NKR1_Social skill training for ADHD

Characteristics of studies

Characteristics of included studies

Abikoff 2004

Methods	Randomised Clinical Trial
Participants	103 children(age 7.0 - 9.9 years) participated in the study. Sex: 93% boys, 7% girls Ethnicity: 84% white, 13% African American, 2% Hispanic, and 1% other. Sample size calculation is not reported. Comorbidity: 53.4% had oppositional defiant disorder, 30% had conduct disorder, 16.5% anxiety disorder. All the participants in the study received psychostimulant medication. 84 of the children (81.2%) lived with both parents, 13 (12.6%) with one parent and 6 (5.8%) with their mother and stepfather. Setting: Outpatient clinic in two large medicals Centre in New York and Montreal. Baseline between group differences: No differences except on socioeconomic status, where there were differences between the M alone and M + ACT. Medications for comorbid disorders: no information Inclusion criteria: 1) A diagnosis of ADHD based on the DISC-P2 conducted by a clinical psychologist. The diagnosis had to be confirmed by a child psychiatrist based on a comprehensive clinical interview with the child, and parent and teacher reports. The children had to, on two different occasions, receive a mean teacher rating of at least 1.5 on the hyperactivity factor or the hyperactivity index of the Conners Teachers Rating Scale. 2) Children had to be medication free for at last 2 weeks before evaluation. 3) Normal IQ (i.e.,WISC-R ≥ 85). 4) Living with at least one parent, and have telephone access. 5) Positive response to methylphenidate. Exclusion criteria: 1) Children with diagnosable neurological disorders. 2) Psychosis. 3) Significant medical illness. 4) Current physical or sexual abuse. 5) Chronic tic disorder or Tourette´s disorder. 6) DSM-III-R based developmental reading or arithmetic disorder, defined as a standard score in reading or mathematics on the Kaufmann Test of Educational Achievement of 85 or less. 7) Children with a diagnosis of conduct disorder.
Interventions	Number of participants allocated per group: 34 children were randomised to methylphenidate (M), 34 to M+ MultiModal Psychosocial Treatment (MPT), and 35 to M+ Attention Control Treatment (ACT). Number of patients lost to follow up per group: 22 children failed to complete the study, 10 from the M alone group, 6 from the combined M+MPT group, and 6 from the M+ ACT group. Format and duration of the intervention: Duration of the trial: 2 years. M+MPT= Methylphenidate + Parent training/family therapy, academic organizational skills training, individualized academic assistance, academic remediation (when necessary), social skills training, and individual psychotherapy. All the treatment modules were fully manual-based and the manual was developed before the start of the study. Each component was delivered once a week in the first year and once monthly during the second year. M+MPT= Methylphenidate + attention control program (delivered once a week in the first year and once monthly during the second year.) A 75% of attendance was required. Content of the intervention: The Multimodal Psychosocial Treatment (MPT) was manual-based and integrated several treatment components. Children received individualized academic assistance, organizational skills training, individual psychotherapy, social skills training and, when necessary, reading remediation. Parents received parent management training and counselling. Daily report cards were completed by teachers and formed the basis for a home-based reinforcement program for targeted school behaviour and academic performance. The Attention Control Psychosocial Treatment consisted of components parallel to those in the MPT but excluded the therapeutic content. Medication: The medical treatment consisted of a medical manual and efforts was made to give each child a maximal dose of methylphenidate. There was a five week open methylphenidate titration trial before randomisation. No between groups difference were found in the methylphenidate medication.
Outcomes	Parent rated: Hyperkinesis Index from Conners Parent Rating Scale. Home situations questionnaire (parents). SSRS - Social Skills Rating Scale(parents). Teacher rated: Hyperactivity and Conduct Problems Factors from the Conners Teacher Rating Scale. School Situations Questionnaire (teachers). Children rated: SSRS - Social Skills Rating Scale (children). Clinician rated:

	Child Psychiatrists completed a DSM-III R checklist for ADHD, ODD, conduct disorder symptoms, and a C-GAS. Observations: School Observations: The Classroom Observation Code. CTRS Hyperkinesis Index(rated by observers). IOWA CTRS(rated by observers). Children were evaluated at baseline, 6, 12, 18, and 24 months after baseline. School observation: Social Interaction Observation Code.
Notes	Authors conclusions: There is no support for adding ambitious long-term psychosocial interventions to methylphendidate to improve ADHD and ODD symptoms.

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Clarification has been requested from the one of the trial investigators and Hovard Abikoff informed us in an email on 28 January 2011 that they had used a block randomisation scheme with blocks of 4 children. The groups were balanced for age, sex, ODD and ethnicity.
Allocation concealment (selection bias)	Low risk	Clarification has been requested from the one of the trial investigators and Howard Abikoff informed in an email that they had used sealed envelops.
Blinding of participants and personnel (performance bias)	High risk	No blinding.
Blinding of outcome assessment (detection bias)	High risk	There were blinding on at least one of this reviews primary outcomes, in the rest of the outcomes there were no blinding.
Incomplete outcome data (attrition bias)	High risk	22 out of 103 children failed to complete the study.
Selective reporting (reporting bias)	Unclear risk	No prior statement of assessment tools. Design article published at the same time as trial article.
Other bias	Unclear risk	

Antshel 2003

Methods	Randomised Clinical Trial
Participants	120 children from 8-12 years with ADHD, Inattentive type (n = 59) or ADHD, Combined type (n = 61). Sex: 90 boys, 30 girls. Ethnicity: 112 children were Caucasian, 6 African American, 2 Asian American. Participants were recruited from newspaper advertisement and from consecutive referrals to a university based behavioural paediatric clinic specialized in ADHD and related disorders. Comorbidity: 53 children had comorbid ODD, 29 had mood disorders, 11 had anxiety disorders, and 5 tic disorders. Al 120 participants were taking stimulant medication (n = 110) or selective Serotonin reuptake inhibitor medications. Sample size calculation not reported. Pre randomisation: 142 Post randomisation:120 No statistical significant between-groups differences in age, sex, or classroom placement, duration and severity of ADHD symptoms, or comorbid conditions. Setting:Out patient clinic, Kentucky, USA. Co-medications for comorbid-disorders: SSRI balanced between groups. Inclusion criteria: 1) A diagnosis ADHD based on DSM-IV (DICA-R-P). Only the children which scored >1.0 SD above the mean on the CBCL Attention subscale were included. Exclusion criteria: 1) Not having an ADHD diagnosis. 2) Ages 8-12, children with significant cognitive delays (IQ < 70) 3) Children with English as a second language. (Information received in an email from Kevin Antshel, 16 December 2010).
Interventions	Format and duration of the intervention: The treatment groups consisted of 8 weeks treatment and there were 90 minutes group sessions for the children during consecutive weeks. The parents met in 3 parent sessions. Content of the interventions: All sessions were conducted by the same two therapists, a male doctoral student i psychology and a female master´s student in social work. The treatment were videotaped to ensure treatment consistency. The therapist followed a treatment manual. The child groups consisted of different methods to promote generalization of social skills.There were 6 themes which consisted of: Cooperation with peers, learning how to take others perspective, problem solving, recognizing and controlling anger, assertiveness, conversations (giving and receiving complements). The parent sessions consisted of information about the themes and content in the Childrens group and discussion of how to assess and monitor homework completion. Mean attendance at the 8 treatment session was 94% for the diagnostically homogeneous and 92% for the diagnostically heterogenous treatment groups. The control group was a wait list group. Medication: No statistically significant between groups differences on medication type and dosage.
Outcomes	Parent rated: SSRS - Social Skills Rating Scale. (38 items) Higher scores indicate more social skills competences. The scale has indexes which are used as outcomes in this study; cooperation, assertion, self-control, empathy (child version only) and responsibility (parents version only). Both the child and parent version of the SSRS, social skill domain scores range from 0 (less skilled) to 20 (high level of skills).

	Child rated: The SSRS - Social Skills Rating Scale (34 items). The outcome assessment were 8 weeks after the pretest and follow up were 3 months after the posttest. There were 100% completion rate at all tree assessment intervals(pre-, post-treatment and follow-up).
Notes	Authors conclusion: The results of this trial do not support the efficacy of social skills training for children with ADHD.

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	They used a computer generated randomisation process. Information received from Kevin Antshel in an email 13 July 2011.
Allocation concealment (selection bias)	Low risk	Allocation was concealed. Information received from Kevin Antshel in an email 13 July 2011.
Blinding of participants and personnel (performance bias)	High risk	No blinding
Blinding of outcome assessment (detection bias)	High risk	No blinded outcome assessors. High risk of bias.
Incomplete outcome data (attrition bias)	Low risk	There is stated that there was 100% completion rate.
Selective reporting (reporting bias)	Low risk	All of interest reported.
Other bias	Unclear risk	

Azad 2014

Methods	Design: Randomized controlled trial, parallel group
Participants	Sex, number of boys and girls: No information Age, mean and range: Primary School Students, age not specified Comorbidity, % of each type: No information Co medication for comorbid disorders, balanced between groups?: No information Social economic status: No information IQ, mean, range: No information Ethnicity,%: No information ADHD medication: No information Pretreatment: Not described Included criteria: Not described Excluded criteria: Not described
Interventions	Number of participants allocated per group:15 participants were allocated to Intervention and 15 to the control Attendance:Not described Format and duration of the intervention:The intervention consisted of 15 sessions. Each session lasted 60 minutes. There were 3 sessions per week.Children in the control group did not receive any training. Content of the intervention:1st session: pre-intervention assessment and explaining the objective of the research to the parents. 2nd and 3rd sessions: elaborating the application and importance of the research, explaining, to the students, the role of using the certain methods in the improvement of their educational and non-educational activities and the fact that to have a better and more focused behaviour they should take some steps. 4th and 5th sessions: presenting the steps to the students, step 1: the students imagine a new environment and a new behaviour, step 2: the students interpret the new environment and the new behaviour, step 3:the students embed the appropriate behaviour in the new environment, step 4: the students think about the methods/strategies to express their behaviour, step 5: the students should guess the best method and choose it, step 6: the students should accurately appraise/review the cases. 6th and 7th sessions: new cases were presented to the students and they were asked to follow the steps using a guide card. 8th and 9th sessions: transparent self-guidance: the students should repeat the presented cases aloud and do the expected behaviour using the learned steps and the guide card. If required, minor verbal advices will be given. 10th and 11th sessions: reductive self-guidance: the objective of this session is to internalise the learned method. It was explained to the students that since now on they will practice the method that they have leaned internally. To do so, a new subjective environment was presented as a pattern and the proper reactive behaviours were suggested. It was asked from the students to act like this. 12th session: 6th session was repeated but it was asked from the students to minimise using guide card. 13th and 14th sessions: presentation of proper and structured reactive behaviours without using guide card or presenting the steps. 15th session: reviewing/appraising the precious sessions and reviewing the assignments. 16th session: measuring the post-intervention outcome.
Outcomes	*Social Skills competences – teacher rated - final – SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences – parent rated - final – SD* ● **Outcome type**: ContinuousOutcome ● **Notes**: Conners Parent Rating Scale *Social Skills competences – parent rated – longest follow up – SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences – child rated - final – SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences – child rated – longest follow up – SD* ● **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated - final – SD
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

General behavior – child rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – child rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – final – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – parent rated – final – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – parent rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – final – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – final – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Performances and grades in school – final – SD
- **Outcome type**: ContinuousOutcome

Performances and grades in school – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Adverse events – severe
- **Outcome type**: ContinuousOutcome

Adverse events – not severe
- **Outcome type**: ContinuousOutcome

Social skills competences - teacher rated - final- change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – teacher rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – parent rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – parent rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

	General behavior – teacher rated – final – change score ● **Outcome type**: ContinuousOutcome *General behavior – teacher rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome *General behavior – parent rated – final – change score* ● **Outcome type**: ContinuousOutcome *General behavior – parent rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome *General behavior – child rated – final – change score* ● **Outcome type**: ContinuousOutcome *General behavior – child rated – longest follow up – change score* ● **Outcome type**: ContinuousOutcome *General behavior – observer rated – final – change score* ● **Outcome type**: ContinuousOutcome *General behavior – observer rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – teacher rated – final – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – teacher rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – parent rated – final – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – parent rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – child rated – final – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – child rated – longest follow up – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – observer rated – final – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – observer rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome
Notes	*Signe Joost* on 03/01/2018 03:31 **Included** Har skrevet til forfatter ang. demografiske data

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Quote: "Participants were randomly assigned to the groups [No more details]" Judgement Comment: No more details were reported.
Allocation concealment (selection bias)	Unclear risk	Judgement Comment: No details reported. It was not possible to retrieve further information from the authors.
Blinding of participants and personnel (performance bias)	High risk	Judgement Comment: Not described, but probably not blinded.
Blinding of outcome assessment (detection bias)	Unclear risk	Judgement Comment: No details reported. It was not possible to retrieve further information from the authors.
Incomplete outcome data (attrition bias)	Low risk	Judgement Comment: No drop outs
Selective reporting (reporting bias)	Unclear risk	Judgement Comment: None known. No registered protocol available.
Other bias	Unclear risk	

Bloomquist 1991

Methods	Randomised Clinical Trial.
Participants	A multistage identification process based on cut of scores in the CBCL: Child Behaviour Checklist teacher/parent resulted in a group of 64 children who were assessed by the Diagnostic Interview for Children and Adolescents- DICA-R. Finally 52 children with ADHD were randomised to either the multi component CBT condition, a teacher intervention, and a wait list control group. Sex: 36 boys and 16 girls in the age 8-9 years. Ethnicity: 95% was Caucasian students. Comorbidity: 18 (35%) had also ODD. Sample size calculation not reported.

	The groups were highly comparable on the descriptive and subjective identification measures; age, IQ, Academic achievement, hyperactivity and self-control behaviour, externalising, internalising behaviour on baseline. Setting: Three suburban elementary schools in the same school district. Co-medications for comorbid disorders: no information Inclusion criteria: 1) T≥ 60 on the CBCL-Teacher. 2) Signed consent form. 3) TT≥ 60 on the CBCL-Parent. 4) An ADHD diagnosis on the basis of DIACA-R. Exclusion criteria: 1) Mental retardation. 2) Epilepsy. 3) Severe emotional disorder. 4) Pervasive development disorder.
Interventions	Format and duration of the intervention: The intervention consisted of Multicomponent Cognitive-Behavioral Therapy Intervention(MLB): The intervention included coordinated child, parent, and teacher training components. The child component consisted of two one hour group sessions each week over a 10 week period (20 sessions). The teacher component consisted of one 2 hour in service and six 45-60 minutes consultation over a 10 week- period. The parent intervention component consisted of seven 90 minutes group sessions. Teacher-only Intervention: This component consisted as the same teacher component as above but without the child only and the parent component. Waiting-list control: No intervention. Content of the intervention: The intervention based on Braswell and Bloomquist(1991) and Bloomquist and Braswell´s cognitive-behavioural therapy program for ADHD children. A variety of cognitive- behavioural techniques were utilized in the child component such as: didactic instructions, modelling, role-play exercises and so on.The teacher intervention was focused on, for example, problem solving in the classroom and on reinforcing appropriate behaviour and consequating disruptive behaviour. The parent intervention targeted to teach the parents about ADHD, to establish a positive trusting atmosphere among the parents, and to teach them cognitive/behavioural principles identical to those adressed in the teacher training component. The child group was led by school psychologist, the parents' groups by therapist and the teacher intervention by a consultant. The child and teacher interventions had almost 100% attendance.
Outcomes	Observations: Structured behavioural observations(blinded to treatment assignment) Children rated: Self-Control Rating Scale (SCRS) (33 item questionnaire, 7 point scale. The higher the score, the more the child lacked self-control). Teacher rated: Conners Teacher Rating Scale (CTRS) (39 items questionnaire, 4 point Likert scale: from not at all (0) to very much (3)) Teacher Report-Walker-McConnell Scale of Social Competance and School Adjustment (43 items) There was a comprehensive treatment manual for the MLB and for the teacher only intervention.
Notes	Key conclusions of the study authors: No difference between groups. Authors refer to another paper by Bloomquist 1991. We cannot find this paper. We do not know if it was ever published.

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	No description of the randomisation method used.
Allocation concealment (selection bias)	Unclear risk	No description of the allocation method used.
Blinding of participants and personnel (performance bias)	High risk	No blinding.
Blinding of outcome assessment (detection bias)	High risk	The observers were blinded to treatment assignment but the teachers were not. No blinding on primary outcomes.
Incomplete outcome data (attrition bias)	High risk	16 excluded data sets with much likelihood to bias results.
Selective reporting (reporting bias)	Low risk	All of interest reported
Other bias	Unclear risk	

Bul 2016

Methods	Design: Randomized controlled trial, crossover
Participants	Social skills training 1 Sex, number of boys and girls: Boys= 70 (79.5%) Girls= 18 (20.5%) Age, mean and range: 9.89 (1.28) Comorbidity, % of each type: Oppositional defiant disorder (ODD)= clinical: 74 (84.1%), subclinical: 14 (15.9%) Social economic status: No information IQ, mean, range: 105.40 (14.46) ADHD medication: 80 (90.9%) No intervention/wait list Sex, number of boys and girls: Boys= 67 (81.7%) Girls= 15 (18.3%) Age, mean and range: 9.82 (1.24)

	Comorbidity, % of each type: Oppositional defiant disorder ODD= clinical: 75 (91.5%), subclinical: 7 (8.5%) IQ, mean, range: 107.02 (SD= 15.18) ADHD medication: 76 (92.7%) Overall Sex, number of boys and girls: Boys= 137 (80.6%) Girls= 33 (19.4%) Age, mean and range: 8-12 (M=9.85, SD=1.26) Comorbidity, % of each type: Oppositional defiant disorder= clinical: 149 (87.6%), subclinical: 21 (12.4%) IQ, mean, range: 106.18 (14.79) ADHD medication: 156 (91.8%) Inclusion criteria: 1) A Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR) diagnosis of ADHD, confirmed by the Kiddie Schedule for Affective Disorders and Schizophrenia-Lifetime version [K-SADS] 2) age 8-12 years 3) stable on pharmacological and/or psychological treatment for ADHD 8 weeks before baseline (determined by health care professionals on the basis of medication data and behavioral observation) 4) no initiation or change of pharmacological and/or psychological treatment for ADHD during the study period 5) availability of a computer workstation at home with Internet and sound facilities 6) sufficient understanding of the Dutch language by the child and by at least one of the parents Exclusion criteria: 1) An estimated total Intelligent Quotient (IQ) lower than 80 (determined by vocabulary and block design subtests of the Wechsler Intelligence Scale for Children III [WISC-III]) 2) Substance abuse problems (eg, drugs, alcohol) 3) conduct disorder, previously diagnosed by health care professionals 4) autism spectrum disorder, previously diagnosed by health care professionals 5) comorbid acute psychiatric disorder (eg, depression, mania; confirmed by the K-SADS 6) participation in a previous pilot study with a prototype of Plan-It Commander 7) Children with a severe physical disability (eg, blindness, deafness) or learning disability (eg, dyslexia) were also excluded on the basis of the child's medical file and a standardized interview administered by phone to parents Pretreatment: There was no significant difference in baseline demographics between the two groups Medication: n=156/170 (91.8%) received ADHD medication as TAU
Interventions	Format and duration of the interventionThe serious game was played for a maximum of 65 minutes 3 times per week (minimum not informed) – not possible to play more than 65 minutes in one 24 hour period Children received treatment as usual for the first 10 weeks and crossed over to the serious game intervention in addition to treatment as usual for the subsequent 10 weeks. Content of the intervention Plan-IT commander: Internet-based serious game intervention. Online adventure game: designed to improve domains of daily life: 1) time management, 2) planning/organizing and 3) cooperations skills. Access to game environment and a closed social community – possible to ask others for help, predefined messages, badges.
Outcomes	*Social Skills competences – teacher rated - final – SD* ● **Outcome type**: ContinuousOutcome ● **Notes**: SSRS (Total) *Social Skills competences – parent rated - final – SD* ● **Outcome type**: ContinuousOutcome ● **Notes**: SSRS (Subscale Total) *Social Skills competences – parent rated – longest follow up – SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences – child rated - final – SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences – child rated – longest follow up – SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences – observer rated - final – SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences – observer rated – longest follow up – SD* ● **Outcome type**: ContinuousOutcome *General behavior – teacher rated – final – SD* ● **Outcome type**: ContinuousOutcome *General behavior – teacher rated – longest follow up - SD* ● **Outcome type**: ContinuousOutcome *General behavior – parent rated – final – SD* ● **Outcome type**: ContinuousOutcome *General behavior – parent rated – longest follow up - SD* ● **Outcome type**: ContinuousOutcome *General behavior – child rated – final – SD* ● **Outcome type**: ContinuousOutcome *General behavior – child rated – longest follow up – SD* ● **Outcome type**: ContinuousOutcome *General behavior – observer rated – final – SD* ● **Outcome type**: ContinuousOutcome *General behavior – observer rated – longest follow up - SD*

- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – final – SD
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Core ADHD symptoms – teacher rated – longest follow up - SD
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Core ADHD symptoms – parent rated – final – SD
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Core ADHD symptoms – observer rated – final – SD
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Core ADHD symptoms – observer rated – longest follow up - SD
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Performances and grades in school – final – SD
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Performances and grades in school – longest follow up - SD
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Adverse events – severe
- **Outcome type**: ContinuousOutcome

Adverse events – not severe
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Social skills competences - teacher rated - final- change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – teacher rated – longest follow up - change score
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Social Skills competences – parent rated - final – change score
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Social Skills competences – observer rated - final – change score
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Social Skills competences – observer rated – longest follow up – change score
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General behavior – teacher rated – final – change score
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General behavior – teacher rated – longest follow up - change score
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General behavior – parent rated – final – change score
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- **Outcome type**: ContinuousOutcome

General behavior – child rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – child rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – final – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – longest follow up - change score

	● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – parent rated – final – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – parent rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – child rated – final – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – child rated – longest follow up – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – observer rated – final – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – observer rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome *Emotional competences - child rated - final - SD* ● **Outcome type**: ContinuousOutcome *Emotional competences - child rated - longest follow up* ● **Outcome type**: ContinuousOutcome *Emotional competences - child rated - change score* ● **Outcome type**: ContinuousOutcome *Emotional competences - parent rated - final - SD* ● **Outcome type**: ContinuousOutcome *Emotional competences - parent rated - longest follow up* ● **Outcome type**: ContinuousOutcome *Emotional competences - parent rated - change score* ● **Outcome type**: ContinuousOutcome *Emotional competences - teacher rated - final - SD* ● **Outcome type**: ContinuousOutcome *Emotional competences - teacher rated - change score* ● **Outcome type**: ContinuousOutcome *Emotional competences - teacher rated - longest follow up* ● **Outcome type**: ContinuousOutcome
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Judgement Comment: 1:1 ratio and based on a prespecified computer-generated randomization list. Allocation was stratified by study site and gender and arranged in permutated blocks.
Allocation concealment (selection bias)	Unclear risk	Judgement Comment: Group assignment was performed online using the next available number on the randomization list corresponding to the site and gender of the participant.
Blinding of participants and personnel (performance bias)	High risk	Judgement Comment: It was not possible to blind participants to their treatment allocation. After screening and baseline assessment parents received an email with notification of group allocation
Blinding of outcome assessment (detection bias)	High risk	Judgement Comment: Parent and child self-report: Detection bias due to child and parent knowledge of received intervention. Full blinding of researchers and teachers not guaranteed as participants could spontaneously talk about the game during the assessment or the study time.
Incomplete outcome data (attrition bias)	Low risk	Judgement Comment: Intention-to-treat analyses were used and included all randomized participants. Linear trend at point was used as an imputation method.
Selective reporting (reporting bias)	Low risk	Judgement Comment: All expected outcome measures reported. Only satisfaction questionnaire are not mentioned in the protocol.
Other bias	Unclear risk	

Evans 2016

Methods	Design: Randomized controlled trial, Parallel group
Participants	Social skills training 1 Sex, number of boys and girls: boys= 79 (70.5%) Age, mean and range: 38.4% grade 6, 37.5% grade 7, 24.1% grade 8. Mean age: 12.1 (.9) Comorbidity, % of each type: 19.6% Anxiety disorder, 8% depression, ODD symptoms mean 4.5, SD 2.3, CD symptoms mean 2.1, SD 1.9 Co medication for comorbid disorders, balanced between groups?: .

	Social economic status: Mean 56.500, SD 45.200 in thousand $ IQ, mean, range: 100.3 (SD=14.2) Ethnicity,%: 7.1% African American, 74.1% White, 14.3% Biracial, 4.5% Other, 2.7% Hispanic ADHD medication: 43.8% Social skills training 2 Sex, number of boys and girls: boys= 76 (69.1%) Age, mean and range: 40.9% grade 6, 37.3% grade 7, 23.1% grade 8, mean= 12.1 (09) Comorbidity, % of each type: 21.1% Anxiety disorder, 10.9% depression, ODD symptoms mean 4.7, SD 2.3, CD symptoms mean 1.9, SD 1.3 Co medication for comorbid disorders, balanced between groups?: Social economic status: Mean 61.500, SD 52.400 in thousand $ IQ, mean, range: 99.2 (SD=13.1) Ethnicity,%: 14.5% African American, 78.2% White, 5.5% Biracial, 1.8% Other, 5.5% Hispanic ADHD medication: 57 (51.8%) No intervention/wait listSex, number of boys and girls: boys= 77 (74.0%) Age, mean and range: 41.3% grade 6, 29.8% grade 7, 28.8% grade 8. Mean= 12.1 (1.0) Comorbidity, % of each type: 17.3% Anxiety disorder, 7.7% depression, ODD symptoms mean 4.4, SD 2.2, CD symptoms mean 1.7, SD 1.4 Co medication for comorbid disorders, balanced between groups?: Social economic status: Mean 63.500, SD 55.500 in thousand $ IQ, mean, range: 101.4 (13.7)Ethnicity,%: 14.4% African American, 79.8% White, 4.8% Biracial, 1% Other, 1% Hispanic ADHD medication: 47 (45.4 %) Comorbidity, % of each type: (Langberg et al. 2016) 55% of the participants metcriteria for ODD or CD, 27% met criteria for ananxiety disorder, and 13% met criteria for adepressive disorder (seeEvans et al., 2015, for amore detailed description of recruitment activities and of participant demographic characteristic Inclusion criteria: 1) attended one of the participating schools, grad 6, 7 or 8 2) met full DSM-IV-TR diagnostic criteria for either ADHD-Predominantly Inattentive Type or ADHD-CombinedType ADHD based on the Parent Children's Interview for Psychiatric Syndromes (P-ChIPS;Weller, Weller, Fristad, Rooney, , 2000) or combined with teacher ratings on the DisruptiveBehavior Disorders Rating Scale (DBD;Van Eck, Finney, 2010) 3) demonstrated impairment based on parent or teacher report on the Impairment Rating Scale (IRS; scores3 constitute impairment) 4) IQ of 80 or above as estimated using the Wechsler Intelligence Scale for Children—Fourth Edition (WISC-IV;Wechsler, 2003); Exclusion criteria: 1) meet diagnostic criteria for a pervasive developmental disorder or any of the following on the P-ChIPS: bipolardisorder, psychosis, or obsessive-compulsive disorder.Pretreatment**:** There were no statistically significant differences between Groups on any demographic variables
Interventions	Number of participants allocated per group:Group 1(CHP-AS) = 112, Group 2 (CHP-M) = 110, Control Group (community care/TAU)= 104 Attendance: Group 1 (CHP-AS)= The average number of CHP-AS sessions offered was 53.80 (ranging 47-68; median 53.5). Students attended a mean of 31.85 sessions (SD 18.75, ranging from 0-59; median 36). Of the 112 students assigned to the after-school program condition, 105 (94%) attended at least one session. Twenty-two percent of the participants withdrew from treatment during the academic year. The average number of meetings attended by parents was 1.67(SD 1.23, ranging from 0 to 3; median 2).Group 2 (CPH-M)= The average number of consultant-mentor meetings was 13.39(SD 3.65, ranging from 0-22; median 14) and the average consultant-mentor meeting duration was 19.59 min (SD 6.47,ranging from 8 to 44 min; median 18.00). The average numberof mentor-student meetings (intervention sessions) was 25.17(SD 17.14; median 22.5), and the average number of mentor-student feedback sessions completed was 1.84 (SD 0.99; median 2). The average mentor-student intervention session durationwas 12.12 min (SD 7.17, ranging from 2 to 53 min;median 10.33). Seventy-five percent of the mentor-studentinterventions involved organizational skills, 53% involved homeworkrecording accuracy in assignment notebooks, 30% involveddaily report cards (DRCs), 20% involved missing assignmentchecks, 10% involved study skills, and 3% involved some othertype of intervention. Thirty percent of the mentor-student pairingsinvolved only one intervention, 50% of the mentor-student pairingsinvolved two interventions, 18% involved three interventions,and 2% involved four interventions. Three percent of the participantswithdrew from treatment during the academic year (i.e., student discontinued meetings with mentor). Control Group (TAU)= 3 withdrew from study. No other information reported Content and format of the interventionSocial skills training 1: Challenging Horizons Program-after school version (CHP-AS). occurred twice weekly for 2 hour and 15 min per day and included organization,social functioning, and academic study skills interventions. Further organization and task progress was monitored daily. Six to 10 students were assigned to a group. One to two students were each assigned to a primary counsellor (PC). The CHP-AS PCs was staffed by undergraduate students and a site supervisor (graduate student/postdoc fellow) who supervised the PCs and led group activities. All staff received 9 hr of training prior to beginning the program, and PCs received weekly supervision.Social skills training 2: Challenging Horizons Program-mentoring version (CHP-M). students were paired with a mentor(e.g., teacher) who was trained by a consultant and delivered a subset of the CHP-AS interventions during school. Mentor meet weekly with student and biweekly with research staff.No intervention/wait list: Community care (CC)condition. No direct intervention was provided in CC. A list of available resources in the specific community setting was collated and distributed to the participants randomised to this group
Outcomes	*Social Skills competences - teacher rated - final - SD* ● **Outcome type**: ContinuousOutcome ● **Notes**: CPS Interpersonal factor *Social Skills competences - parent rated - final - SD* ● **Outcome type**: ContinuousOutcome ● **Notes**: SSIS Social skills *Social Skills competences - parent rated - longest follow up - SD*

- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated - final – SD
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated - final – SD
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

General behavior – child rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – child rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – final – SD
- **Outcome type**: ContinuousOutcome
- **Notes**: Disruptive Behavior Disorders Rating Scale (DBD-Hyper/Imp), subscale hyperactivity/impulsivity symptoms

Core ADHD symptoms – teacher rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – parent rated – final – SD
- **Outcome type**: ContinuousOutcome
- **Notes**: Disruptive Behavior Disorders Rating Scale (DBD-Hyper/Imp), subscale hyperactivity/impulsivity symptoms

Core ADHD symptoms – parent rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – final – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – final – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Performances and grades in school – final – SD
- **Outcome type**: ContinuousOutcome
- **Notes**: CPS Academic factor

Performances and grades in school – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Adverse events – severe
- **Outcome type**: ContinuousOutcome

Adverse events – not severe
- **Outcome type**: ContinuousOutcome

Social skills competences - teacher rated - final- change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – teacher rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – parent rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – parent rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated - final – change score

	● **Outcome type**: ContinuousOutcome *Social Skills competences – child rated – longest follow up – change score* ● **Outcome type**: ContinuousOutcome *Social Skills competences – observer rated - final – change score* ● **Outcome type**: ContinuousOutcome *Social Skills competences – observer rated – longest follow up – change score* ● **Outcome type**: ContinuousOutcome *General behavior – teacher rated – final – change score* ● **Outcome type**: ContinuousOutcome *General behavior – teacher rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome *General behavior – parent rated – final – change score* ● **Outcome type**: ContinuousOutcome *General behavior – parent rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome *General behavior – child rated – final – change score* ● **Outcome type**: ContinuousOutcome *General behavior – child rated – longest follow up – change score* ● **Outcome type**: ContinuousOutcome *General behavior – observer rated – final – change score* ● **Outcome type**: ContinuousOutcome *General behavior – observer rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – teacher rated – final – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – teacher rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – parent rated – final – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – parent rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – child rated – final – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – child rated – longest follow up – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – observer rated – final – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – observer rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome *Performance and grades in school - change score* ● **Outcome type**: ContinuousOutcome ● **Data value**: Endpoint
Notes	*Signe Joost* on 08/12/2017 20:31 **Population** *Met criteria for any anxiety disorder or depressive disorder as determined by child self-report on semi-structured diagnostic interview. ** Reported in thousands. *** Reported in grade equivalents. **** Race/ethnicity do not sum to 100% because ethnicity (Hispanic) was asked separate from race *Signe Joost* on 22/12/2017 21:31 **Included** Har skrevet til forfatter angående quality assessment. *Signe Joost* on 10/03/2018 00:29 **Included** Social competences (teacher rated - longest follow-up) Group 1= 10.25 (SD 4.44), Group 2= 10.57 (SD 4.30), Control Group = 9.9 (4.32).

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Judgement Comment: Comment from author: Randomization was conducted after the recruitment of each of the three cohorts. Our statistician (who was not involved in recruitment) generated a string of random numbers that led to the assignment of participants to condition. The statistician sent the PIs at each site the condition allocation for our sites.
Allocation concealment (selection bias)	Low risk	Judgement Comment: Comment from author: The statistician sent the PIs at each site the condition allocation for our sites.
Blinding of participants and personnel (performance bias)	High risk	Judgement Comment: Based on the intervention type it is not possible for participants and personnel to be blind to group status. However, according to the authors parents had similar expectations for improvement in both of the two active treatment conditions.
Blinding of outcome assessment (detection bias)	High risk	Judgement Comment: The outcomes relevant for this review are parent and teacher ratings, so it is not possible with blinding of outcome assessors. Comment from the author: Teachers were minimally aware of condition as they completed assessments, but were not actively involved in any other activities for participants in any condition. Nevertheless, had they wanted to know the services a child was or was not receiving, the information was available to them. Thus, as most, if not all teachers remained unaware, they were not “blinded” to treatment condition.
Incomplete outcome data (attrition bias)	Low risk	Judgement Comment: Intention to treat was used. Seven did not attend any Challenging Horizons Program - after school version (CHP-AS) sessions (including one that withdrew). There were four study withdrawals across the two treatment conditions. One child passed away. One participant´s parent passed away. Two were no longer interested in participating and requested no further contact. Two participants transferred schoold before the academic year started.
Selective reporting (reporting bias)	Unclear risk	Judgement Comment: No trial registration is found, so it is not possbile to judge if all outcome data have been reported. Grade point average was collected however mean and sd were not reported.
Other bias	Unclear risk	

Hannesdottir 2017

Methods	Design: Randomized controlled trial, Crossover
Participants	Social skills training 1 Sex, number of boys and girls: 75% boys, 25% girls Age, mean and range: 9.24 (.48)IQ, mean, range: 105.8 (10.51) ADHD medication: 16 (100%) ADHD subtypes, % of each: 87.5% combined, 6.3% inattentive, 6.3% hyperactive-impulsive No intervention/wait list Sex, number of boys and girls: 57.1 % boys, 42.9% girls Age, mean and range: 8.89 (.47) IQ, mean, range: 110.6 (14.93) ADHD medication: 12 (85.7%) ADHD subtypes, % of each: ADHD combined: 13 (92.9%), ADHD inattentive= 1 (7.1%), ADHD hyperactive-impulsive= 0 (%) Overall Sex, number of boys and girls: Boys= 29 (71%) girls= 12 (29%) Age, mean and range: 8-10 (M= 9.2, SD= 0.62) Comorbidity, % of each type: ADHD combined: 36 (88%), ADHD inattentive= 4 (10%), ADHD hyperactive-impulsive= 1 (2%) ADHD subtypes, % of each: ADHD combined: 36 (88%), ADHD inattentive= 4 (10%), ADHD hyperactive-impulsive= 1 (2%) Inclusion criteria: 1) Aged 8 to 10 years of age.Previously diagnosed with ADHD by a licensed clinical psychologist and a medical doctor. Exclusion criteria: 1) Diagnosis of an autism spectrum disorder or an IQ below 70. Pretreatment**:** Significant difference in number of days between assessment. Concern with regard to practice effect, but this was not the case for the waitlist group who had had the fewest days between measurements. Medication**:** Intervention 100%Control 85.7%
Interventions	Number of participants allocated per group: Intervention n=16 Waitlist n=14 Attendance:No percentage of attendance reported as requirement.Intervention: attendance for more than 90% of the session and no child missed more than 2 sessions Format and duration of the intervention: OutSMARTers. 10 afternoon sessions of 2 hour each over the duration of 5 weeks. Control group: On wait list to receive the OutSMARTers program later on Content of the intervention: Group of 6 children, worked in smaller groups of 3 children in a predetermined order at multiple training stations with a reward system for completing assignments and following rules. The therapists lead discussions among the children necessary to solve the tasks and to reinforce appropriate behaviors in the group with tokens. Tokens could be used in end of session to buy rewards such as trading cards or movie tickets.

Outcomes

Social Skills competences – teacher rated - final – SD
- **Outcome type**: ContinuousOutcome

Social Skills competences – parent rated - final – SD
- **Outcome type**: ContinuousOutcome

Social Skills competences – parent rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated - final – SD
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated - final – SD
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

General behavior – child rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – child rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – final – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – parent rated – final – SD
- **Outcome type**: ContinuousOutcome
- **Notes**: ADHD rating scale - Hyperactivity/impulsivity subscale

Core ADHD symptoms – parent rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – final – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – final – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Performances and grades in school – final – SD
- **Outcome type**: ContinuousOutcome

Performances and grades in school – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Adverse events – severe
- **Outcome type**: ContinuousOutcome

Adverse events – not severe
- **Outcome type**: ContinuousOutcome

Social skills competences - teacher rated - final- change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – teacher rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – parent rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – parent rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

General behavior – child rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – child rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – final – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – parent rated – final – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – parent rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – final – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – final – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Participants satisfaction with treatment
- **Outcome type**: ContinuousOutcome

Parent satisfaction with treatment
- **Outcome type**: ContinuousOutcome

Emotional competences - child rated - change score
- **Outcome type**: ContinuousOutcome

Emotional competences - child rated - longest follow up
- **Outcome type**: ContinuousOutcome

Emotional competences - child rated - final - SD
- **Outcome type**: ContinuousOutcome

Emotional competences - parent rated - change score
- **Outcome type**: ContinuousOutcome

Emotional competences - parent rated - final - SD
- **Outcome type**: ContinuousOutcome
- **Notes**: Emotion Regulation Checklist (ERC) - emotion regulation subscale

Emotional competences - parent rated - longest follow up
- **Outcome type**: ContinuousOutcome

Emotional competences - teacher rated - change score

	● **Outcome type**: ContinuousOutcome *Emotional competences - teacher rated - final - SD* ● **Outcome type**: ContinuousOutcome *Emotional competences - teacher rated - longest follow up* ● **Outcome type**: ContinuousOutcome *Performance and grades in school - change score* ● **Outcome type**: ContinuousOutcome
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Judgement Comment: Parents who contacted the coordinator for their child to participate in the Outsmarters program was allocated the next number available (ex. fifth parent to contact the coordinator got subject number five). A computer-generated list with a computer randomization of numbers (1-50) allocated to either the treatment group or the waitlist group.
Allocation concealment (selection bias)	Unclear risk	Judgement Comment: No mentioning of allocation concealment
Blinding of participants and personnel (performance bias)	High risk	Judgement Comment: It is not seen as possible to blind participants and personnel.
Blinding of outcome assessment (detection bias)	High risk	Judgement Comment: Outcomes were parent reported (who were not blinded).
Incomplete outcome data (attrition bias)	Low risk	Quote: "Attrition rates were very low for this group; only one child did not com- plete the treatment (6%)." Judgement Comment: Only one child in intervention Group 1 did not complete treatment, two in intervention Group 2
Selective reporting (reporting bias)	Low risk	Judgement Comment: All measures described in methods section were reported in results tables. There is no trial registration so it is not possible to judge whether any further measures have been included but not reported. It is not clear on what basis it were decided to use and report total scores or sub-scale scores for the included measures.
Other bias	Unclear risk	

MTA 1999

Methods	Randomised Clinical Trial
Participants	576 children with ADHD (DSM-IV) aged to 9.9 years were randomised to either 14 month of medical treatment, intensive behavioural treatment, the two combined and standard community care. Setting: Six multi site outpatient clinics in USA. Sex: 465 boys and 111 girls. Ethnicity: 61% white, 20% African American, and 8% Hispanic. Comorbidity: 33.5% anxiety disorder, 14.3% conduct disorder, 39.9% oppositional-defiant disorder, 3.8 % affective disorder, 10.9% tic disorder, 2.2%, other (bulimia, enuresis). Co-medications for comorbid disorders: balanced between groups. Inclusion criteria: 1) Boys and girls, aged 7.0 - 9.9 years (1 st-4th grades), residing with primary caretakers for at least 6 months, who meet dimensional criteria for hyperactivity on the basis of parent end teacher rating scales and full diagnostic criteria for ADHD, Combined type. Exclusion criteria: 1) Currently in hospital (inability to obtain school assessments). 2) Currently in another treatment study (confounding of assessments and treatments). 3) Below 80 on WISC-III Verbal IQ, Performance IQ, or Full Scale IQ scores and on Scales of Independent Behavior (insufficient ability to participate in psychosocial interventions). 4) Bipolar disorder, psychosis, pervasive developmental disorder, severe obsessive-compulsive disorder (treatment may be incompatible with MTA treatments). 5) Chronic, serious tics or Tourette´s Disorder (possible contraindication for stimulant treatment). 6) Neuroleptic treatment in previous 6 months (may need resumption, which is incompatible with MTA treatments). 7) Major neurological or medical illness that would interfere with study participation or require medications incompatible with MTA medications (inability to participate in MTA treatment). 8) History of intolerance to MTA medications (dangerous if participants assigned to arm involving medications). 9) Suicidal of homicidal (needs more intensive treatment than MTA provides). 10) Ongoing or previously undisclosed child abuse (risk of removal from home precludes parent intervention and consistent parent data). 11) Missed more than 25% of school days in previous 2 months (interference with teacher assessments and school intervention). 12) Another child in household already participating in MTA (cross-arm contamination if two children in same household randomised to different arms). 13)Same classroom as child already participating in MTA (cross-arm contamination if two pupils in same classroom are randomised to different arms). 14) Parental stimulant/cocaine abuse in past 2 years (possible co-opting of child´s medications). 15) Inability of parent to speak English (inability to participate in parent training). 16) No telephone (inability to participate in telephone calls with therapists).

Interventions	There were four treatment conditions; Medication Treatment Group, Psychosocial Treatment Group, Combined Treatment (M+PS), and Community Care Group. Format and duration of the treatment: Medication Treatment Group: 1 month of blind titration. Monthly visits after the titration period, doses adjusted as indicated by monthly monitors. Behavioural Treatment Group: Intense, Multi-Component, including 27 group & 8 individual sessions of parent training, 16-20 sessions teacher consultations, 8 week full time Summer Treatment Program, and 12 week of half-time classroom behavioural specialist. No medication. Combined Treatment Group: Integration of all treatment components in Medication Treatment Group and Behavioral Treatment Group. Community Care Group: Treatment of own choosing in the community. No treatment provided by MTA. Content of the Treatment: Medical Treatment Group: 1 month of blind titration with methylphenidate for best dose, if unsatisfactory, then open titration with d-amphetamine, pemoline, imipramine, others. Supplementary general advice and selected readings without systematic behavioural intervention. Behavioural Treatment Group: Consisted of three major components: parent training, a two part school intervention component, and a child treatment component anchored in an intensive summer treatment program.
Outcomes	Parent rated: Homework Problems Checklist Social Skills Rating System DISC 3.0 Conners Rating Scale Child Behavior Checklist SNAP-IV DSM-IV Conduct Disorder Checklist Consumer Satisfaction Teacher rated: Social Skills Rating System Conners Rating Scale Child Behavior Checklist SNAP-IV Child rated: WIAT Social Skills Rating System DISC 3.0 Self Report of Antisocial Behaviour Observator rated: Classroom Observations
Notes	The authors states that medication and combined treatment do not differ on teacher and parent rated social skills.

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Adequate method used.
Allocation concealment (selection bias)	Low risk	Adequate method used.
Blinding of participants and personnel (performance bias)	High risk	No blinding.
Blinding of outcome assessment (detection bias)	High risk	Blinded and unblinded raters.
Incomplete outcome data (attrition bias)	Unclear risk	Imputation method?
Selective reporting (reporting bias)	Unclear risk	Where is the consumer satisfaction and the CBCL data reported? Clarification has been requested from one of the trial investigators, but we had received no answer when this review was finished.
Other bias	Unclear risk	

Pfiffner 1997

Methods	Design: Randomised Clinical Trial.
Participants	Participants were recruited from newspaper advertisement and from consecutive referrals to a university-based behavioural paediatric clinic specialized in ADHD and related disorders. Children 8-10 years with an ADHD diagnosis made on the basis of DSM-III-R criteria. Sex: 19 boys, 8 girls. Ethnicity: Patients were Caucasian except from 1 boy, who was African American. Socioeconomic status were from middle to upper middle class. Two children were from single-parent families. Comorbidity: 25 children met criteria for ADHD and 2 met criteria for UADD. 19 children met criteria for comorbid oppositional defiant disorder, 3 for conduct disorder, 4 for separation anxiety disorder, 5 for overanxious disorder, and 2 for dysthymic disorder. Only 12 of the children (44%) were receiving stimulant medication. Sample size calculation not reported. Pre randomisation: 27. Post randomisation: 18.

	Setting: University based paediatric clinic, USA. Co-medications for comorbid disorders: no information Inclusion criteria: 1) Diagnosis of ADHD (DSM-III-R), a mean score at or above 1,5 on at least one of the parent-completed sub scales assessing ADHD. behaviour from the CLAM rating scale or the SNAP-R, a T score of at least 60 on the Attention Problem subscale of the CBCL. Exclusion criteria: Not reported. We have attempted to get information about this from the study investigators but have not succeeded in this attempt.
Interventions	Three conditions: Social skills training for the children (SST), Social skills training for the children with parent mediated generalisation (SST-PG) and a wait list control group. Format and duration of the intervention: The two treatment groups attended 8 group sessions. There were assessment at pre and post treatment and follow-up 3-4 months post treatment. Children in the treatment groups received 90 min group sessions during consecutive weeks. Content of the intervention: The same two therapists were teaching in all the children groups. Six themes/modules were covered during the 8 weeks. 1) good sportsmanship, 2) accepting consequences, 3) assertiveness, 4) ignoring provocations, 5) problem solving, 6) recognising and dealing with feelings. Children were assigned homework to practice at home. The children received points for following the rules of the groups, participate and attend the sessions.The points could be exchanged for child-selected games and activities during the last 10 minute for each group. In the SST-PG parent were used as a primary vehicle to program generalisation of the social skills learned in the SST groups to home and school settings. The parents group were led by a licensed psychologist. The parents went through the same group themes or agendas as the children did. The parents met with their childrens teacher and gave the teacher a template for the scorecard, also called the daily report card.The teacher scored the child on a 4 point scale and parents rewarded the child when the child scored high on the scale. There were a protocol for both the SST and the SST-PG intervention. The intervention groups were led by psychologist.
Outcomes	Parent rated: Social Skils Rating System (SSRS) The Social Skills scale consists of 30 items on a Likert scale (0-3). Social Skills Scale (UCI) 10 items (5 point scale: 1-5) (parent). Consumer Satisfaction Questionnaire (12 items, 7 point scale (scores above 4 reflecting satisfaction and scores below 4 reflecting dissatisfaction). Teacher rated: Social Skils Rating System (SSRS). The Social Skills scale consists of 30 items on a Likert scale (0-3). Interviewers: Test of social skill knowledge (six questions each scored from 1-15)(scored by blinded raters).
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	No information given in the article. Clarification requested from the trial investigators and they reported in an email 26 May 2011 that it is not possible to find this data now.
Allocation concealment (selection bias)	Unclear risk	No information given in the article. Clarification requested from the trial investigators and they reported in an email 26 May 2011 that it was not possible to find this data now.
Blinding of participants and personnel (performance bias)	High risk	No blinding.
Blinding of outcome assessment (detection bias)	High risk	There was blinding on at least one of this study's primary outcomes; in the rest of the outcomes there was no blinding.
Incomplete outcome data (attrition bias)	Low risk	Imputation method used. F.u. scores for 3 participants replaced by m.
Selective reporting (reporting bias)	High risk	The author informed in an email that the CLAM and SNAP were used post treatment, but not reported in the article. It was not possible to get the data because they had been lost over time.
Other bias	Unclear risk	

Pfiffner 2007

Methods	Design: Randomised Clinical Trial.
Participants	There were 69 children in the age 7- 11 years randomised to Child Life and Attention Skills Program (CLAS) or a control group who did not receive the intervention. Setting: Outpatient clinic. Sex: 46 boys, 23 girls. Ethnicity: White 51%, Asian 16%, Hispanic 10%, Afro American 6%, and mixed 17%. There were not any significant difference between group in the form of child age, sex, race, symptoms of hyperactivity/impulsivity, comorbid oppositional defiant disorder, anxiety or depression, IQ or academic achievement. Comorbidity: ODD (23%), depressive (1%), anxiety (12%) Co-medications for comorbid disorders: no information Inclusion criteria: 1) DSM-IV diagnosis of ADHD-I. 2) IQ > 80 (based on Wechsler Abbreviated Scale of Intelligence). 3) Living with at least one parent for the past year. 4) Attending school full time.

	5) The school consenting to participate in school-based treatment. Exclusion criteria: 1) Families expecting to change medication status for their child during the study. 2) Children with visual or hearing impairment. 3) Severe language delay. 4) Major neurological illness. 5) Psychosis, or pervasive development disorder. 6) A child being in the same classroom as another participant or having a sibling who was already enrolled. In the intervention group 7 children were lost to follow-up and in the control group 8 children were lost to follow-up.
Interventions	The treatment included three components administrated concurrently over 12 weeks: teacher consultation, parent training, and child skills training. Format and duration of the treatment: Child skills training: 8 (cohort:1-4) and 10 (cohort 5) 1 ½ hours a week groups with child skills training in the 12 week period. Parent Training: 8 (cohort:1-4) or 10 (cohort 5) 1½ hour group sessions and 4 to 5 family sessions (cohort 2-5). Teacher Consultations: 1/2 hour overview of behavioural interventions and classroom-based accommodations for ADHD followed by 4-5 1/2 hour meetings of teacher, child, and therapist over the 12 week period. Content of the intervention: Child Skills Training: The training were divided into modules focused on skills for independence and skills for social competance.There were both behavioural interventions (for example, a reward based contingency management program) and cognitive-behavioural interventions (for example, problem-solving, the use of cues/verbal mediation strategies to stay on task and focused). Parent Training:The modules in the child group were reviewed each week and the parents were taught methods to promote end reinforce the childs use of skills at home. The parents were also taught methods to managing ADHD. Teacher consultations: A school-home daily report card was designed and used (Classroom Challenge-CC). Also a special notebook was created for each child containing copies of CC. All the interventions were manual-based. There were made some changes to the manuals to refine the interventions based on feedback from clinicians, participants, teachers, and parents. Attendance: Parents in all cohorts participated in more than 95% of the group meetings.
Outcomes	Parent rated: Child Symptom Inventory (parents and teachers) corresponds to DSM-IV inattention symptoms and are rated on a 4 point scale (0 = never to 3 = very often). The SCT scale (parents and teachers) consists of 15 SCT items rated on a 4-point scale (0 = never to 3 = very often). SSRS - Social Skills Rating Scale. 30 items rated on a 3 point scale (never, sometimes, very often). Organisational Skills (parents: 58 items, 4 point scale, 1 = never to 4 = just about all time). Clinical Global Impression - Improvement. Teacher rated: Child Symptom Inventory (parents and teachers) corresponds to DSM-IV inattention symptoms and are rated on a 4 point scale (0 = never to 3 = very often). The SCT scale (parents and teachers) consists of 15 SCT items rated on a 4-point scale (0 = never to 3 = very often). SSRS - Social Skills Rating Scale. 30 items rated on a 3 point scale (never, sometimes, very often). Organisational Skills (teacher: 38 items, 4 point scale, 1 = never to 4 = just about all time). Clinical Global Impression-Improvement. Children rated: Test of Life Skill Knowledge Consumer satisfaction: Parents: 100% very satisfied 35% improved or much improved 90% useful or very useful Teachers: 32 of 36 rated the programme as appropriate 73% rated improved attentional difficulties Children: 32 of 36 liked the group. 83% found the programme helped at home. 78% found the programme helped in school.
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Random table. Information received from Pfiffner in an email 25 May 2011.
Allocation concealment (selection bias)	Low risk	Sealed.
Blinding of participants and personnel (performance bias)	High risk	No blinding.
Blinding of outcome assessment (detection bias)	High risk	No blinding.
Incomplete outcome data (attrition bias)	Low risk	Imputation method used.
Selective reporting (reporting bias)	Low risk	All apparent assessment are made.
Other bias	Unclear risk	

Pfiffner 2014

Methods	Design: Randomized controlled trial, Parallel group
Participants	Social skills training 1 Sex, number of boys and girls: 51.4% boys Age, mean and range: 8.8 (1.15) mean, SD Comorbidity, % of each type: Anxiety 6.8%, Depression 1.7%, ODD 5.1% Social economic status: Parent education (83.6% college grads). Single-parent household 9.5%. IQ, mean, range: 103.6 (11.0) WISC FSIQ mean, SD Ethnicity,%: 55.4% Caucasian, 12.2% Latino, 9.5% Asian American, 5.4% African American, 17.6% self-identified as mixed race. ADHD medication: 9.5% No intervention/wait list Sex, number of boys and girls: 58.8% boys Age, mean and range: 8.4 (1.13) mean, SD Comorbidity, % of each type: Anxiety 5.3%, Depression 2.6%, ODD 5.3% Social economic status: Parent education (78.4% college grads). Single-parent household 11.8% IQ, mean, range: 105.6 (11.6) WISC FSIQ mean, SD Ethnicity,%: 43.1% Caucasian, 25.5% Latino, 3.9% Asian American, 3.9% African American, 23.5% self-identified as mixed race. ADHD medication: 2.0% Overall Sex, number of boys and girls: 58% boys Age, mean and range: 8.6 (7-11) Social economic status: Total household income was below $50,000 for 14.1%, $50,000-100,000 for 28.3%, $100,000-150,000 for 28.8%, and more than $150,000 for 28.8% of families. 81.2% of the primary parents reported having graduated from college. Thirteen percent of the participants were living in single-parent Ethnicity,%: 54% Caucasian, 17% Latino, 8% Asian American, 5% African American, 17%self-identified as mixed race. ADHD medication: 4.5% Inclusion criteria: 1) A primary DSM-IV diagnosis of ADHD-I (confirmed by the KSADS-PL IQ > 80 (confirmed with the Wechsler Intelligence Scale for Children, version IV [WISC-IV, Wechsler, 2003]) 2) Living with at least one parent for the past year 3) Child age between 7-11 years (and grades 2-5) 4) Attending school full time in a regular classroom, 5) Ability to participate in our groups on the days scheduled 6) School proximity within 45 minutes of study site to allow for the clinician to conduct school meetings 7) Teacher consent to participate in a school-based treatment Exclusion criteria: 1) Families of children who were taking non-stimulant psychoactive medication (because of difficulty withholding medication to confirm ADHD-I symptoms) 2) Cases planning to initiate or change medication treatment (stimulant or otherwise) in the near term 3) Children with significant developmental disorders (e.g., pervasive developmental disorder) or neurological illnesses Pretreatment: Only medication status at randomization differed across the treatment groups (p = .035), with significantly more CLAS children reporting medication use (9.5%) than PFT (1.4%), but not compared to TAU (2.0%). ADHD medication: The small number of children taking stimulant medication (not otherwise specified) completed a one-week wash-out to assess behavior and obtain ratings off-medication.
Interventions	Number of participants allocated per group: 74 to CLAS; 74 to PFT; 51 to TAU group Attendance: CLAS parents attended an average of 9.3 group meetings and 4.2 individual family meetings. Teachers attended an average of 4.0 meetings (including the orientation). PFT parents attended an average of 8.8 group meetings and 3.9 individual parent meetings. Participants in CLAS and PFT did not differ significantly in the number of individual parent meetings attended; however, PFT parents participated in slightly fewer group meetings (8.8) compared to CLAS parents (9.3), p = .023 (d = .38). Participation in the booster sessions varied across individuals, with a mean of 2.1 sessions for CLAS families (range of 0-6) and a mean of 2.1 sessions for PFT families (range of 0-7). Clinicians met with teachers of 11 (9 met once, 2 met twice) of the 74 children (15%) in the CLAS condition during the subsequent school year as an extension of treatment to the new classroom setting Formation and duration of intervention: Treatment occurred over a 10- to 13-week period, with a follow-up at 5-7 months post-treatment Content of intervention: Child Life and Attention Skills, (CLAS) included three manualized coordinated components (a) ten 90-minute parent group meetings, along with up to six 30-minute family meetings (parent, child, and therapist); (b) ten 90-minute child group meetings; and (c) teacher consultation, which included one 30-minute orientation meeting involving the teacher and therapist and up to five subsequent 30-minute meetings with the parent, child, teacher, and therapist and monthly booster sessions. Parent and child groups contained between five and eight families. Treatment as usual (TAU)included a written diagnostic report based on the assessment conducted at baseline. Families in the TAU condition also received a list of community treatment providers but were not given specific treatment recommendation
Outcomes	*Social Skills competences – teacher rated - final – SD* ● **Outcome type**: ContinuousOutcome ● **Reporting**: Fully reported ● **Scale**: Social skills improvement system (SSIS) Total ● **Data value**: Endpoint *Social Skills competences – parent rated - final – SD* ● **Outcome type**: ContinuousOutcome ● **Reporting**: Fully reported

- **Scale**: Social skills improvement system (SSIS) Total
- **Data value**: Endpoint

Social Skills competences – parent rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome
- **Reporting**: Fully reported
- **Scale**: Social skills improvement system (SSIS) Total
- **Data value**: Endpoint

Social Skills competences – child rated - final – SD
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated - final – SD
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

General behavior – child rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – child rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – final – SD
- **Outcome type**: ContinuousOutcome
- **Reporting**: Fully reported
- **Scale**: Child Symptom inventory, Inattentive symptoms
- **Data value**: Endpoint

Core ADHD symptoms – teacher rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome
- **Reporting**: Fully reported
- **Scale**: Child Symptom inventory, Inattentive symptoms
- **Data value**: Endpoint

Core ADHD symptoms – parent rated – final – SD
- **Outcome type**: ContinuousOutcome
- **Reporting**: Fully reported
- **Scale**: Child Symptom inventory, Inattentive symptoms
- **Data value**: Endpoint

Core ADHD symptoms – parent rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome
- **Reporting**: Fully reported
- **Scale**: Child Symptom inventory, Inattentive symptoms
- **Data value**: Endpoint

Core ADHD symptoms – child rated – final – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – final – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Performances and grades in school – final – SD
- **Outcome type**: ContinuousOutcome

Performances and grades in school – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Adverse events – severe
- **Outcome type**: ContinuousOutcome

Adverse events – not severe
- **Outcome type**: ContinuousOutcome

Social skills competences - teacher rated - final- change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – teacher rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – parent rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – parent rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

General behavior – child rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – child rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – final – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – parent rated – final – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – parent rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – final – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – final – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Participants satisfaction with treatment
- **Outcome type**: ContinuousOutcome

Parent satisfaction with treatment
- **Outcome type**: ContinuousOutcome

Emotional competences - child rated - final - SD
- **Outcome type**: ContinuousOutcome

Emotional competences - child rated - longest follow up
- **Outcome type**: ContinuousOutcome

	Emotional competences - child rated - change score ● **Outcome type**: ContinuousOutcome *Emotional competences - parent rated - final - SD* ● **Outcome type**: ContinuousOutcome *Emotional competences - parent rated - longest follow up* ● **Outcome type**: ContinuousOutcome *Emotional competences - parent rated - change score* ● **Outcome type**: ContinuousOutcome *Emotional competences - teacher rated - final - SD* ● **Outcome type**: ContinuousOutcome *Emotional competences - teacher rated - longest follow up* ● **Outcome type**: ContinuousOutcome *Emotional competences - teacher rated - change score* ● **Outcome type**: ContinuousOutcome
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Quote: "randomized" Judgement Comment: Unclear how randomization was done.
Allocation concealment (selection bias)	Unclear risk	Judgement Comment: no information
Blinding of participants and personnel (performance bias)	High risk	Judgement Comment: no bildning of particpant
Blinding of outcome assessment (detection bias)	Unclear risk	Judgement Comment: Nothing mentioned
Incomplete outcome data (attrition bias)	Low risk	Quote: "missing at pre-treatment (19 values, 0.8%) or post-treatment (53 values, 3.3%), so none were imputed. Across the 1592 follow-up outcome values, 168 were missing (10.6%). Most of the missing data related to attrition. As reported in Figure 1, four families"
Selective reporting (reporting bias)	Unclear risk	Judgement Comment: no protocol, no prespecificaion of outcomes
Other bias	Unclear risk	

Pfiffner 2016

Methods	Design: Cluster randomized controlled trial, Parallel group
Participants	Social skills training 1Sex, number of boys and girls: 54 (75 %) boys, 18 girls (25%)Age, mean and range: 8.3 (1.1) mean years, SDComorbidity, % of each type: ODD= 43Social economic status: 65 % *IQ, mean, range: 103.0 (13.0) WASI FSIQ (mean, SD)Ethnicity,%: 31% white, 8% african american, 22% Asian, 21% hispanic/latino, 18% multiracial/multiethnicADHD medication: 9.7%No intervention/wait listSex, number of boys and girls: 42 (67%) boys, 21 girls (33%)Age, mean and range: 8.5 (1.1) mean years, SDComorbidity, % of each type: ODD= 59Co medication for comorbid disorders, balanced between groups?:Social economic status: 55% *IQ, mean, range: 101.0 (14.7) WASI FSIQ (mean, SD)Ethnicity,%: 22% white, 10% african american, 19% Asian, 27% hispanic/latino, 22% multiracial/multiethnicADHD medication: 7.9%Inclusion criteria: 1) Eligibility criteria were high ratings of ADHD symptoms (i.e., equal or above 6 inattention symptoms and/or equal or above 6 hyperactive/impulsive symptoms) endorsed on the CSI by the parent or teacher as occurring often or very often2) Cross-situational impairment (home and school), documented as a score of at least 3 in at least 1 domain of functioning on parent and teacher Impairment Rating Scales3) Full-Scale Intelligence Quotient equivalent to higher than 79 on the Wechsler Abbreviated Scale of Intelligence4) A caretaker available to participate in treatment; and a primary classroom teacher who agreed to participate in the classroom component.Exclusion criteria: 1) Students with significant visual or hearing impairments,severe language delay, psychosis, or pervasive developmental disorder or who were in full-day special day classrooms were excluded.Pretreatment: Groups did not differ on demographics or medication use at baseline.ADHD medication: Children taking medication were eligible as long as their regimens were stable(* = % college graduates)
Interventions	Number of participants allocated per group: 72 patients in intervention group (CLS). 63 patients in the control group (BAU)Attendance: Parent attendance at groups averaged above 79% (range 0−100%). More than 90% attended at least half the group sessions. Child attendance averaged above 92% (range 67−100%).Format and duration of intervention:CLS is a 12-week program delivered by school-based mental health providers.Content of intervention:CLS (Collaborative Life Skills) is a psychosocial multicomponent treatment that integrates classroom interventions, parent training groups, and child skills groups. Social skills modules incl. ex: good sportsmanship, accepting consequences, assertion, dealing with teasing, problem solving, self-control, and friendship making. Independence modules incl. ex: homework skills, completing chores and tasks independently, and establishing and following routines. Activities accommodated developmental needs (e.g., having older children take more of a leader/helper role in groups, providing age-appropriate examples of skill use).Business as usual (BAU). The usual school and community services.
Outcomes	*Social Skills competences − teacher rated - final − SD* ● **Outcome type**: ContinuousOutcome ● **Reporting**: Fully reported ● **Scale**: Social skills improvement system (SSIS) ● **Range**: 4 point scale ● **Direction**: Higher is better

- **Data value**: Endpoint

Social Skills competences – parent rated - final – SD
- **Outcome type**: ContinuousOutcome
- **Reporting**: Fully reported
- **Scale**: Social skills improvement system (SSIS)
- **Range**: 4 point scale
- **Direction**: Higher is better
- **Data value**: Endpoint

Social Skills competences – parent rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated - final – SD
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated - final – SD
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

General behavior – child rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – child rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – final – SD
- **Outcome type**: ContinuousOutcome
- **Reporting**: Fully reported
- **Scale**: ADHD symptom severity (CSI)
- **Range**: 4 point scale
- **Direction**: Lower is better
- **Data value**: Endpoint

Core ADHD symptoms – teacher rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – parent rated – final – SD
- **Outcome type**: ContinuousOutcome
- **Reporting**: Fully reported
- **Scale**: ADHD symptom severity (CSI)
- **Range**: 4 point scale
- **Direction**: Lower is better
- **Data value**: Endpoint

Core ADHD symptoms – parent rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – final – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – final – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Performances and grades in school – final – SD
- **Outcome type**: ContinuousOutcome
- **Reporting**: Fully reported
- **Scale**: SSIS. Academic competence

- **Range**: 5 point scale
- **Data value**: Endpoint

Performances and grades in school – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Adverse events – severe
- **Outcome type**: ContinuousOutcome

Adverse events – not severe
- **Outcome type**: ContinuousOutcome

Social skills competences - teacher rated - final- change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – teacher rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – parent rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – parent rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

General behavior – child rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – child rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – final – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – parent rated – final – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – parent rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – final – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – final – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Participants satisfaction with treatment
- **Outcome type**: ContinuousOutcome

Parent satisfaction with treatment
- **Outcome type**: ContinuousOutcome

	Emotional competences - child rated - final - SD ● **Outcome type**: ContinuousOutcome *Emotional competences - child rated - longest follow up* ● **Outcome type**: ContinuousOutcome *Emotional competences - child rated - change score* ● **Outcome type**: ContinuousOutcome *Emotional competences - parent rated - final - SD* ● **Outcome type**: ContinuousOutcome *Emotional competences - parent rated - longest follow up* ● **Outcome type**: ContinuousOutcome *Emotional competences - parent rated - change score* ● **Outcome type**: ContinuousOutcome *Emotional competences - teacher rated - final - SD* ● **Outcome type**: ContinuousOutcome *Emotional competences - teacher rated - longest follow up* ● **Outcome type**: ContinuousOutcome *Emotional competences - teacher rated - change score* ● **Outcome type**: ContinuousOutcome
Notes	*Signe Joost* on 29/11/2017 00:32 **Included** Intervention = Collaborative Life Skills - Indeholder 3 komponenter: 1) klasseværelset, 2) forældre og 3) børns færdigheder *Signe Joost* on 09/01/2018 23:44 **Population** (* = % college graduates) *Signe Joost* on 10/01/2018 02:29 **Outcomes** General behavior: ODD symptom severity *Signe Joost* on 14/03/2018 21:56 **Included** ADHD subtypes (%) skal tilføjes: Intervention group= combined: 54 %, Inattentive: 40%Hyperactive-impulsive: 6%. Control group = combined: 62%, Inattentive: 38%, Hyperactive-impulsive: 0 %

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Quote: "BAU) within level 2 (schools). Entry into the study was staggered into 2 cohorts during each of 3 school years, with 1 cohort beginning in fall and 1 in winter. Schools within cohorts (n ¼ 3–5 schools) were randomized to CLS (n ¼ 12) or BAU (n ¼ 11), with randomization of schools stratified based on the percentage of students receiving free or reduced lunch. Schools were rank-ordered by the percentage of students receiving free or reduced lunch. Ordered pairs were randomized to CLS or BAU by the study statistician after students, parents, and teachers consented to participation and completed baseline measurements. Classroom Component. SMHPs led 2" Judgement Comment: Unclear how the randomization was done.
Allocation concealment (selection bias)	Unclear risk	Judgement Comment: No details
Blinding of participants and personnel (performance bias)	High risk	Judgement Comment: Nothing mentioned, but it do not seem possible to blind participants and personnel in the study.
Blinding of outcome assessment (detection bias)	High risk	Quote: "Rater bias or expectancy might have been factors (parents and teachers involved in the treatment provided the ratings). More objective mea- surements of outcome (e.g., academic achievement tests, blinded observations) would avoid these biases. How- ever, the fact that teachers reported significant im- provements in some areas (ADHD symptom severity, organizational and academic functioning) but not in others (ODD symptom severity or social skills) suggests that if rater biases were operative, they were not univer- sal."
Incomplete outcome data (attrition bias)	Unclear risk	Quote: "Few data were missing at baseline or posttreatment (2–5% across measurements), so none were imputed. Most of the missing data were related to attrition." Judgement Comment: Not clearly stated
Selective reporting (reporting bias)	High risk	Judgement Comment: Protocol available. The primary and secondary outcomes, including the time frame reported in the study do not match the protocol.
Other bias	Unclear risk	

Qian 2017

Methods	Design: Randomized controlled trial, Parallel group
Participants	Social skills training 1Sex, number of boys and girls: boys, n=32 (84.2%), girls, n=6 (15.8%)Age, mean and range: 8.3 (SD=1.3)Comorbidity, % of each type: ODD: 7 (18.4%) Learning disorder: 8 (21.1%) Special phobia: 5 (13.2%)IQ, mean, range: 105.7 (SD=13.9)ADHD subtypes, % of each type: Inattentive: 17 (44.7%) Hyperactivity-impulsivity: 0 (0%) Combined: 21 (55.33%)No intervention/wait listSex, number of boys and girls: boys, n=22 (73.3%), girls, n=8 (26.7%%)Age, mean and range: 7.8 (SD=1.2)Comorbidity, % of each type: ODD: 7 (23.3%) Learning disorder: 4 (13.3%) Special phobia: 2 (6.7%)IQ, mean, range: 101.8 (SD=10.4)ADHD subtypes, % of each type: Inattentive: 16 (53.3%) Hyperactivity-impulsivity: 1 (3.3%) Combined: 13 (43.3%)OverallSex, number of boys and girls: 54 boys and 14 girlsAge, mean and range: 6-12 yearsInclusion criteria: 1) Diagnosis of ADHD: meeting DSM-IV criteria based on parent ratings on ADHD-RS-IV confirmed by semi-structed interview by experienced pediatric psychiatrist using the clinical diagnostic interview scale.age 6 to 12 years of ageExclusion criteria:1) A history of head injury2) A diagnosis of other congenital or acquired neurological conditions3) An estimated full-scale IQ804) A diagnosis of autism spectrum disorder, psychosis, or an emergent psychiatric condition that needed immediate medication.5) New medications could not be initiated during the study.Pretreatment**:** No significant difference was found in reported baseline characteristics.ADHD medication: Ten participants had maintained steady dosage of medications for more than a half year and remained unchanged during the entire study. New medications could not be initiated during the study.
Interventions	Number of participants allocated per group: Intervention, n=44; Waitlist, n=42. Analysis including baseline characteristics is based on Intervention, n=38, Waitlist n=30Attendance: 86.4% (38/44) of children in intervention group complied with the training, completing ten or more sessions in the 12-session period.All missed group sessions were administered to the trainee individually. The percentage of the number of sessions administered individually is not specified.Format and duration of the intervention12 weekly 1 hour sessions in clinical setting.Content of intervention:Executive skill training based on Dawson Guare's (2010) training with the content adapted culturally to ensure acceptability to Chinese children. 12 weekly 1 hour sessions in clinical setting. Groups of 6 to 8 families. First and last session included parents, it is not clear wether the children participated. The first session focused on setting behavioural goals, action plans, environmental modifications and reward systems and how to help with homework. The last session on how to continue to use the learned skills. Only children participated in session 2-11 and handbook specified homework between sessions. All missed sessions were administered to the trainee individually.Control group consisted of a waitinglist
Outcomes	*Social Skills competences - teacher rated - final - SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences - parent rated - final - SD* ● **Outcome type**: ContinuousOutcome ● **Notes**: Weiss Functional Impairment Rating Scale - Parent Report (WFIRS-P), subscale: social activities *Social Skills competences - parent rated - longest follow up - SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences - child rated - final - SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences - child rated - longest follow up - SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences - observer rated - final - SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences - observer rated - longest follow up - SD* ● **Outcome type**: ContinuousOutcome *General behavior - teacher rated - final - SD* ● **Outcome type**: ContinuousOutcome *General behavior - teacher rated - longest follow up - SD* ● **Outcome type**: ContinuousOutcome *General behavior - parent rated - final - SD* ● **Outcome type**: ContinuousOutcome *General behavior - parent rated - longest follow up - SD* ● **Outcome type**: ContinuousOutcome *General behavior - child rated - final - SD* ● **Outcome type**: ContinuousOutcome *General behavior - child rated - longest follow up - SD* ● **Outcome type**: ContinuousOutcome *General behavior - observer rated - final - SD* ● **Outcome type**: ContinuousOutcome *General behavior - observer rated - longest follow up - SD* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms - teacher rated - final - SD* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms - teacher rated - longest follow up - SD* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms - parent rated - final - SD* ● **Outcome type**: ContinuousOutcome

Core ADHD symptoms – parent rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – final – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – final – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Performances and grades in school – final – SD
- **Outcome type**: ContinuousOutcome

Performances and grades in school – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Adverse events – severe
- **Outcome type**: ContinuousOutcome

Adverse events – not severe
- **Outcome type**: ContinuousOutcome

Social skills competences - teacher rated - final- change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – teacher rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – parent rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – parent rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

General behavior – child rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – child rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – final – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – parent rated – final – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – parent rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – final – change score
- **Outcome type**: ContinuousOutcome

	Core ADHD symptoms – child rated – longest follow up – change score ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – observer rated – final – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – observer rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome *Participants satisfaction with treatment* ● **Outcome type**: ContinuousOutcome *Parent satisfaction with treatment* ● **Outcome type**: ContinuousOutcome *Emotional competences - child rated - final - SD* ● **Outcome type**: ContinuousOutcome *Emotional competences - child rated - longest follow up* ● **Outcome type**: ContinuousOutcome *Emotional competences - child rated - change score* ● **Outcome type**: ContinuousOutcome *Emotional competences - parent rated - final - SD* ● **Outcome type**: ContinuousOutcome ● **Notes**: The behavior Rating Inventory of Executive Function (BRIEF) subscale: emotional control *Emotional competences - parent rated - longest follow up* ● **Outcome type**: ContinuousOutcome *Emotional competences - parent rated - change score* ● **Outcome type**: ContinuousOutcome *Emotional competences - teacher rated - final - SD* ● **Outcome type**: ContinuousOutcome *Emotional competences - teacher rated - longest follow up* ● **Outcome type**: ContinuousOutcome *Emotional competences - teacher rated - change score* ● **Outcome type**: ContinuousOutcome
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Quote: "The study adopted a randomized block design to balance the individuals between the intervention and waitlist groups. Children with ADHD who met the eligibility criteria were randomized to a block that comprised a permutation of four participants, two for each group separately."
Allocation concealment (selection bias)	Low risk	Judgement Comment: The randomization grouping was concealed in envelopes , and the recruited participant was notified of his or her group sequentially.
Blinding of participants and personnel (performance bias)	High risk	Judgement Comment: Blinding not possible
Blinding of outcome assessment (detection bias)	High risk	Judgement Comment: Primarily parent rating scales and parents were not blind to group status. However it is unclear wether assessors of executive functioning performance tests were blind to group status.
Incomplete outcome data (attrition bias)	Unclear risk	Judgement Comment: 6/44 intervention children and 12/42 waitlist children dropped out. No reasons for drop out were specified. There is no report of baseline data for the 18 children that dropped out and no analysis of attrition.
Selective reporting (reporting bias)	High risk	Judgement Comment: The trial registration specifies following secondary outcome that are not mentioned or reported in the paper: - Conners- Cambridge Neuropsychological Test Automatic Battery But the following measures not mentioned in the trial registration are reported:- BRIEF- WFIRS-P WEISS functional Impairment Scale-Parents
Other bias	Unclear risk	

Schramm 2016

Methods	
Participants	
Interventions	
Outcomes	
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Need more info. Tricle processing approach described as often associated with corruption of assignment
Allocation concealment (selection bias)	Unclear risk	Need more info
Blinding of participants and personnel (performance bias)	High risk	The trainers and children must be aware of status as either training, active control or waitlist are blinded
Blinding of outcome assessment (detection bias)	High risk	Parent and children are aware of group assignment, teachers are not described as effectively blinded
Incomplete outcome data (attrition bias)	Low risk	It appears that results in all measures noted in method section are reported
Selective reporting (reporting bias)	Low risk	Loss to follow up in waitlist is small n=2 and reported due to participants not wanting to wait anymore. In the intervention group it is 1 dropp out due to familial difficulties and in the active control 1 lost due to an accident.
Other bias	Unclear risk	

Storebo 2012

Methods	Design: Randomized controlled trial, Parallel group
Participants	Social skills training 1Sex, number of boys and girls: 19 boys (67.8%), 9 girlsAge, mean and range: 10.6 (1.29)Comorbidity, % of each type: Oppositional defiant disorder No(%): 4 (33.3), Anxiety disorder: 4 (33.3), Depressive disorder: 1(8.3), Tics and Obsessive Compulsive Disorder: 0(0.0), Enuresis: 2 (20.0), Stuttering: 1(5.0).IQ, mean, range: WISC verbal mean(SD): 93.9(15.7), WISC non-verbal: 94.8(19.0)No intervention/wait listAge, mean and range: 10.2 (1.34)Ethnicity,%: Danish 100%OverallSex, number of boys and girls: 39 boys and 16 girlsEthnicity,%: Danish 100%Inclusion criteria:1) ADHD diagnosis according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV, 1994)2) 8-12 years at the time of the start of assessment3) Parents willing to take part in the trial and giving consent for medical treatment of the child as well as to participation of the child in the trial.Exclusion criteria:1) Schizophrenia or all the autism diagnoses according to DSM IV2)Violent and criminal children3) Both verbal and nonverbal intelligence quotient (IQ) below 804) Previously medicated for ADHD5) Resistance against participating.Pretreatment:There were no significant difference in baseline demographics between the two groups.ADHD medication: After assessment and confirmation, the family was offered medical treatment for the child following a medication protocol. The children had never previously received medical treatment for ADHD.
Interventions	Number of participants allocated per group**:**Intervention (n) = 28 Control (n) = 27Attendance: 1 patient in each group did not recieve allocated interventionFormat and duration of intervention:The children in SOSTRA were offered weekly 90minute social-skills training sessions in a total of eight weeks. During the process where the children received social skills training, the parents attended parental training.Content of the interventionThe experimental intervention included social skills training plus parental training combined with standard treatment (medication). Social-skills training aimedto improve and maintain the individual's social skills. The childrenwere taught how to adjust their verbal and nonverbal behaviour intheir social interaction. Social-skills training also included efforts tochange the child's cognitive assessment of the 'social world'.The training generally focused on teaching the children to 'read'the subtle cues in social interaction, such as learning to wait fortheir turn.The standard treatment offered to both the experimental group and the control group encompassedthe normal practice regarding ADHD patients at the ChildPsychiatric Clinic in Holbaek. After assessment and confirmation of the ADHD diagnosis, the family was offered medical treatmentfor the child following a medication protocol. The children hadnever previously received medical treatment for ADHD.
Outcomes	*Social Skills competences – parent rated - final – SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences – parent rated – longest follow up – SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences – child rated - final – SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences – child rated – longest follow up – SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences – observer rated - final – SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences – observer rated – longest follow up – SD* ● **Outcome type**: ContinuousOutcome *General behavior – teacher rated – final – SD* ● **Outcome type**: ContinuousOutcome *General behavior – teacher rated – longest follow up - SD* ● **Outcome type**: ContinuousOutcome *General behavior – parent rated – final – SD* ● **Outcome type**: ContinuousOutcome *General behavior – parent rated – longest follow up - SD* ● **Outcome type**: ContinuousOutcome *General behavior – child rated – final – SD* ● **Outcome type**: ContinuousOutcome

General behavior – child rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – final – SD
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – final – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome
- **Reporting**: Fully reported
- **Scale**: Conners 3/ CBRS (hyperactivity)
- **Data value**: Endpoint
- **Notes**: Longest follow-up was 6 months after randomization.

Core ADHD symptoms – parent rated – final – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – parent rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – final – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – longest follow up – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – final – SD
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – longest follow up - SD
- **Outcome type**: ContinuousOutcome

Performances and grades in school – final – SD
- **Outcome type**: ContinuousOutcome

Performances and grades in school – longest follow up - SD
- **Outcome type**: ContinuousOutcome
- **Reporting**: Fully reported
- **Scale**: Conners 3/ CBRS (acedemic score)
- **Data value**: Endpoint
- **Notes**: Longest follow-up was 6 months after randomization

Adverse events – severe
- **Outcome type**: ContinuousOutcome

Adverse events – not severe
- **Outcome type**: ContinuousOutcome

Social skills competences - teacher rated - final- change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – teacher rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – parent rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – parent rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

	General behavior – child rated – final – change score ● **Outcome type**: ContinuousOutcome *General behavior – child rated – longest follow up – change score* ● **Outcome type**: ContinuousOutcome *General behavior – observer rated – final – change score* ● **Outcome type**: ContinuousOutcome *General behavior – observer rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – teacher rated – final – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – teacher rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – parent rated – final – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – parent rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – child rated – final – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – child rated – longest follow up – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – observer rated – final – change score* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – observer rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome *Participants satisfaction with treatment* ● **Outcome type**: ContinuousOutcome *Parent satisfaction with treatment* ● **Outcome type**: ContinuousOutcome *Emotional competences - child rated - final - SD* ● **Outcome type**: ContinuousOutcome *Emotional competences - child rated - longest follow up* ● **Outcome type**: ContinuousOutcome *Emotional competences - child rated - change score* ● **Outcome type**: ContinuousOutcome *Emotional competences - parent rated - final - SD* ● **Outcome type**: ContinuousOutcome *Emotional competences - parent rated - longest follow up* ● **Outcome type**: ContinuousOutcome *Emotional competences - parent rated - change score* ● **Outcome type**: ContinuousOutcome *Emotional competences - teacher rated - final - SD* ● **Outcome type**: ContinuousOutcome *Emotional competences - teacher rated - longest follow up* ● **Outcome type**: ContinuousOutcome *Emotional competences - teacher rated - change score* ● **Outcome type**: ContinuousOutcome *Social Skills competences – teacher rated - Longest follow-up – SD* ● **Outcome type**: ContinuousOutcome ● **Reporting**: Fully reported ● **Scale**: Conners 3/ CBRS(social problems) ● **Data value**: Endpoint ● **Notes**: Longest follow-up is months after randomization.
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Quote: "The Copenhagen Trial Unit (CTU) conducted central ran- domization with computer generated, permuted randomization sequences in blocks of four with an allocation ratio of 1:1 stratified for sex and comorbidity."

Allocation concealment (selection bias)	Low risk	Quote: "To secure integrity, the principal investigator hid all data that could be used to identify the patient's allocation before data entry. Blinded data were then handed over to the CTU, which was in charge of data entry and statistical analyses. Standardized procedures including double data entry were assured." Quote: "The block size was unknown to the investigators. A research secretary randomized the patient by calling the CTU providing a personal pin code, patient number, and information on the stratification variables."
Blinding of participants and personnel (performance bias)	High risk	Quote: "The interventions given were not 'blind' to participants, parents, treating physicians, or personnel in the Child Psychiatric Clinic in Holbaek."
Blinding of outcome assessment (detection bias)	Low risk	Quote: "However, the outcome assessors of the primary and secondary outcomes (the teachers) were kept blinded of the allocated intervention. The involved parties were also instructed not to inform the assessors of the intervention allocated."
Incomplete outcome data (attrition bias)	Low risk	Quote: "Two children were excluded a few days after the randomization, one of them because his mother did not want her child to receive central stimulating medication, and we were not allowed to obtain outcome assessment from this child. The other child and his parents did not want to participate in the treatment, but all his outcome assessments were obtained and this child is included in the analysis."
Selective reporting (reporting bias)	Low risk	Judgement Comment: Matches study protocol. All outcome measures outlined in protocol was reported.
Other bias	Unclear risk	

Tutty 2003

Methods	Design: Randomised Clinical Trial.
Participants	Children 5-12 with an ADHD diagnosis made on the basis of DSM-IV criteria. Sex: 75 boys and 25 girls Ethnicity: White (49% intervention group, 38% control group), Afro-American (4% IG, 2% CG), Asian (5% IG, 1% CG), Hispanic 1% IG, 0% CG). Sample size calculation not reported. Setting:Outpatient clinic, Washington, USA Pre randomisation: 100 Post randomisation: Blinded follow-up measures were completed by 97% and 98% of parent or guardian participants at 3 and 6 months after enrolment, respectively. Follow-up completion rates for teacher participants yielded 92% and 75% for 3 and 6 months after enrolment, respectively. Participants with missing data did not differ from participants with complete data sets across time or any clinical, functional, and demographic variables according to the authors of the study article. For the ADHD Rating Scale outcome 2 children where lost to follow up. For the Child Attention Profile outcome totally 24 children where lost to follow-up (16 in the IG and 8 in the CG). Co-medications for comorbid disorders: it was allowed but not stated if it were balanced between groups. Inclusion criteria: Diagnosis of ADHD (DSM-IV) Exclusion criteria: 1) Conduct disorder 2) Oppositional defiant disorder 3) Tourette syndrome 4) Affective disorder 5) Active alcohol or other substance abuse during previously 90 days 6) Chronic mental ilness 7) Patients enrolled in BSS class at GHC in the past. Baseline characteristics: Mean baseline parented attention-deficit hyperactivity disorder symptom scores were more symptomatic for the IG than for the CG, as well as the use of parent discipline practice. These between groups differences were adjusted before follow-up analysis.
Interventions	Two conditions: Behavioural and social skills class versus control group (waiting list). Both groups received psychostimulant treatment. Format and duration of the intervention: The BSS intervention consisted of 8 once a week, 50 minute group sessions. The children were divided into one of three child groups according to age; 5-7, 8-10 and 11-12 years. There was a parent only group at the same time as the child only group. Content of the intervention: The BSS intervention was based on an existing ADHD program previously developed by the CADD clinical team. The intervention are designed to enhance the children's overall understanding of ADHD and how to cope and manage with many of the physical and psychosocial problems connected to this condition. Each BSS session was based on a structured session by session agenda. The intervention was delivered by master levels therapist with at least two years experience. The child and parents were divided into a child only and a parent only group. There was no significant between-groups difference in psychostimulant use found at 3 (49.01% vs 53,6%; X^2= 0.196, P = 0.658) months and 6 months (52,94% vs 39.02% x^2 = 1.768, P = 0.184) for both IG and CG participants. Co-medication: allowed, but not stated if equal in groups.
Outcomes	Outcome assessment were conducted at 3 and 6 months. Clinican rated: The ADHD Rating Scale (18 items, Likert scale) assessed by a blinded research assistant at baseline, 3 months and 6 months. Assessment by telephone interviews of parents. The Child Attention Profile (12 items. Likert scale) assessed by a blinded research assistant at baseline, 3 months and 6 months. Assessment by telephone interviews of teachers.

Notes	There was a third outcome used in this study, but it is not relevant for this review, because it measured the parents' discipline practice.

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	The study used coin toss method performed by the research assistant and this is an adequate method according to the Cochrane Handbook.
Allocation concealment (selection bias)	Unclear risk	Information on this is not reported. Clarification about method of allocation concealment has been requested form the trial investigators, but no information on this topic was available at the time the review was prepared.
Blinding of participants and personnel (performance bias)	High risk	No blinding.
Blinding of outcome assessment (detection bias)	High risk	Outcome assessment by telephone interviews of parents and teacher performed by a blinded research assistant. The parents not blinded, and therefore not an adequate method.
Incomplete outcome data (attrition bias)	Low risk	There were used an ITT method.
Selective reporting (reporting bias)	Low risk	All of interest reported.
Other bias	Unclear risk	

van der Oord 2007

Methods	Design: Randomised Clinical Trial.
Participants	Children aged 8-12 years with ADHD diagnosed according to DSM-IV. Ethnicity: 40 children(89%) children from Caucasian parents, 1 child(2%) was from Caribbean parents, and 4(9%) from mixed origin. Comorbidity: ODD/CD 61,9% in one group and 41,7% in the other. Sample size calculation not reported. Setting: Five different outpatient clinics in Netherland. Co-medications for comorbid disorders: no information Inclusion criteria: 1) ADHD diagnosis based on DSM-IV established with the parent version of DISC-IV. 2) Total IQ of 75 or above based on the short version of WISC-R. 3) Parents must give informed consent for their child to participate in the trial. Baseline characteristic: One-way ANOVAs and Chi^2 analyses showed not significant differences between the two conditions in terms of baseline demographic characteristics. Furthermore one-way ANOVAs showed no significant group differences. Exclusion criteria: 1) Inadequate mastering of the Dutch language by the child or both parents. 2) A history of methylphenidate use. Of the 50 randomised children one declined the methylphenidate only group and two of the children in the methylphenidate plus BT discontinued the intervention. Furthermore, one child was lost to posttest and follow up in the methylphenidate only intervention, one was omitted from analysis in the combined intervention group. Medication:There were used a four-week, pseudo-randomised, multiple-blind placebo-controlled, crossover medication design, as described in the MTA study. The treatment groups did not differ on dose of methylphenidate either at baseline or posttreatment.
Interventions	Format and duration of the intervention. 50 children were randomised to either methylphenidate (n = 23) or methylphenidate plus multimodal behaviour therapy (n = 27). The multimodal treatment consisted of child cognitive-behaviour therapy, parent behaviour therapy and teacher behavioural training. The child cognitive-behaviour therapy consisted of 10 weekly, 75 minutes group sessions, provided by two therapists. The parent behaviour therapy onsite of 10 weekly sessions of 90 minutes group therapy, provided by two therapists. Content of the intervention. There were used a treatment program and there were manuals in all the groups. In the child group there were used cognitive- behaviour techniques and the program for this group was adapted from Kendall and Braswell. It consisted of problem solving techniques, relaxation techniques, contingency management techniques, role playing, and guided practice. The parent group was based on Barkley´s training's manual "Defiant children: A clinicians manual for parent training." Components included, for example, psychoeducation on ADHD, structuring the environments, practicing positive attending skills and contingency management skills. The teacher training was based on the teacher training manual by Pelham and consisted of a two hour workshop, which consisted of, for example, psycho-education on ADHD, structuring the classroom environment, and a daily report card. Mean treatment attendance in the combined condition was 88.6%. To ensure treatment compliance all therapist completed a treatment integrity checklist.
Outcomes	Parent rated: DBDRS consist of 42 items and contains four sub scales: Inattention (9 items), Hyperactivity/Impulsivity (9 items), ODD (8 items), and CD (16 items). Has a 4-point Likert scale (0-3). The Inattention and the Hyperactivity/Impulsitivity sub scale were combined into one ADHD score. Higher scores indicate more increased symptoms. SSRS - Social Skills Rating Scale. (The parent version consist of 38 items. Has a 3-point Likert scale rating from 0-2.) Parenting Stress Index(PSI) Teacher rated: DBDRS consist of 42 items and contains four sub scales: Inattention(9 items), Hyperactivity/Impulsivity (9 items), ODD (8

	items), and CD (16 items).Has a 4-point Likert scale (0-3). The Inattention and the Hyperactivity/Impulsitivity sub scale were combined into one ADHD score. Higher scores indicate more increased symptoms. SSRS - Social Skills Rating Scale. The teacher version consist of 30 items. Has a 3-point Likert scale rating from 0-2. Child rated: Self-Perception Profile for Children (SPPC). State Trait Anxiety Inventory for Children (STAIC).
Notes	Authors conclusion is that there are no additive effect of multi modal treatment compared to medical treatment alone.

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Information on this is not reported. Clarification about method of allocation concealment has been requested form the trial investigators, but no information on this topic was available at the time the review was prepared.
Allocation concealment (selection bias)	Unclear risk	Information on this is not reported. Clarification about method of allocation concealment has been requested form the trial investigators, but no information on this topic was available at the time the review was prepared.
Blinding of participants and personnel (performance bias)	High risk	No blinding.
Blinding of outcome assessment (detection bias)	High risk	No blinding.
Incomplete outcome data (attrition bias)	Low risk	All the participants lost to follow up were stated and lost to follow up not believed to influence results.
Selective reporting (reporting bias)	Low risk	No.
Other bias	Unclear risk	

Waxmonsky 2010

Methods	Design: Randomised Clinical Trial.
Participants	Children aged 6-12 years with ADHD diagnosed according to DSM-IV-TR Ethnicity: 80,4% white, 10.7% African American, and 8,9% mixed. 7 children (12.5%) discontinued the study, 5 in the IG and 2 in the CG. Sample size calculation not reported. Of the 56 children 48 were diagnosed with ADHD-combined type, 7 were diagnosed with ADHD-inattentive type, and 1 was diagnosed with ADHD-hyperactive/impulsive type. 22 children met criteria for comorbid conduct disorder and 24 for oppositional defiant disorder, leaving only 10 children with non comorbid ADHD. Setting: Outpatient (attending school), Buffalo, USA Co-medications for comorbid disorders: no information Inclusion criteria: ADHD based on DSM-IV Exclusion criteria: 1) Current or past history of seizures (not including benign febrile seizures). 2) Other physical conditions that precluded administration of atomoxetine (for example, marked cardiac conduction delay). 3) Documented failed trial of atomoxetine, defined as 3 weeks or more on treatment with at least 0.8 mg/kg/d, or a documented inability to tolerate this dose. 4) Serious forms of psychopathology other than ADHD, such as autism, bi-polar disorder, schizophrenia, or any other psychopathology requiring urgent treatment with psychotropic medication. 5) Any history of major depression requiring treatment, or any past history of self-harm or serious suicidal ideation. 6) An intelligence quotient of less than 75 (based on Wechsler Intelligence Scale for Children, 3rd edition). 7) No evidence of ADHD-related impairment at school. Baseline characteristics: 56 children randomised. 45 boys and 11 girls. Medication: All patients received psychostimulant medications. No significant between group differences in mean doses of atomoxetine.
Interventions	8 week intervention + Medication versus Medication alone. Number of participants allocated per group: 27 (Med); 29 (Med + BT) Number of patents lost to follow up per group: 2 (Med); 5 (BT + Med) Format and duration of the intervention: The 8 week intervention consisted of: Parent group: 8 week group, 2 hours session;1 session/week. Child group - SST: 8 week. 2 hours session;1 session/week. Teacher: Daily report card. Content of the intervention: Parent group: Based on the COPE program and consisted of social learning's principals targeting at the Childrens behaviour and lack of impulse control. Group leaders were advanced graduate students or doctoral level clinicians. Child group: Social skills training program. Group leaders were graduate students in clinical psychology. Treatment compliance: The parent intervention was based on a manual (COPE). It is unclear whether the child group intervention also was based on a manual. 62% of the parents attended 8 sessions, 62% attended 6 or more sessions. The children's attendance in the SST group is not reported.

Outcomes	Parent rated: DBD (45 items, Likert scale 0 (not very much) to 3 (very much)). SSRS (Social Skills Rating Scale) (55 items on the parent version, rated from 0 (not at all) to 2 (very often)). Treatment satisfaction (Likert scale from 1 (strongly disagree) to 7 (strongly agree)). Teacher rated: DBD (45 items, Likert scale 0 (not very much) to 3 (very much)). SSRS (Social Skills Rating Scale) (57 items on the teacher version, rated from 0 (not at all) to 2 (very often) and from 0(lowest 10%) to 5 (highest 10%). APRS (Academic Performance Rating Scale) (19 items scale, 1-5 Likert scale). DRC (Daily Report Card). Observations: Observations of violence to classroom rules using Student Behaviour Teacher Response Observation Code. Clinician ratings: CGI(Clinical Global Impressions scale). Classroom behaviour. ADHD symptoms and functioning at home and at school.
Notes	Key conclusion of the author: Behavioural therapy improved ADHD symptoms at the home but not at school.

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Clarification requested from the one of the trial investigators and Dan Wascbusch informed in an email 22 June 2011 that they had used a computer generated randomisation process
Allocation concealment (selection bias)	Low risk	Clarification requested from the one of the trial investigators and Dan Wascbusch informed in an email 22 June 2011 that the clinicians did not know the treatment assignment before it was assigned.
Blinding of participants and personnel (performance bias)	High risk	No blinding.
Blinding of outcome assessment (detection bias)	High risk	No blinding.
Incomplete outcome data (attrition bias)	High risk	Clarification requested from the one of the trial investigators and Dan Wascbusch informed in an email that subjects were dropped if there was not sufficient information. Scores in indexes were computed if there were at least 50% of the items in the index answered and counted them missing if they were not. Dan Wascbusch also informed that they had essentially complete data pre-treatment and nearly complete at post-treatment. For teachers they had a lower response. They included whatever they had in the analyses and dropped subjects when there was not sufficient information, repeating this for each analysis.
Selective reporting (reporting bias)	Unclear risk	Protocol published in Clinicaltrials.gov after trial conduct. Publication and report in Clinicaltrials gov. is not consistent.
Other bias	Unclear risk	

Waxmonsky 2016

Methods	Design: Randomized controlled trial, Parallel group
Participants	Social skills training 1Sex, number of boys and girls: Boys: 20/31 (65%)Age, mean and range: 9.3 (SD 1.6)Comorbidity, % of each type: CD, 13%(4), ODD 94%(29), Anxiety/subthreshold anxiety 29%(9)Co medication for comorbid disorders, balanced between groups?: No other psychosocial treatment in the project period.Social economic status: Socioeconomic Index*, M (SD): 42.3 (15.2)IQ, mean, range: 100.6 (SD 15.4)Ethnicity,%: Racial/ethnic minority: 12 (39%)ADHD medication: 100%, entry stimulant dose in mg/kg/day: mean .90 (SD .40)No intervention/wait listSex, number of boys and girls: Boys: 19/25 (76%)Age, mean and range: 9.4 (Sd 1.5)Comorbidity, % of each type: CD, 4%(1), ODD 96%(24), Anxiety/subthreshold anxiety 44%(11)Co medication for comorbid disorders, balanced between groups?: 60% (n=15) received other mental health services during the project period. Two (8%) received only school-based counseling. 13 (52%) received individual sessions (for mixture of behavior problems, anger management, and social skills issues).Social economic status: Socioeconomic Index*, M (SD): 42.03 (12.8)IQ, mean, range: 100.7 (SD 10.6)Ethnicity,%: Racial/ethnic minority: 9 (36%)ADHD medication: Entry stimulant dose mg/kg/day** : mean .90 (SD .43Overall: *Sex, number of boys and girls*: Boys: 39 Girls: 17Inclusion criteria: 1) 7 –12 years of age2) Combined subtype of ADHD and SMD3) ADHD evaluated based on the Disruptive Behavior Disorders Structured Parent Interview (DBD-I)Exclusion criteria: 1) IQ below 802) Prominent traits of autism spectrum disorder3) Use of any non-stimulant psychotropic4) Bipolar I/II, or psychoses5) Children with suicidal ideation needing emergent treatment.Pretreatment: There were no differences in baseline demographics between groupsADHD medication: Prior to therapy phase psychostimulant dose were optimised for all participants. Thus all participants received pharmacological treatment.
Interventions	Number of participants allocated per group:Intervention, n=35; control n=33 (baseline data on intervention n=31 and control n=25Attendance (% of attendance was required): Completers were participants attending at least six of the eleven sessions (n=29).Mean attendance 9.7 out of 11 group sessions. All but two attended at least half of the group or make-up sessions.Format and duration of the interventionMedication + AIM. AIM 11 parallel group sessions for parents and children of each 105 minutesContent of the intervention:Address theorised deficits of SMD focus on the connection between mood and behaviour, including: emotion recognition in self and others, connections between emotions and cognitions (e.g problem solving when upset), application of coping tools and problem-solving skills at school and home. A contingency mangement system was implemented with points that could be exchanged for gift cards.Medication + community psychosocial care. Encouraged to engaged with local psychosocial providers. Referrals but not treatment were provided from project staff

Outcomes	*Social Skills competences – teacher rated - final – SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences – parent rated - final – SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences – parent rated – longest follow up – SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences – child rated - final – SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences – child rated – longest follow up – SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences – observer rated - final – SD* ● **Outcome type**: ContinuousOutcome *Social Skills competences – observer rated – longest follow up – SD* ● **Outcome type**: ContinuousOutcome *General behavior – teacher rated – final – SD* ● **Outcome type**: ContinuousOutcome *General behavior – teacher rated – longest follow up - SD* ● **Outcome type**: ContinuousOutcome *General behavior – parent rated – final – SD* ● **Outcome type**: ContinuousOutcome *General behavior – parent rated – longest follow up - SD* ● **Outcome type**: ContinuousOutcome *General behavior – child rated – final – SD* ● **Outcome type**: ContinuousOutcome *General behavior – child rated – longest follow up – SD* ● **Outcome type**: ContinuousOutcome *General behavior – observer rated – final – SD* ● **Outcome type**: ContinuousOutcome *General behavior – observer rated – longest follow up - SD* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – teacher rated – final – SD* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – teacher rated – longest follow up - SD* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – parent rated – final – SD* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – parent rated – longest follow up - SD* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – child rated – final – SD* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – child rated – longest follow up – SD* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – observer rated – final – SD* ● **Outcome type**: ContinuousOutcome *Core ADHD symptoms – observer rated – longest follow up - SD* ● **Outcome type**: ContinuousOutcome *Performances and grades in school – final – SD* ● **Outcome type**: ContinuousOutcome *Performances and grades in school – longest follow up - SD* ● **Outcome type**: ContinuousOutcome *Adverse events – severe* ● **Outcome type**: ContinuousOutcome *Adverse events – not severe* ● **Outcome type**: ContinuousOutcome *Social skills competences - teacher rated - final- change score* ● **Outcome type**: ContinuousOutcome *Social Skills competences – teacher rated – longest follow up - change score* ● **Outcome type**: ContinuousOutcome *Social Skills competences – parent rated - final – change score* ● **Outcome type**: ContinuousOutcome

Social Skills competences – parent rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – child rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated - final – change score
- **Outcome type**: ContinuousOutcome

Social Skills competences – observer rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – teacher rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – parent rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

General behavior – child rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – child rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – final – change score
- **Outcome type**: ContinuousOutcome

General behavior – observer rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – final – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – teacher rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – parent rated – final – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – parent rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – final – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – child rated – longest follow up – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – final – change score
- **Outcome type**: ContinuousOutcome

Core ADHD symptoms – observer rated – longest follow up - change score
- **Outcome type**: ContinuousOutcome

Participants satisfaction with treatment
- **Outcome type**: ContinuousOutcome

Parent satisfaction with treatment
- **Outcome type**: ContinuousOutcome

Emotional competences - child rated - final - SD
- **Outcome type**: ContinuousOutcome

Emotional competences - child rated - longest follow up
- **Outcome type**: ContinuousOutcome

Emotional competences - child rated - change score
- **Outcome type**: ContinuousOutcome

Emotional competences - parent rated - final - SD
- **Outcome type**: ContinuousOutcome

Emotional competences - parent rated - longest follow up
- **Outcome type**: ContinuousOutcome

Emotional competences - parent rated - change score
- **Outcome type**: ContinuousOutcome

Emotional competences - teacher rated - final - SD
- **Outcome type**: ContinuousOutcome

	Emotional competences - teacher rated - longest follow up ● **Outcome type**: ContinuousOutcome *Emotional competences - teacher rated - change score* ● **Outcome type**: ContinuousOutcome
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Quote: "Treatment Conditions Participants were randomized to ADHD medication plus the experimental therapy (AIM group) or medication plus community psychosocial care (CC group) using a computer- generated permutated blocking procedure. Similar to other stepped treatment trials in pediatric mental health, randomization occurred before the medication phase so parents would be aware of therapy status prior to making decisions about medication. 53 Families assigned to community care"
Allocation concealment (selection bias)	Low risk	Judgement Comment: It is assumed that the use of a computer blocking procedure conceals the allocation.
Blinding of participants and personnel (performance bias)	High risk	Judgement Comment: Blinding of participants and personnel was not possible.
Blinding of outcome assessment (detection bias)	High risk	Quote: "All clinician-rated assessments were completed by MD/PhD-level staff masked to therapy status. Participants were interviewed by the same rater whenever possible." Judgement Comment: The PICO measures included were rated by parents or teachers and though clinician-rated assessments were completed by staff masked to therapy status this is not relevant for these measures.
Incomplete outcome data (attrition bias)	Low risk	Quote: "skills to just one participant. There were 68 participants randomized, with 65 entering the medication trial. 52 Two discontinued during the medication phase (Figure 1). Five participants no longer exhibited impairing SMD symptoms after optimizing medication. One was excluded for detection of an exclusionary comorbidity and an additional participant assigned to the therapy group could not attend sessions and so dropped before baseline, leaving 56 participants entering the therapy phase. There were 29 AIM participants completing follow-up assessments. Due to differential rates of dropout during the medication phase, the cells became slightly unbalanced, although there were no differences in baseline demographics (Table 2). Most participants had previously used ADHD" Judgement Comment: There was a drop out (n=3) in the CC group due to assignment. All drop out is well described and except the drop out due to assignment the reasons does not indicate a bias.
Selective reporting (reporting bias)	Low risk	Judgement Comment: Compared to the protocol all stated primary and secondary outcome measures are reported. In the paper SSRS is also reported. This measure is not described in the trial registration.
Other bias	Unclear risk	

Yuk-chi 2005

Methods	Design: Randomised Clinical Trial
Participants	90 children with ADHD were randomised to psychosocial treatment plus methylphenidate versus methylphenidate treatment alone. Children aged 7 - 9.9 years. Ethnicity: Chinese children. Sample size calculation was made. Sex: 77 boys, 9 girls. Comorbidity: Anxiety 29%, Depression 6%, ODD 50%, Conduct Disorder 6%. Setting: Community mental health center: Out patient clinic in Hong Kong Socio demographic: No significant differences between the two treatment groups in demographic and social economic status, comorbid conditions, and additional intervention received in the first six months of the treatment. Medication: All participants received methylphenidate treatment. No information about between group differences in the medical treatment. Co-medications for comorbid disorders: no information Inclusion criteria: 1) ADHD-Combined Type based on DSM-IV criteria 2) Children in the age 7-9.9 years. 3) Studying first to fourth grade. 4) Living with a parent, who is the major caretaker. 5) IQ>80. 6) No significant physical disability. 7) No stimulant medication (methylphenidate) use for more than 2 weeks previously. 8) Their parents willingness to accept stimulant medication and psychosocial intervention of this study. 9) The parents willingness to accept random allocation. 10) No parent suffering from intellectual impairment or current psychosis.

Interventions	There were three components in the psychosocial treatment; child training, cognitive- behavioural parent training, and school consultations. Pre randomisation: 146 Post randomisation: 90 Form and duration of the treatment: Child training: 24 weekly sessions. Each group session lasted for 1 hour and 30 minutes to 2 hours. Cognitive-Behavioral Parent Training: 18 weekly sessions in total. Each session lasted for 1 hour and 30 minutes to 2 hours. School Consultations: There were two telephone consultations, Content of the intervention: The child training:The training provided a rich direct contingency management environment, in which the training of problem solving's skills and anger control management was provided. All sessions were videotaped to check treatment integrity. Themes were, for example, feelings, games, problem solving, stop & think, role play school and home. Parent training: The child training and the parent training were developed to implement concommitantly.Themes in the group were for instance: know yourself, attention rules, stress management, child mood management, homework coaching. School consultations: The therapist in the child groups talked to the teachers about implementations of classroom management strategies and review of the child's progress in school. No protocol violations to both child and parent training treatment program were detected.
Outcomes	Parent rated: SWAN rating scale, (30 items, 7 point scale, 1(slightly below average) to -3 (far above average). Teacher rated: SWAN rating scale.(30 items, 7 point scale, 1(slightly below average) to -3 (far above average). Clinician rated: MFFT(computer programme to measure impulsivity. Scores time taken to make the response, and total numbers of errors.) Consumer satisfaction: At post treatment: 40% very useful, 60% useful.
Notes	Combined Medication + PST yielded benefits on primary ADHD symptoms and on conduct problems.

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Table of random numbers, with block size of two.
Allocation concealment (selection bias)	Unclear risk	Unclear.
Blinding of participants and personnel (performance bias)	High risk	No blinding.
Blinding of outcome assessment (detection bias)	High risk	No blinding on this reviews primary outcome.
Incomplete outcome data (attrition bias)	High risk	Type of imputation method used is unclear.
Selective reporting (reporting bias)	Low risk	Low risk.
Other bias	Unclear risk	

Footnotes

Summary of findings tables

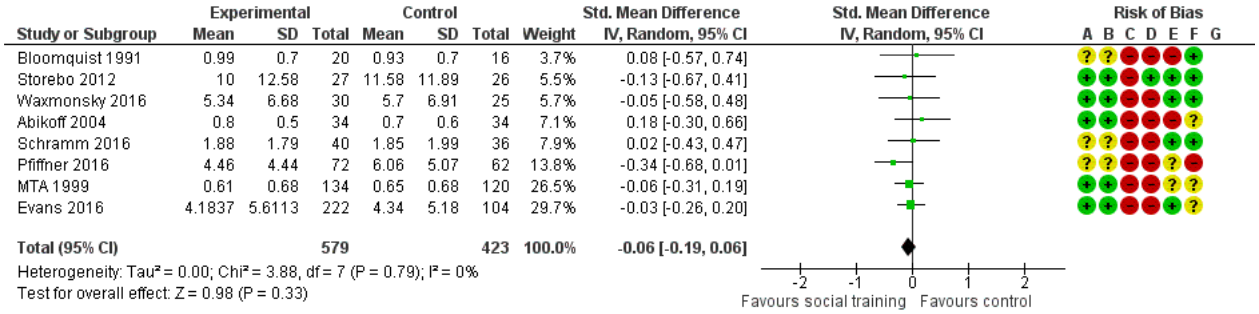
Data and analyses

1 Social skill training vs no training

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.1 General behaviour, teacher-rated, EoT	8	1002	Std. Mean Difference (IV, Random, 95% CI)	-0.06 [-0.19, 0.06]
1.2 General behavior, parent rated, EoT	8	995	Std. Mean Difference (IV, Random, 95% CI)	-0.38 [-0.61, -0.14]
1.3 ADHD core symptoms, parent rated, EoT	11	1206	Std. Mean Difference (IV, Random, 95% CI)	-0.54 [-0.81, -0.26]
1.4 ADHD core symptoms, teacher rated, EOT	14	1379	Std. Mean Difference (IV, Random, 95% CI)	-0.26 [-0.47, -0.05]
1.5 Social skills, teacher rated, EoT	11	1271	Std. Mean Difference (IV, Random, 95% CI)	0.11 [-0.00, 0.22]
1.6 Social skills, parent rated, EoT	15	1609	Std. Mean Difference (IV, Random, 95% CI)	0.19 [0.06, 0.32]
1.7 ADHD core symptom teacher rated, longest follow-up	5	582	Std. Mean Difference (IV, Random, 95% CI)	-0.11 [-0.28, 0.06]
1.8 Performance in school, EoT	3	510	Std. Mean Difference (IV, Random, 95% CI)	0.12 [-0.06, 0.30]
1.9 General behavior, teacher rated, longest follow-up	4	637	Std. Mean Difference (IV, Random, 95% CI)	-0.10 [-0.27, 0.07]
1.10 Social skills, teacher rated, longest follow-up	3	192	Std. Mean Difference (IV, Random, 95% CI)	0.06 [-0.22, 0.35]

Figures

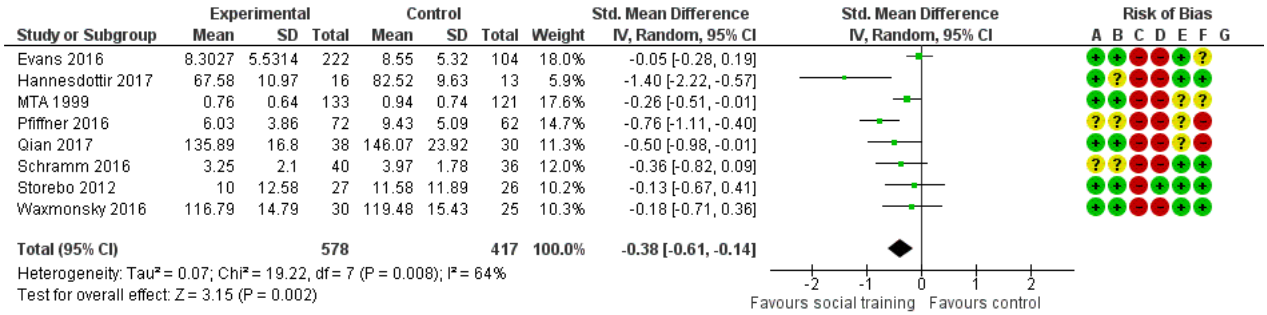
Figure 1 (Analysis 1.1)



Risk of bias legend
(A) Random sequence generation (selection bias)
(B) Allocation concealment (selection bias)
(C) Blinding of participants and personnel (performance bias)
(D) Blinding of outcome assessment (detection bias)
(E) Incomplete outcome data (attrition bias)
(F) Selective reporting (reporting bias)
(G) Other bias

Forest plot of comparison: 1 Social skill training vs no training, outcome: 1.1 General behaviour, teacher-rated, EoT.

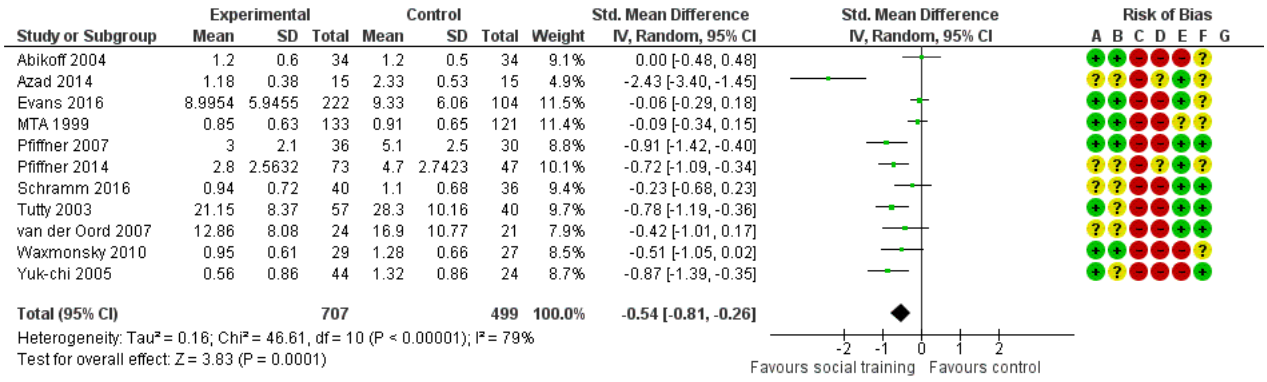
Figure 2 (Analysis 1.2)



Risk of bias legend
(A) Random sequence generation (selection bias)
(B) Allocation concealment (selection bias)
(C) Blinding of participants and personnel (performance bias)
(D) Blinding of outcome assessment (detection bias)
(E) Incomplete outcome data (attrition bias)
(F) Selective reporting (reporting bias)
(G) Other bias

Forest plot of comparison: 1 Social skill training vs no training, outcome: 1.2 General behavior, parent rated, EoT.

Figure 3 (Analysis 1.3)



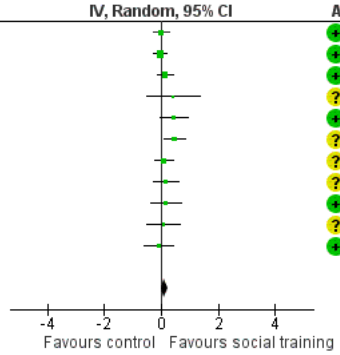
Risk of bias legend
(A) Random sequence generation (selection bias)
(B) Allocation concealment (selection bias)
(C) Blinding of participants and personnel (performance bias)
(D) Blinding of outcome assessment (detection bias)
(E) Incomplete outcome data (attrition bias)
(F) Selective reporting (reporting bias)
(G) Other bias

Forest plot of comparison: 1 Social skill training vs no training, outcome: 1.3 ADHD core symptoms, parent rated, EoT.

Figure 4 (Analysis 1.5)

Study or Subgroup	Experimental Mean	Experimental SD	Experimental Total	Control Mean	Control SD	Control Total	Weight	Std. Mean Difference IV, Random, 95% CI
Bul 2016	36.75	6.92	88	36.76	7.21	82	14.0%	-0.00 [-0.30, 0.30]
Evans 2016	10.1992	4.2121	222	10.34	4.07	104	23.3%	-0.03 [-0.27, 0.20]
MTA 1999	1.19	0.3	108	1.15	0.32	99	17.0%	0.13 [-0.14, 0.40]
Pfiffner 1997	89.9	13.5	9	84.3	13.3	9	1.4%	0.40 [-0.54, 1.33]
Pfiffner 2007	90.89	8.82	36	86.67	10.03	30	5.3%	0.44 [-0.05, 0.94]
Pfiffner 2014	94.6	10.1114	71	90.1	9.5979	47	9.1%	0.45 [0.08, 0.82]
Pfiffner 2016	85.07	11.43	72	83.87	13.78	62	11.0%	0.09 [-0.24, 0.43]
Schramm 2016	5.91	1.95	40	5.49	3.03	37	6.3%	0.16 [-0.28, 0.61]
Storebo 2012	-6.89	5.68	27	-7.85	5.93	27	4.4%	0.16 [-0.37, 0.70]
van der Oord 2007	36.64	8.79	24	35.84	10.68	21	3.7%	0.08 [-0.51, 0.67]
Waxmonsky 2010	30.5	10.36	29	31.28	8.21	27	4.6%	-0.08 [-0.61, 0.44]
Total (95% CI)			**726**			**545**	**100.0%**	**0.11 [-0.00, 0.22]**

Heterogeneity: Tau² = 0.00; Chi² = 7.99, df = 10 (P = 0.63); I² = 0%
Test for overall effect: Z = 1.93 (P = 0.05)



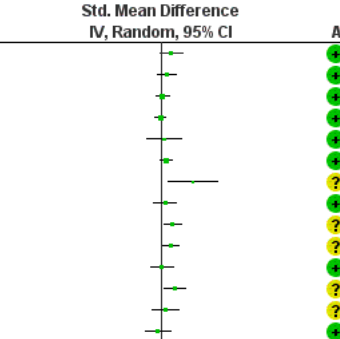
Risk of bias legend
(A) Random sequence generation (selection bias)
(B) Allocation concealment (selection bias)
(C) Blinding of participants and personnel (performance bias)
(D) Blinding of outcome assessment (detection bias)
(E) Incomplete outcome data (attrition bias)
(F) Selective reporting (reporting bias)
(G) Other bias

Forest plot of comparison: 1 Social skill training vs no training, outcome: 1.5 Social skills, teacher rated, EoT.

Figure 5 (Analysis 1.6)

Study or Subgroup	Experimental Mean	Experimental SD	Experimental Total	Control Mean	Control SD	Control Total	Weight	Std. Mean Difference IV, Random, 95% CI
Abikoff 2004	88.3	14.8	34	80.8	19.5	34	5.5%	0.43 [-0.05, 0.91]
Antshel 2003	81.9	11.8	80	79.3	10.6	40	7.6%	0.23 [-0.15, 0.61]
Bul 2016	44.58	8.5	88	44.08	10.67	82	10.1%	0.05 [-0.25, 0.35]
Evans 2016	85.655	16.1369	222	86.21	15.74	110	13.2%	-0.03 [-0.26, 0.19]
Hannesdottir 2017	41.6	12.12	15	40.14	8.09	14	2.8%	0.14 [-0.59, 0.87]
MTA 1999	1.22	0.27	127	1.17	0.26	120	12.2%	0.19 [-0.06, 0.44]
Pfiffner 1997	86.4	12.8	9	72.4	6.4	9	1.4%	1.32 [0.27, 2.36]
Pfiffner 2007	99.56	13.91	36	97.18	15.72	33	5.6%	0.16 [-0.31, 0.63]
Pfiffner 2014	96.2	10.1114	71	91.3	10.0623	45	7.7%	0.48 [0.10, 0.86]
Pfiffner 2016	93.16	14.45	72	86.84	17.33	62	8.7%	0.40 [0.05, 0.74]
Qian 2017	5.79	3	38	5.7	3.04	30	5.5%	0.03 [-0.45, 0.51]
Schramm 2016	7.5	1.72	40	6.44	1.95	37	5.9%	0.57 [0.12, 1.03]
van der Oord 2007	48.79	9.2	27	46.9	10.72	23	4.4%	0.19 [-0.37, 0.74]
Waxmonsky 2010	43.57	11.79	29	45	8.56	27	4.8%	-0.14 [-0.66, 0.39]
Waxmonsky 2016	76.45	16.27	30	80.57	17.05	25	4.7%	-0.24 [-0.78, 0.29]
Total (95% CI)			**918**			**691**	**100.0%**	**0.19 [0.06, 0.32]**

Heterogeneity: Tau² = 0.02; Chi² = 20.76, df = 14 (P = 0.11); I² = 33%
Test for overall effect: Z = 2.92 (P = 0.003)



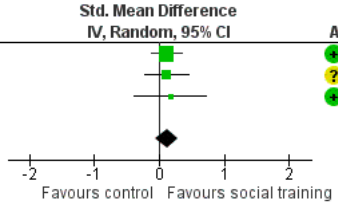
Risk of bias legend
(A) Random sequence generation (selection bias)
(B) Allocation concealment (selection bias)
(C) Blinding of participants and personnel (performance bias)
(D) Blinding of outcome assessment (detection bias)
(E) Incomplete outcome data (attrition bias)
(F) Selective reporting (reporting bias)
(G) Other bias

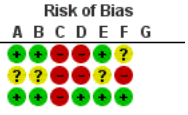
Forest plot of comparison: 1 Social skill training vs no training, outcome: 1.6 Social skills, parent rated, EoT.

Figure 6 (Analysis 1.8)

Study or Subgroup	Experimental Mean	Experimental SD	Experimental Total	Control Mean	Control SD	Control Total	Weight	Std. Mean Difference IV, Random, 95% CI
Evans 2016	-23.4978	9.1177	222	-24.48	8.36	104	60.8%	0.11 [-0.12, 0.34]
Pfiffner 2016	89.6	13.9	72	88.1	13	62	28.6%	0.11 [-0.23, 0.45]
Storebo 2012	20.13	15.15	24	17.88	10.11	26	10.7%	0.17 [-0.38, 0.73]
Total (95% CI)			**318**			**192**	**100.0%**	**0.12 [-0.06, 0.30]**

Heterogeneity: Tau² = 0.00; Chi² = 0.04, df = 2 (P = 0.98); I² = 0%
Test for overall effect: Z = 1.26 (P = 0.21)

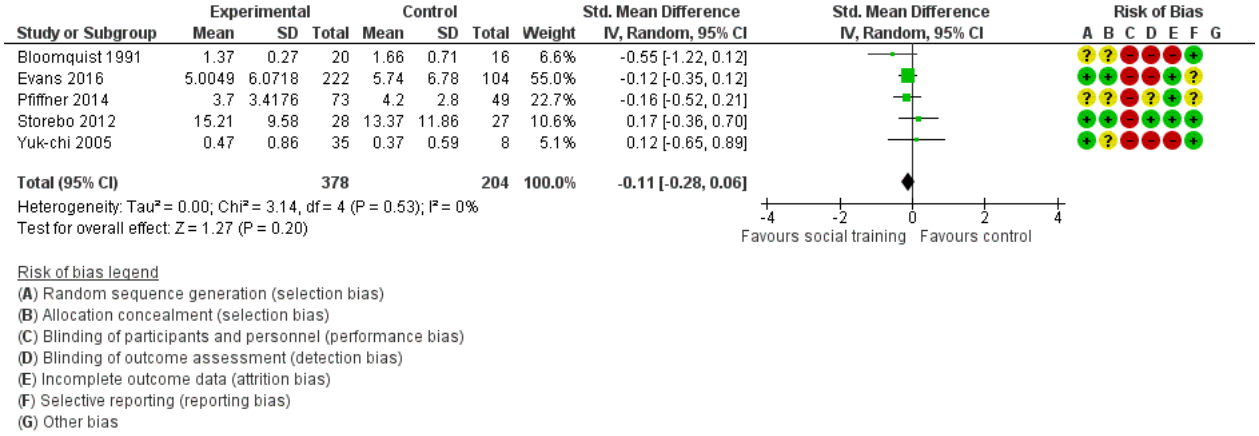




Risk of bias legend
(A) Random sequence generation (selection bias)
(B) Allocation concealment (selection bias)
(C) Blinding of participants and personnel (performance bias)
(D) Blinding of outcome assessment (detection bias)
(E) Incomplete outcome data (attrition bias)
(F) Selective reporting (reporting bias)
(G) Other bias

Forest plot of comparison: 1 Social skill training vs no training, outcome: 1.8 Performance in school, EoT.

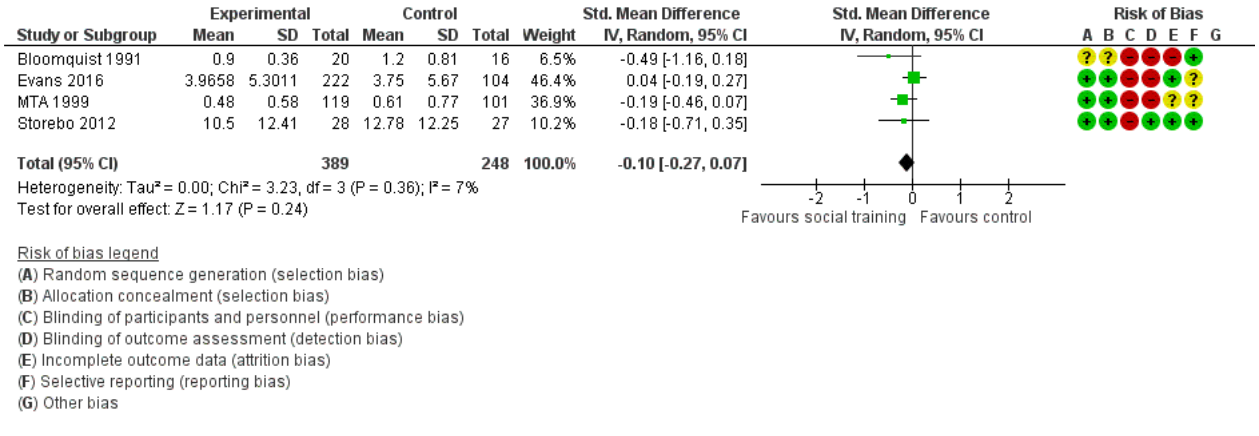
Figure 7 (Analysis 1.7)



Risk of bias legend
(A) Random sequence generation (selection bias)
(B) Allocation concealment (selection bias)
(C) Blinding of participants and personnel (performance bias)
(D) Blinding of outcome assessment (detection bias)
(E) Incomplete outcome data (attrition bias)
(F) Selective reporting (reporting bias)
(G) Other bias

Forest plot of comparison: 1 Social skill training vs no training, outcome: 1.7 ADHD core symptom teacher rated, longest follow-up.

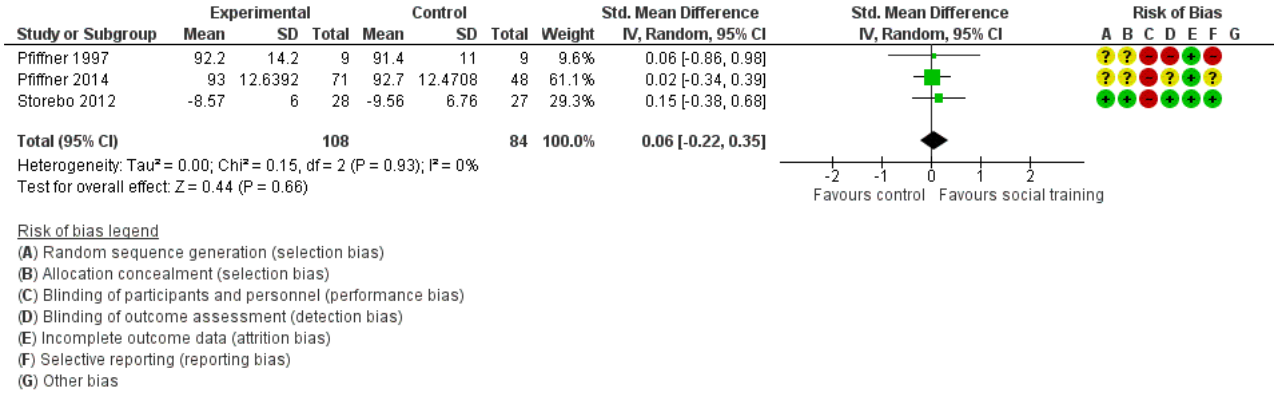
Figure 8 (Analysis 1.9)



Risk of bias legend
(A) Random sequence generation (selection bias)
(B) Allocation concealment (selection bias)
(C) Blinding of participants and personnel (performance bias)
(D) Blinding of outcome assessment (detection bias)
(E) Incomplete outcome data (attrition bias)
(F) Selective reporting (reporting bias)
(G) Other bias

Forest plot of comparison: 1 Social skill training vs no training, outcome: 1.9 General behavior, teacher rated, longest follow-up.

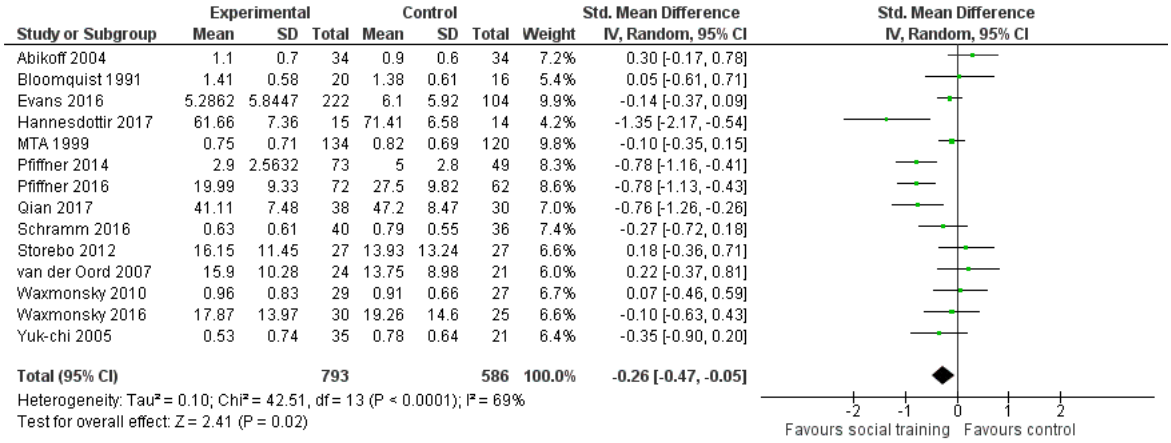
Figure 9 (Analysis 1.10)



Risk of bias legend
(A) Random sequence generation (selection bias)
(B) Allocation concealment (selection bias)
(C) Blinding of participants and personnel (performance bias)
(D) Blinding of outcome assessment (detection bias)
(E) Incomplete outcome data (attrition bias)
(F) Selective reporting (reporting bias)
(G) Other bias

Forest plot of comparison: 1 Social skill training vs no training, outcome: 1.10 Social skills, teacher rated, longest follow-up.

Figure 10 (Analysis 1.4)



Forest plot of comparison: 1 Social skill training vs no training, outcome: 1.4 ADHD core symptoms, teacher rated, EOT.