

S1 Table. Excluded studies

No. Study	Reason for exclusion
1 Aldred, C., et al. (2012). "Brief report: mediation of treatment effect in a communication intervention for pre-school children with autism." <u>Journal of Autism & Developmental Disorders</u>	Subanalysis of the previous study
2 Aliee, Z. S., et al. (2013). "The effectiveness of managing split attention among autistic children using computer based intervention." <u>TOJET: The Turkish Online Journal of Educational</u>	Age 5-18
3 Andrews, L., et al. (2013). "Increasing the appropriate demonstration of affectionate behavior, in children with Asperger syndrome, high functioning autism, and PDD-NOS: A randomized controlled trial." <u>Research in Autism Spectrum Disorders</u> 7(12):	Age 7-12
4 Asghari Nekah, S. M., et al. (2013). "The effect of puppet play therapy intervention on the communicative skills of autistic children." <u>Boutros, Nash [Ed] 2(pp. 199-215): 199-215.</u>	Quasi-experimental - not RCT
5 Begeer, S., et al. (2011). "Theory of Mind training in children with autism: a randomized controlled trial." <u>Journal of Autism & Developmental Disorders</u> 41(8): 997-1006.	Age 8-13
6 Berquist, K. L. and M. H. Charlop (2014). "Teaching parents of children with autism to evaluate interventions." <u>Journal of Developmental and Physical Disabilities</u> 26(4): 451-472.	The focus was to evaluate parents skills.
7 Boyd, B. A., et al. (2013). "Feasibility of exposure response prevention to treat repetitive behaviors of children with autism and an intellectual disability: a brief report." <u>Autism</u> 17(2): 196-204.	Quasi-experimental - not RCT
8 Bressel, E., et al. (2011). "Effect of whole body vibration on stereotypy of young children with autism." <u>BMJ Case Reports</u> .	Not RCT, pre/post with 3 children
9 Cardon, T. A. and M. Wilcox (2011). "Promoting imitation in young children with autism: A comparison of reciprocal imitation training and video modeling." <u>Journal of Autism and</u>	Compare two experimental groups
10 Causin, K. G., et al. (2013). "The role of joint control in teaching listener responding to children with autism and other developmental disabilities." <u>Research in Autism Spectrum</u>	multiple probe design
11 Dawson, G., et al. (2012). "Early behavioral intervention is associated with normalized brain activity in young children with autism." <u>Journal of the American Academy of Child & Adolescent</u>	Outcome is EEG - behavioral outcome was previously published in
12 D'Elia, L., et al. (2014). "A longitudinal study of the TEACCH program in different settings: The potential benefits of low intensity intervention in preschool children with autism spectrum disorder." <u>Journal of Autism and Developmental Disorders</u> 44(3):	Not randomized
13 DeRosier, M. E., et al. (2011). "The efficacy of a Social Skills Group Intervention for improving social behaviors in children with High Functioning Autism Spectrum disorders." <u>Journal of Autism & Developmental Disorders</u> 41(8): 1033-1043.	Age 8-12
14 Dezfoolian, L., et al. (2013). "A pilot study on the effects of Orff-based therapeutic music in children with autism spectrum disorder." <u>Music and Medicine</u> 5(3): 162-168.	No control group
15 Eapen, V., et al. (2013). "Clinical outcomes of an early intervention program for preschool children with Autism Spectrum Disorder in a community group setting." <u>BMC Pediatrics</u> 13(1): 3.	Pre-post comparison (No control group)
16 Eldevik, S., et al. (2012). "Outcomes of Behavioral Intervention for Children with Autism in Mainstream Pre-School Settings."	Not RCT

- 17 Farmer, C., et al. (2012). "Predictors and moderators of parent Not RCT, age 4-14 training efficacy in a sample of children with autism spectrum disorders and serious behavioral problems." Journal of Autism & Developmental Disorders **42**(6): 1037-1044.
- 18 Fernell, E., et al. (2011). "Early intervention in 208 Swedish Prospective naturalistic preschoolers with autism spectrum disorder. A prospective study naturalistic study." Research in Developmental Disabilities **32**(6):
- 19 Field, T., et al. (2013). "Reciprocal imitation following adult Not TAU imitation by children with autism." Infant and Child Development
- 20 Flanagan, H. E., et al. (2012). "Effectiveness of large-scale Not RCT community-based intensive Behavioral Intervention: A waitlist comparison study exploring outcomes and predictors." Research in Autism Spectrum Disorders **6**(2): 673-682.
- 21 Foussier, S., et al. (2012). "Behaviour regulation, stimulation and French article homogenisation of social/emotional and cognitive development in Not RCT children with autism: A recreational approach by 2-player-game (pun in French between first person pronoun "I" and the word "game" which sound the same)." A N A E Approche Neuropsychologique des Apprentissages chez l'Enfant **24**(4[119]:
- 22 Fragala-Pinkham, M. A., et al. (2011). "Group swimming and group swimming and aquatic exercise programme for children with autism spectrum aquatic exercise disorders: a pilot study." Developmental neurorehabilitation **14**(4):
- 23 Freitag, C. M., et al. (2012). "The Frankfurt early intervention No control program FFIP for preschool aged children with autism spectrum disorder: a pilot study." Journal of Neural Transmission **119**(9):
- 24 Fujii, C., et al. (2013). "Intensive cognitive behavioral therapy for Age 7-11 anxiety disorders in school-aged children with autism: A preliminary comparison with treatment-as-usual." School Mental
- 25 Ganz, J. B., et al. (2013). "Effectiveness of the PECS Phase III app Single case multiple and choice between the app and traditional PECS among baseline preschoolers with ASD." Research in Autism Spectrum Disorders
- 26 Gatta, M., et al. (2013). "Novelty learning in pervasive Two comparative study, 6 developmental disorder children: A comparison between children) psychomotor therapy and psychoeducational intervention." Giornale di Neuropsichiatria dell'Eta Evolutiva **33**(2): 75-86.
- 27 Goh, S., et al. (2013). "Teaching non-verbal children with autistic Age 5-13 disorder to read and write: A pilot study." International Journal of Developmental Disabilities **59**(2): 95-107.
- 28 Gordon, K., et al. (2011). "A communication-based intervention Age 4-10 for nonverbal children with autism: what changes? Who benefits?" Journal of Consulting & Clinical Psychology **79**(4): 447-457.
- 29 Green, J., et al. (2013). "Intervention for infants at risk of Case series developing autism: A case series." Journal of Autism and Developmental Disorders **43**(11): 2502-2514.
- 30 Gulsrud, A. C., et al. (2014). "Two to ten years: developmental Growth model analysis of trajectories of joint attention in children with ASD who received data from previous RCT targeted social communication interventions." Autism research ; Official Journal of the International Society for Autism Research
- 31 Hastings, R. P., et al. (2012). "Interventions for children with No random assignment pervasive developmental disorders in low and middle income countries." Journal of Applied Research in Intellectual Disabilities

- 32 Hopkins, I. M., et al. (2011) Avatar assistant: Improving social Age 6-15 skills in students with an asd through a computer-based intervention. Journal of Autism and Developmental Disorders **41**, 1543-1555 DOI: <http://dx.doi.org/10.1007/s10803-011-1179-z>
- 33 Huskens, B., et al. (2013). "Promoting question-asking in school- School age aged children with autism spectrum disorders: effectiveness of a robot intervention compared to a human-trainer intervention." Developmental neurorehabilitation **16**(5): 345-356.
- 34 Ingersoll, B. R. and A. L. Wainer (2013). "Pilot study of a school- Not RCT based parent training program for preschoolers with ASD." Autism
- 35 Jang, J., et al. (2012). "Randomized trial of an eLearning program Age 3.1-11.5, not children's for training family members of children with autism in the behavior outcome principles and procedures of applied behavior analysis." Research in Autism Spectrum Disorders **6**(2): 852-856.
- 36 Kasari, C. (2014). "Are we there yet? The state of early prediction Sequential multiple and intervention in autism spectrum disorder." Journal of the assignment randomized American Academy of Child & Adolescent Psychiatry **53**(2): 133- trial, age 5-8, speech 134. utterance is main outcome
- 37 Kasari, C., et al. (2014). "Caregiver-mediated intervention for low- Control group was not resourced preschoolers with autism: an RCT." Pediatrics **134**(1): "treatment as usual".
- 38 Kasari, C., et al. (2012). "Longitudinal follow-up of children with Age 6-11 autism receiving targeted interventions on joint attention and play." Journal of the American Academy of Child & Adolescent
- 39 Kasari, C., et al. (2012). "Making the connection: randomized School age (Mean age 8.14 controlled trial of social skills at school for children with autism years) spectrum disorders." Journal of Child Psychology & Psychiatry &
- 40 Kasari, C., et al. (2006). "Joint attention and symbolic play in Not TAU young children with autism: a randomized controlled intervention study." Journal of Child Psychology and Psychiatry **47**(6): 611-
- 41 Kasari, C., et al. (2008). "Language outcome in autism: Not TAU randomized comparison of joint attention and play interventions." Journal of Consulting & Clinical Psychology **76**(1): 125-137.
- 42 Kassardjian, A., et al. (2013). "Utilizing teaching interactions to 4 kids facilitate social skills in the natural environment." Education and Training in Autism and Developmental Disabilities **48**(2): 245-
- 43 Kenworthy, L., et al. (2014). "Randomized controlled age 3-5th graders effectiveness trial of executive function intervention for children on the autism spectrum." Journal of Child Psychology &
- 44 Kern, J. K., et al. (2011). "Prospective trial of equine-assisted No random assignment, age activities in autism spectrum disorder." Alternative Therapies in 3-12 Health & Medicine **17**(3): 14-20.
- 45 Kern, J. K., et al. (2011). "A clinical trial of glutathione Nutrition supplement study supplementation in autism spectrum disorders." Medical Science
- 46 Kovshoff, H., et al. (2011). "Two-year outcomes for children with Not RCT autism after the cessation of early intensive behavioral intervention." Behavior Modification **35**(5): 427-450.
- 47 Kretzmann, M. (2013). "Facilitating peer engagement between Elementary school kids children with autism and their classmates at school." Dissertation Abstracts International Section A: Humanities and Social Sciences **74**(3-A(E)): No Pagination Specified.

- 48 Lawton, K. and C. Kasari (2012). "Brief report: longitudinal improvements in the quality of joint attention in preschool children with autism." Journal of Autism & Developmental Disorders
- 49 Lee, R. and P. Sturmey (2014). "The effects of script-fading and a Multiple baseline across Lag-1 schedule on varied social responding in children with autism." Research in Autism Spectrum Disorders **8**(4): 440-448.
- 50 Lepper, T. L., et al. (2013). "Effects of operant discrimination training on the vocalizations of nonverbal children with autism." Journal of Applied Behavior Analysis **46**(3): 656-661.
- 51 Lim, H. A. and E. Draper (2011). "The effects of music therapy approach for children with autism spectrum disorders." Journal of
- 52 Lim, H. (2010). "Effect of "Developmental Speech and Language Training Through Music" on Speech Production in Children with Autism Spectrum Disorders." Journal of Music Therapy **47**(1):2-
- 53 Magiati, I., et al. (2011). "Patterns of Change in Children with Autism Spectrum Disorders Who Received Community Based Comprehensive Interventions in Their Pre-School Years: A Seven Year Follow-Up Study." **5**(3): 1016-1027.
- 54 Mandelberg, J., et al. (2014). "Long-term outcomes of parent-assisted social skills intervention for high-functioning children with autism spectrum disorders." Autism **18**(3): 255-263.
- 55 Mandell, D. S. (2013). "Adults with autism-A new minority." Journal of General Internal Medicine **28**(6): 751-752.
- 56 Matson, J. L. and R. L. Goldin (2014). "Early Intensive Behavioral Interventions: Selecting behaviors for treatment and assessing treatment effectiveness." Research in Autism Spectrum Disorders
- 57 McDuffie, A., et al. (2010). "Autism spectrum disorder in children and adolescents with fragile X syndrome: Within-syndrome differences and age-related changes." American Journal on Intellectual and Developmental Disabilities **115**(4): 307-326.
- 58 Minne, E. P. and M. Semrud-Clikeman (2012). "A Social Competence Intervention for Young Children with High Functioning Autism and Asperger Syndrome: A Pilot Study."
- 59 Mitchell, E. S. (2013). "The effectiveness of a behavioral summer treatment program for children with high functioning autism spectrum disorder." Dissertation Abstracts International: Section B: The Sciences and Engineering **74**(1-B(E)): No Pagination
- 60 Mohammadzaheri, F., et al. (2014). "A randomized clinical trial comparison between pivotal response treatment (prt) and structured applied behavior analysis (aba) intervention for children with autism." Journal of Autism and Developmental Disorders
- 61 Murdock, L. C. and J. Q. Hobbs (2011). "Picture me playing: increasing pretend play dialogue of children with autism spectrum disorders." Journal of Autism & Developmental Disorders **41**(7):
- 62 Murdock, L. C., et al. (2014). "The effect of a platform swing on the independent work behaviors of children with Autism Spectrum Disorders." Focus on Autism and Other Developmental

- 63 Nefdt, N., Koegel, R., Singer, G. and Gerber, M. (2010). "The Use of a Self-Directed Learning Program to Provide Introductory Training in Pivotal Response Treatment to Parents of Children With Autism" *Journal of Positive Behavior Interventions* 2010; 12; 23 Intervention duration was too short (7 days).
- 64 Okuno, H., et al. (2013). "[Effectiveness of a modified parent training of smaller groups and shorter schedules for children with pervasive developmental disorders]." *No to Hattatsu [Brain & Development]* 45(1): 26-32. Pre-post comparison, included ADHD
- 65 Oosterling, I., et al. (2010) Randomized controlled trial of the focus parent training for toddlers with autism: 1-year outcome. *Journal of Autism and Developmental Disorders* 40, 1447-1458 Not RCT
DOI: 10.1007/s10803-010-1004-0
- 66 Park, M. N. (2013). "Targeting social communication impairments in children with autism spectrum disorders through self-management." *Dissertation Abstracts International: Section B: The Sciences and Engineering* 74(4-B(E)): No Pagination Specified. not RCT
- 67 Perry, T. L. (2013). "The effects of response interruption and redirection on language skills in children with vocal stereotypy." *Dissertation Abstracts International: Section B: The Sciences and Engineering* 74(4-B(E)): No Pagination Specified. Not RCT
- 68 Persicke, A., et al. (2013). "Teaching children with autism to attend to socially relevant stimuli." *Research in Autism Spectrum Disorders* 7(12): 1551-1557. Not RCT - 3 participants
- 69 Peters-Scheffer, N., et al. (2013). "Therapist characteristics predict discrete trial teaching procedural fidelity." *Intellectual & Developmental Disabilities* 51(4): 263-272. Sample also includes intellectual disability, not just ASD
- 70 Pfeiffer, B. A., et al. (2011). "Effectiveness of sensory integration interventions in children with autism spectrum disorders: a pilot study." *American Journal of Occupational Therapy* 65(1): 76-85. Sensory integration
- 71 Radley, K. C., et al. (2014). "The feasibility and effects of a parent-facilitated social skills training program on social engagement of children with autism spectrum disorders." Not RCT, 5 kids
- 72 Reaven, J., et al. (2012). "Group cognitive behavior therapy for children with high-functioning autism spectrum disorders and anxiety: a randomized trial." *Journal of Child Psychology & Psychiatry & Allied Disciplines* 53(4): 410-419. Age 7-14
- 73 Reichow, B. and M. Wolery (2011). "Comparison of progressive prompt delay with and without instructive feedback." *Journal of Applied Behavior Analysis* 44(2): 327-340. Not RCT, adapted alternating treatment design
- 74 Rickards, A., et al. (2009). "One-year follow-up of the outcome of a randomized controlled trial of a home-based intervention programme for children with autism and developmental delay and their families." *Child: Care, Health and Development* 35(5): 593- included.
- 75 Roberts, J., et al. (2011). "A randomised controlled trial of two early intervention programs for young children with autism: Centre-based with parent program and home-based." *Research in Autism Spectrum Disorders* 5(4): 1553-1566. Not RCT

- 76 Romero, N. L. (2014). "Evaluating the effectiveness of a computer Not RCT, 3 kids
based intervention, the transporters, on both recognition and
understanding of emotions in young children with autism."
Dissertation Abstracts International Section A: Humanities and
Social Sciences **74**(9-A(E)): No Pagination Specified.
- 77 Roux, G., et al. (2013). "A randomized controlled trial of group RCT but included children
Stepping Stones Triple P: a mixed-disability trial." Family Process with Down syndrome and
52(3): 411-424. cerebral palsy.
- 78 Ruble, L. and J. H. McGrew (2013). "Teacher and child predictors Age 3-9
of achieving IEP goals of children with autism." Journal of Autism
& Developmental Disorders **43**(12): 2748-2763.
- 79 Ruble, L. A., et al. (2013). "A randomized controlled trial of School age children
COMPASS web-based and face-to-face teacher coaching in
autism." Journal of Consulting & Clinical Psychology **81**(3): 566-
- 80 Sallows, G. O. and T. D. Graupner (2005). "Intensive behavioral Not TAU
treatment for children with autism: four-year outcome and
predictors." American Journal of Mental Retardation **110**(6): 417-
- 81 Samadi, S. A. and A. Mahmoodizadeh (2014). "Omid early Focus was parents needs
intervention resource kit for children with autism spectrum
disorders and their families." Early Child Development and Care
- 82 Sandiford, G. A. (2013). "The efficacy of melodic based Outcome was solely
communication therapy for eliciting speech in nonverbal children language (e.g., number of
with autism." Dissertation Abstracts International: Section B: The correct words)
Sciences and Engineering **73**(11-B(E)): No Pagination Specified.
- 83 Scarpa, A. and N. M. Reyes (2011). "Improving emotion Emotion regulation was the
regulation with CBT in young children with high functioning main outcome, age 5-7
autism spectrum disorders: a pilot study." Behavioural &
- 84 Schaaf, R. C., et al. (2014). "An intervention for sensory Age 4-7:11
difficulties in children with autism: a randomized trial." Journal of
Autism & Developmental Disorders **44**(7): 1493-1506.
- 85 Shin, S., et al. (2012). "A Comparative Study of the Preliminary Age preschool to high
Effects in the Levels of Adaptive Behaviors: Learning Program for school
the Development of Children with Autism (LPDCA)." **13**(1): 6-15
- 86 Schultz, T. R. (2013). "Evaluating the effectiveness of the core Multiple baseline design
content of The Incredible Years with and without visual
performance feedback for parents of children with autism."
Dissertation Abstracts International Section A: Humanities and
- 87 Schwartzberg, E. T. and M. J. Silverman (2013). "Effects of Age 9-21
music-based social stories on comprehension and generalization of
social skills in children with autism spectrum disorders: A
randomized effectiveness study." The Arts in Psychotherapy **40**(3):
- 88 Senechal, C., et al. (2013). "Parents as co-therapists: A winning Quasi-experimental - not
solution for treating autistic children." Annales Medico- RCT
- 89 Silva, L. M., et al. (2011). "Early intervention for autism with a Qigong massage by parents
parent-delivered Qigong massage program: a randomized
controlled trial." American Journal of Occupational Therapy **65**(5):
- 90 Simpson, K., et al. (2013). "The use of music to engage children Not an active intervention
with autism in a receptive labelling task." Research in Autism to children (sung vs spoken
Spectrum Disorders **7**(12): 1489-1496. condition)

- 91 Stock, R., et al. (2013). "Comparison of community-based verbal Two comparative study behavior and pivotal response treatment programs for young children with autism spectrum disorder." Research in Autism Spectrum Disorders 7(9): 1168-1181.
- 92 Strasberger, S. K. and S. J. Ferreri (2013). "The effects of peer Not RCT, 4 kids assisted communication application training on the communicative and social behaviors of children with autism." Journal of Developmental and Physical Disabilities Oct(Pagination): No
- 93 Weiner, R. H. and R. L. Greene (2014). "Intention-based therapy Not RCT for autism spectrum disorder: promising results of a wait-list control study in children." Explore: The Journal of Science &
- 94 Whyte, E. M., et al. (2013). "Learning of idiomatic language Age 7-12 expressions in a group intervention for children with autism."
- 95 Williams, B. T., et al. (2012). "Teaching emotion recognition The intervention (watching skills to young children with autism: a randomised controlled trial DVD) was not classified of an emotion training programme." Journal of Child Psychology into the three model. & Psychiatry & Allied Disciplines 53(12): 1268-1276.
- 96 Young, K. L., et al. (2012). "Evaluation of a Self-Instructional Not RCT Package on Discrete-Trials Teaching to Parents of Children with Autism." 6(4): 1321-1330.

RCT means randomized controlled trial. TAU means treatment as usual.