score [higher for RPMT group than PECS group] and object-exchange turns [higher for PECS group than for RPMT group], correction was only performed where time 1 variables correlated with time 2 and 3 variables. Therefore, no covariate was entered to control for group differences on the ADOS social algorithm [higher in RPMT group] as this variable was not significantly correlated with the outcome variable in the YODER2010 paper, however, authors do not report correlations or corrections for this variable for the outcomes reported in YODER2006B paper)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		

Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	No (parents in the RPMT group chose to receive more hours of training [mean: 10.6 hours] than parents in the PECS group [mean 7.9 hours]. In addition, the number of hours of 'other intervention' increased between the treatment and follow-up periods, and this increase was greater for the PECS group [4 hours] than for the RPMT group [-0.3 hours])
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes

C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Unclear for behavioural observation outcome measures (only 20% of behavioural observations were double-coded and no standardized coding instrument was used so reliability and validity of this outcome measure unclear)
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear for behavioural observation outcome measures (identity and blinding of outcome assessor not reported)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear for behavioural observation outcome measures (identity and blinding of outcome assessor not reported)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias for behavioural observation measures		
Likely direction of effect: Unknown direction		

1.10 BIOMEDICAL INTERVENTIONS AIMED AT SPEECH AND LANGUAGE

1.10.1 ALLAM2008

Study ID		ALLAM2008
Bibliographic reference: Allam H, Eidine NG, Helmy G. Scalp acupuncture effect on language development in children with autism: a pilot study. Journal of Alternative and Complementary Medicine. 2008;14:109-114.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (random numbers table)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (results of randomisation were made available to the investigator in sealed envelopes)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (insufficient detail reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	No

B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Unclear (no validity or reliability information reported for any outcome measures)
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (no details of outcome assessors reported)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (no details of outcome assessors reported)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

1.10.2 ZHOU2008/CHEUK2011

Study ID		ZHOU2008/CHEUK2011
Bibliographic reference: Zhou H, Zhang P. The effect of language therapy combined with point massage on communication disability in autism children. China Pratical Medical. 2008;3:24-26. Cheuk DKL, Wong V, Chen WX. Acupuncture for autism spectrum disorders (ASD)(Review). The Cochrane Database of Systematic Reviews. 2011;9:Art. No CD007849. Available from: DOI: 10.1002/14651858.CD007849.pub2.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (method of randomisation is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (insufficient detail reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No

B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Unclear (no validity or reliability information reported for any outcome measures)
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (no details of outcome assessors reported)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (no details of outcome assessors reported)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

1.11 PSYCHOSOCIAL INTERVENTIONS AIMED AT IQ AND ACADEMIC SKILLS

1.11.1 ROGERS2012

Study ID		ROGERS2012
Bibliographic reference: Rogers SJ, Estes A, Lord C, Vismara L, Winter J, Fitzpatrick A, et al. Effects of a brief Early Start Denver Model (ESDM)-based parent intervention on toddlers at risk for autism spectrum disorders: a randomized controlled trial. Journal of the American Academy of Child and Adolescent Psychiatry. 2012;51:1052-1065.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer generated algorithm)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (central allocation)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (children in the experimental group had a higher mean ADOS Social Affect score [mean 34.14] than children in the control group [mean 29.45] , and children in the control group had higher imitation and nonsocial orient scores [means 3.78 and 8 respectively] than children in the experimental group [means 2.53 and 7 respectively])
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		

B1	The comparison groups received the same care apart from the intervention(s) studied	No (significant differences in number of intervention hours received between groups with the control group receiving more weekly hours of intervention [mean=3.68] than the experimental group [mean=1.48])
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: Not reported; Control group N: Not reported	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Unclear
C3	For how many participants in each group were no outcome data available? Experimental group N: Not reported; Control group N: Not reported	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Unclear

Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Different validity and reliability for different outcome measures: Unclear/unknown for imitative sequences and orienting to social stimuli and joint attention measures
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Different for different outcome measures: Unclear/unknown for ADOS-T (outcome assessor reported as 'laboratory personnel' and blinding of outcome assessors not reported) and MSEL and imitative sequences, orienting to social stimuli and orienting to joint attention measures (identity and blinding of outcome assessors not reported); No for CDI and VABS (parent-rated or based on parental report and parents were non-blind and involved in the intervention)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcome measures: Unclear/unknown for ADOS-T (outcome assessor reported as 'laboratory personnel' and blinding of outcome assessors not reported) and MSEL and imitative sequences, orienting to social stimuli and orienting to joint attention measures (identity and blinding of outcome assessors not reported); No for CDI and VABS (parent-rated or based on parental report and parents were non-blind and involved in the intervention)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		

Different for different outcome measures: Unclear/unknown risk for ADOS-T and MSEL; High risk for CDI, VABS and imitative sequences, orienting to social stimuli and orienting to joint attention measures
Likely direction of effect: Effect size bigger where high risk

1.12 BIOMEDICAL INTERVENTIONS AIMED AT IQ AND ACADEMIC SKILLS

1.12.1 WONG2010A

Study ID		WONG2010A
Bibliographic reference: Wong VC-N, Sun JG. Randomized controlled trial of acupuncture versus sham acupuncture in autism spectrum disorder. Journal of Alternative and Complementary Medicine. 2010a;16:545-553.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer generated randomisation)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (randomisation carried out by an independent statistician)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		

B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes (control condition was sham acupuncture)
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias (High risk for performance bias and low risk for response bias)		
Likely direction of effect: Effect size bigger, where high risk		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Different validity and reliability for different outcomes: Yes - Griffiths Mental Developmental Scale, Ritvo-Freeman Real Life Scale and Reynell Language Developmental Scale No - WeeFIM
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes (outcome measures were taken by independent research assistants who were blind to treatment allocation)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Yes (outcome measures were taken by independent research assistants who were blind to treatment allocation)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.12.2WONG2010B

Study ID		WONG2010B
Bibliographic reference: Wong VC-N, Chen W-X, Liu W-L. Randomized controlled trial of electro-acupuncture for autism spectrum disorder. Alternative Medicine Review. 2010b;15:136-146.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer generated randomisation)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (results were in sealed envelopes)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (the study reports that children continued with their conventional interventions or education programmes for ASD, but no further information reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes (control condition was sham acupuncture)
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		

Unclear/unknown risk of bias (High risk for performance bias and low risk for response bias)		
Likely direction of effect: Effect size bigger, where high risk		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 1; Control group N: 4	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 1; Control group N: 3	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Different validity and reliability for different outcomes Yes - RFRLS; CGI-I; ABC; RDLS; PEDI Unclear - WeeFIM
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes (all outcome assessors were blind to treatment allocation)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different blinding for different outcome measures: No - RFRLS; CGI-I; ABC; PEDI; parent rated and parents are not blind to confounding factors Unclear - RDLS; WeeFIM; outcome assessor not reported so unclear if they are blinded to confounding factors
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.13 BIOMEDICAL INTERVENTIONS AIMED AT SENSORY SENSITIVITIES

1.13.1 BETTISON1996

Study ID		BETTISON1996
Bibliographic reference: Bettison S. The long-term effects of auditory training on children with autism. Journal of Autism and Developmental Disorders. 1996;26:361-374.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (nsufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes (attention-placebo condition)

B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias (High risk for performance bias and low risk for response bias)		
Likely direction of effect: Effect size bigger, where high risk		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Different for different outcomes: No for SSQ and SP as non-standardized assessment and no validity data available for this outcome measure
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcome: No for SSQ, SP and DBC as parent-completed (and teacher-completed for DBC) so non-blind to other potentially confounding factors; Unclear for ABC as outcome measure based on interview with parents so unclear if blind to other potentially confounding factors; and unclear for PPVT and LIPS as unclear if outcome assessors were blind to other potentially confounding factors
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.13.2FAZLIOGLU2008

Study ID	FAZLIOGLU2008
Bibliographic reference: Fazlioğlu Y, Baran G. A sensory integration therapy program on sensory problems for children with autism. Perceptual and Motor Skills. 2008;106:415-422.	
Guideline topic: Management and support of children and young people on the autism spectrum	Review question number: 6.1
Checklist completed by: Odette Megnin-Viggars	
A. Selection bias (systematic differences between the comparison groups)	

A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes (groups matched on age, sex and level of functioning)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes (both groups were attending special education classes at the centre)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes

C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (identity and blinding of outcome assessors not reported)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (identity and blinding of outcome assessors not reported)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

1.13.3 SILVA2009

Study ID		SILVA2009
Bibliographic reference: Silva LMT, Schalock M, Ayres R, Bunse C, Budden S. Qigong massage treatment for sensory and self-regulation problems in young children with autism: a randomized controlled trial. American Journal of Occupational Therapy. 2009;63:423-432.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	No (there were caveats to randomisation process)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (groups were not comparable on parent-rated measures of social communication and autism composite and teacher-rated measures of sensory problems)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (the study reports that parents agreed not to begin any additional interventions once the study had started, but it is not clear what interventions children were already involved in throughout the duration of the study)
B2	Participants receiving care were kept 'blind' to treatment allocation	No

B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	No (there was a five-month post-intervention follow-up for the treatment group, but not the control group)
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Different validity and reliability for different outcome measures: Yes - ABC and PDDBI Unclear - SSC as this measure was created by the research group and no independent measures of validity or reliability are reported
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Different blinding for different outcome measures: No - PDDBI parent measures as parent were involved in delivering the intervention and were not blind to the treatment allocation Unclear - PDDBI teacher measures as no blinding of teachers reported. Unclear - ABC and SSC as the rated not reported
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different blinding for different outcome measures: No - PDDBI parent and teacher measures as parents and teachers are not blind to confounding variables Unclear - ABC and SSC as the rated not reported
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different risk for different outcomes: Unclear/unknown risk: ABC, SSC and PDDBI teacher measures High risk: PDDBI parent measures		
Likely direction of effect: Effect size bigger, where high risk		

1.13.4 SILVA2011B

Study ID		SILVA2011B
Bibliographic reference: Silva LMT, Schalock M, Gabrielsen K. Early intervention for autism with a parent-delivered Qigong massage program: a randomized controlled trial. American Journal of Occupational Therapy. 2011b;65:550-559.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (randomisation was done by a random number generator)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 4; Control group N: 1	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 4; Control group N: 1	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Different for different outcomes: Yes - PDDBI Unclear - ASPI, Sense and self-regulation checklist
D4	Investigators were kept 'blind' to participants' exposure to the intervention	No (outcomes were parent-rated and parents were delivering the intervention and were not blind to treatment allocation)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (outcomes were parent-rated and parents were not blind to confounding and prognostic factors)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.14 PSYCHOSOCIAL INTERVENTIONS AIMED AT COEXISTING MENTAL HEALTH PROBLEMS

1.14.1 CHALFANT2007

Study ID		CHALFANT2007
Bibliographic reference: Chalfant AM, Rapee R, Carroll L. Treating anxiety disorders in children with high functioning autism spectrum disorders: a controlled trial. Journal of Autism and Developmental Disorders. 2007;37:1842-1857.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method is unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No

B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 4; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Unclear
C3	For how many participants in each group were no outcome data available? Experimental group N: 4; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Unclear
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Different validity and reliability for different outcomes: CATS - unclear as no independent validity or reliability is reported All other measures are valid and reliable
D4	Investigators were kept 'blind' to participants' exposure to the intervention	No (parent- and self-reported outcome measures non-blind and blinding of teachers to group assignment not reported)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (all outcome assessors non-blind to other potentially confounding factors)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.14.2 DRAHOTA2011/WOOD2009

Study ID		DRAHOTA2011/WOOD2009
Bibliographic reference: Drahota A, Wood JJ, Sze KM, Van Dyke M. Effects of cognitive behavioral therapy on daily living skills in children with high-functioning autism and concurrent anxiety disorders. Journal of Autism and Developmental Disorders. 2011;41:257-265. Wood JJ, Drahota A, Sze K, Har K, Chiu A, Langer DA. Cognitive behavioral therapy for anxiety in children with autism spectrum disorders: a randomized, controlled trial. Journal of Child Psychology and Psychiatry. 2009;50:224–234.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer generated sequence)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (the study reports that the allocation of participants was concealed from investigators, but method of concealment is not reported)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (groups were not comparable in relation to coexisting conditions at baseline)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	No

B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	No (no three-month follow-up data available for the waitlist control group)
C2	a. How many participants did not complete treatment in each group? Experimental group N: 3; Control group N: 1	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Blinding different for different outcomes: MASC - No blinding; self-report and parent-rated PCIQ - No blinding; parent-rated CGI and ADIS-CSR- Outcome assessors were independent graduate evaluators who were blind to treatment allocation VABS - Unclear as based on interview with non-blind parents rather than direct behavioural observation
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Blinding different for different outcomes: MASC - No blinding; self-report and parent-rated PCIQ - No blinding; parent-rated CGI and ADIS-CSR- Outcome assessors were independent graduate evaluators who were blind to confounding factors VABS - Unclear as based on interview with non-blind parents rather than direct behavioural observation
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Detection bias different for different outcomes: MASC and PCIQ - High risk ADIS-CSR and CGI - Low risk VABS - Unclear/unknown risk		
Likely direction of effect: Effect size bigger, where high risk		

1.14.3 REAVEN2012

Study ID		REAVEN2012
Bibliographic reference: Reaven J, Blakeley-Smith A, Culhane-Shelburne K, Hepburn S. Group cognitive behavior therapy for children with high-functioning autism spectrum disorders and anxiety: a randomized trial. Journal of Child Psychology and Psychiatry. 2012;53:410-419.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer generated sequence)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 3; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Unclear
C3	For how many participants in each group were no outcome data available? Experimental group N: 4; Control group N: 3	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Different blinding for different outcomes: ADIS-P: Outcome assessors were independent clinical evaluators, but the ADIS-P is based on a parent interview and parents were not blind to treatment allocation CGIS-I: Outcome assessors were blind to treatment allocation
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different blinding for different outcomes: ADIS-P: Outcome assessors were independent clinical evaluators, but the ADIS-P is based on a parent interview and parents were not blind to confounding factors CGIS-I: Outcome assessors were blind to treatment allocation
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Detection bias different for different outcomes: ADIS-P: Unclear/unknown risk of bias CGI: Low risk		
Likely direction of effect: Unknown direction, where unclear risk		

1.14.4 SOFRONOFF2005

Study ID		SOFRONOFF2005
Bibliographic reference: Sofronoff K, Attwood T, Hinton S. A randomised controlled trial of a CBT intervention for anxiety in children with Asperger syndrome. Journal of Child Psychology and Psychiatry. 2005;46:1152-1160.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (method of randomisation unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		

High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 7 (N=3 in child-only group; N=4 in child + parent group); Control group N: 3	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 7 (N=3 in child-only group; N=4 in child + parent group); Control group N: 3	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	No (outcomes were parent-rated and parents were not blind to allocation of treatment)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	No (outcomes were parent-rated and parents were not blind to confounding factors)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		

1.15 PHARMACOLOGICAL INTERVENTIONS AIMED AT COEXISTING MENTAL HEALTH PROBLEMS

1.15.1 ELILILLY2009/HARFTERKAMP2012

Study ID		ELILILLY2009/HARFTERKAMP2012
Bibliographic reference: Eli Lilly and Company. A Randomized, Double-blind Comparison of Atomoxetine Hydrochloride and Placebo for Symptoms of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents With Autism Spectrum Disorder. ClinicalTrials.gov NCT00380692. Available from: http://clinicaltrials.gov/ct2/show/NCT00380692. Harfterkamp M, van de Loo-Neus G, Minderaa RB, van der Gaag R-J, Escobar R, Schacht A, et al. A randomized double-blind study of atomoxetine versus placebo for attention-deficit/hyperactivity disorder symptoms in children with autism spectrum disorder. Journal of the American Academy of Child and Adolescent Psychiatry. 2012;51:733-741.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer random number generator)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (pharmacy-controlled randomization)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		

B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (nsufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 5; Control group N: 3	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes (Last Observation Carried Forward)
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Unclear (unclear if 8 weeks is a sufficient duration to detect significant treatment effects, particularly adverse events)
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear (most outcome measures are parent-reported or teacher-reported and as such are non-blind to other potentially confounding factors)
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.16 PSYCHOSOCIAL AND PHARMACOLOGICAL INTERVENTIONS AIMED AT COEXISTING MEDICAL OR FUNCTIONAL PROBLEMS

1.16.1 CORTESI2012

Study ID		CORTESI2012
Bibliographic reference: Cortesi F, Giannotti F, Sebastiani S, Panunzi S, Valente D. Controlled-release melatonin, singly and combined with cognitive behavioural therapy, for persistent insomnia in children with autism spectrum disorders: a randomised placebo-controlled trial. Journal of Sleep Research. 2012;21:700-709.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computerised random number generator)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Yes
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unlcear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Yes
B2	Participants receiving care were kept 'blind' to treatment allocation	Different blinding for different comparisons: No for all comparisons involving CBT

B3	Individuals administering care were kept 'blind' to treatment allocation	Different blinding for different comparisons: No for all comparisons involving CBT
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Different risk for different comparisons: High risk for all comparisons involving CBT		
Likely direction of effect: Effect size bigger, where high risk		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Melatonin only: 4 CBT only: 4 CBT and Melatonin: 2 Placebo group: 6	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Melatonin only: 6 (2 excluded from analysis due to missing actigraph data) CBT only: 7 (2 excluded from analysis due to missing actigraph data) CBT and Melatonin: 5 (2 excluded from analysis due to missing actigraph data) Placebo group: 8 (2 excluded from analysis due to missing actigraph data)	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Different blinding for different outcomes: Yes for actigraph data (for all comparisons), No for CSHQ for comparisons involving CBT, Yes for CSHQ for melatonin and placebo comparison
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different blinding for different outcomes: Yes for actigraph data (for all comparisons), No for CSHQ for comparisons involving CBT, unclear/unknown for CSHQ for melatonin and placebo comparison
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different blinding for different outcomes: Low risk for actigraph data (for all comparisons), high risk for CSHQ for comparisons involving CBT, unclear/unknown risk for CSHQ for melatonin and placebo comparison		
Likely direction of effect: Effect size bigger, where high risk		

1.16.2GRINGRAS2012

Study ID		GRINGRAS2012
Bibliographic reference: Gringras P, Gamble C, Jones AP, Wiggs L, Williamson PR, Sutcliffe A, et al. Melatonin for sleep problems in children with neurodevelopmental disorders: randomised double masked placebo controlled trial. British Medical Journal. 2012;345:e6664.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Lucy Burt		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computerised random number generator)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Yes (treatment packs were dispensed by the pharmacy at each site)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (insufficient detail reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes (placebo matched on external and internal appearance)
B3	Individuals administering care were kept 'blind' to treatment allocation	Yes (parents and trial staff were blind to treatment allocation)

Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 5; Control group N: 9	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Unclear: Sleep diaries: Validity and reliability is unclear TESS: Unclear who recorded information or how
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes (parents and trial staff were blind to treatment allocation)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcomes: No: Sleep diaries as parents are not blind to confounding factors Unclear: TESS as outcome assessor not reported
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

1.17 BIOMEDICAL INTERVENTIONS AIMED AT COEXISTING MEDICAL OR FUNCTIONAL PROBLEMS

1.17.1 HANDEN2009

Study ID		HANDEN2009
Bibliographic reference: Handen BL, Melmed RD, Hansen RL, Aman MG, Burnham DL, Bruss JB, et al. A double-blind, placebo-controlled trial of oral human immunoglobulin for gastrointestinal dysfunction in children with autistic disorder. Journal of Autism and Developmental Disorders. 2009;39:796-805.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 6.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computerised system)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (insufficient detail reported)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unlcear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes (placebo matched on appearance, taste and consistency)

B3	Individuals administering care were kept 'blind' to treatment allocation	Unclear (paper states 'double-blind' but gives no further detail with regards to who is blinded, i.e. parent, investigator, intervention administrator, outcome assessor)
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 5 (low dose group); 8 (moderate dose group); 7 (high dose group) Control group N: 5	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 0; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes (Intention To Treat [ITT] analysis used)
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		

D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Different for different outcomes: Unclear/unknown for gastrointestinal symptom outcome and adverse events outcomes as the MGIS has not been validated in an autistic population and the outcome measure used to assess adverse events unclear
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Unclear (paper states 'double-blind' but gives no further detail with regards to who is blinded so unclear if parent-rated and/or clinician-rated outcome assessors were blinded)
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcomes: No for parent-rated as even if parents blinded to treatment assignment they will be non-blind to other potentially confounding factors and unclear for all other outcome measures as blinding of outcome assessors is unclear
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Unclear/unknown risk of bias		
Likely direction of effect: Unknown direction		

1.18 PSYCHOSOCIAL INTERVENTIONS AIMED AT IMPROVING THE IMPACT OF AUTISM ON THE FAMILY

1.18.1 TONGE2006/2012

Study ID		TONGE2006/2012
Bibliographic reference: Tonge B, Brereton A, Kiomall M, Mackinnon A, King N, Rinehart N. Effects on parental mental health of an education and skills training program for parents of young children with autism: a randomized controlled trial. Journal of the American Academy of Child and Adolescent Psychiatry. 2006;45:561-569. Tonge B, Brereton A, Kiomall M, Mackinnon A, Rinehart NJ. A randomised group comparison controlled trial of 'preschoolers with autism': a parent education and skills training intervention for young children with autistic disorder. Autism. In press, 2012. Available from: http://aut.sagepub.com/content/early/2012/09/11/1362361312458186.abstract..		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 7.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Yes (computer random number generator)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	No (Children in the control group were significantly older than either of the experimental groups [p=0.005], and had a higher PEP-R DQ [p=0.026], and Reynell expressive [p=0.002] and comprehension [p=0.006] language scales. The PEAC group also had significantly more autism symptoms on the CARS [p=0.009] and the DBC-ASA [p=0.039] than the control group. Controls also had significantly lower scores on the VABS daily living [p=0.004] and socialization [p=0.008] domains than the PEBM group. Finally, the PEBM group had significantly higher scores than the PEAC group on the VABS communication [p=0.004], socialization [p=0.007], and motor

		[p=0.049] domains)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
Unlcear/unknown risk of bias		
Likely direction of effect: Unknown direction		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	No (for the comparison against treatment-as-usual)
B3	Individuals administering care were kept 'blind' to treatment allocation	No
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 2; Control group N: 0	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes

C3	For how many participants in each group were no outcome data available? Experimental group N: 2; Control group N: 0	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes
D4	Investigators were kept 'blind' to participants' exposure to the intervention	Different for different outcome measures and different comparisons: <u>Experimental versus attention-placebo comparison:</u> Impact on family outcomes: Parent-rated so non-blind to other potentially confounding factors but due to attention-placebo comparison blind to treatment allocation VABS scale: Outcome assessor is a blinded clinician but based on parental interview and simultaneous child observation. As the comparison involves an experimental versus attention-placebo condition parents may be judged to be blind to treatment allocation but would be non-blind to other potentially confounding factors DBC scale: Comparison involved attention-placebo condition so parent-rated outcome measures may have been blind to treatment condition (with only the active ingredient differing between the two experimental groups). However, as parent-rated, outcome assessors would have been non-blind to

		other potentially important confounding factors CARS, PEP-R and Reynell Language Scale: Blinded outcome assessor <u>Combined treatment versus no treatment comparison:</u> Impact on family outcomes: Non-blind parental report VABS scale: Outcome assessor is a blinded clinician but based on parental interview and simultaneous child observation and parents non-blind DBC scale: For the combined treatment versus no treatment comparison the parents would have been non-blind to both treatment allocation and other potentially confounding factors CARS, PEP-R and Reynell Language Scale: Blinded outcome assessor
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Different for different outcome measures and different comparisons: <u>Experimental versus attention-placebo comparison:</u> Impact on family outcomes: Parent-rated so non-blind to other potentially confounding factors but due to attention-placebo comparison blind to treatment allocation VABS scale: Outcome assessor is a blinded clinician but based on parental interview and simultaneous child observation. As the comparison involves an experimental versus attention-placebo condition parents may be judged to be blind to treatment allocation but would be non-blind to other potentially confounding factors DBC scale: Comparison involved attention-placebo condition so parent-rated outcome measures may have been blind to treatment condition (with only the active ingredient differing between the two experimental groups). However, as parent-rated, outcome assessors would have been non-blind to other potentially important confounding factors CARS, PEP-R and Reynell Language Scale:

		Blinded outcome assessor Combined treatment versus no treatment comparison: Impact on family outcomes: Non-blind parental report VABS scale: Outcome assessor is a blinded clinician but based on parental interview and simultaneous child observation and parents non-blind DBC scale: For the combined treatment versus no treatment comparison the parents would have been non-blind to both treatment allocation and other potentially confounding factors CARS, PEP-R and Reynell Language Scale: Blinded outcome assessor
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Different for different outcome measures and different comparisons: Experimental versus attention-placebo comparison: Impact on family outcomes: Unclear/unknown risk VABS scale: Low risk DBC scale: Unclear/unknown risk CARS, PEP-R and Reynell Language Scale: Low risk Combined treatment versus no treatment comparison: Impact on family outcomes: High risk VABS scale: Unclear/unknown risk DBC scale: High risk CARS, PEP-R and Reynell Language Scale: Low risk		
Likely direction of effect: Effect size bigger, where high risk		

1.19 ADVERSE EVENTS ASSOCIATED WITH PHARMACOLOGICAL INTERVENTIONS

1.19.1 CAMPBELL1978

Study ID		CAMPBELL1978
Bibliographic reference: Campbell M, Anderson LT, Meier M, Cohen IL, Small AM, Samit C, et al. A comparison of haloperidol and behavior therapy and their interaction in autistic children. Journal of the American Academy of Child Psychiatry. 1978;17:640-655.		
Guideline topic: Management and support of children and young people on the autism spectrum		Review question number: 7.1
Checklist completed by: Odette Megnin-Viggars		
A. Selection bias (systematic differences between the comparison groups)		
A1	An appropriate method of randomisation was used to allocate participants to treatment groups (which would have balanced any confounding factors equally across groups)	Unclear (randomisation method was unclear)
A2	There was adequate concealment of allocation (such that investigators, clinicians and participants cannot influence enrolment or treatment allocation)	Unclear (insufficient detail reported with regards to allocation concealment)
A3	The groups were comparable at baseline, including all major confounding and prognostic factors	Unclear (no examination of potential pre-intervention group differences and thus group comparability was unclear)
Based on your answers to the above, in your opinion was selection bias present? If so, what is the likely direction of its effect?		
High risk of bias		
Likely direction of effect: Effect size bigger		
B. Performance bias (systematic differences between groups in the care provided, apart from the intervention under investigation)		
B1	The comparison groups received the same care apart from the intervention(s) studied	Unclear (insufficient detail reported)
B2	Participants receiving care were kept 'blind' to treatment allocation	Yes

B3	Individuals administering care were kept 'blind' to treatment allocation	Yes
Based on your answers to the above, in your opinion was performance bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
C. Attrition bias (systematic differences between the comparison groups with respect to loss of participants)		
C1	All groups were followed up for an equal length of time (or analysis was adjusted to allow for differences in length of follow-up)	Yes
C2	a. How many participants did not complete treatment in each group? Experimental group N: 1; Control group N: 1	
	b. The groups were comparable for treatment completion (that is, there were no important or systematic differences between groups in terms of those who did not complete treatment)	Yes
C3	For how many participants in each group were no outcome data available? Experimental group N: 1; Control group N: 1	
	b. The groups were comparable with respect to the availability of outcome data (that is, there were no important or systematic differences between groups in terms of those for whom outcome data were not available).	Yes
Based on your answers to the above, in your opinion was attrition bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		
D. Detection bias (bias in how outcomes are ascertained, diagnosed or verified)		
D1	The study had an appropriate length of follow-up	Yes
D2	The study used a precise definition of outcome	Yes
D3	A valid and reliable method was used to determine the outcome	Yes

D4	Investigators were kept 'blind' to participants' exposure to the intervention	Yes
D5	Investigators were kept 'blind' to other important confounding and prognostic factors	Unclear
Based on your answers to the above, in your opinion was detection bias present? If so, what is the likely direction of its effect?		
Low risk of bias		
Likely direction of effect: Not applicable		