| **Author, Year, Country****Groups, N Enrollment/****N Final** | **Age at Intake****Mean months ± SD** | **Measure** | **Baseline Score, Mean ± SD** | **Follow-Up Score, Mean ± SD** | **Analytic Data** |
| --- | --- | --- | --- | --- | --- |
| **RCTs** |
| Aldred et al. 201227, 28UK**IG:** Parent training in social communication intervention plus community intervention, 14/14 **CG:** Eclectic therapy, 14/14 **CGa:** aged 24-27 months, total ADOS score 11-17 (young high functioning)**CGb:** aged 24-47 months; total ADOS score 18-24 (young low functioning)**CGc:** aged 48-71 months; total ADOS score 11-17 (older high functioning)**CGd:** aged 48-71 months; total ADOS score 18-24 (older low functioning)Quality: Good | **IG:** 51.4 ± 11.8**CG:** 50.9 ± 16.3 | ADOS total score | **IG:** 16.1 ± 4.5**IGa:** 12 ± 3.3**IGb:** 19 ± 1.3**IGc:** 14 ± 3.3**IGd:** 20 ± 1**CG:** 15.6 ± 4.9**CGa:** 11 ± 2.3**CGb:** 19 ± 1**CGc:** 14 ± 3.3**CGd:** 20 ± 1.3 | **IG:** 11.8 ± 6.4**IGa:** 6 ± 3.6**IGb:** 13 ± 5.6**IGc:** 11 ± 4.5**IGd:** 17 ± 2.6**CG:** 16.1 ± 4.4**CGa:** 13 ± 4**CGb:** 16 ± 4.3**CGc:** 16 ± 1.3**CGd:** 20 ± 0.6 | Co-varying for baseline ADOS score, there was a significant difference in ADOS change between the groups (F 1,25 = 7.30; p =0.01). |
| Oosterling et al. 201036**IG:** Nonintensive parent training+specialized preschool, 40/36**CG:** Eclectic therapy, 35/31Quality: Fair | **IG:** 35.2 ± 5.5**CG:** 33.3 ± 6.4 | ADOSJoint attention factor | NR | Change from baseline scores:**G1:** -0.8 ± 2.3**G2:** -0.9 ± 0.2 | Joint attention factor: Group effect, F=0.12 Time effect, F=0.67, Group\*Time effect= 0.76 Social affect : Group effect, F=0.01 Time effect, F=6.08 (p<0.05)Group\* Time effect, F= 0.10 |
| Social affect | NR | **G1:** -2.5 ± 4.0**G2:** -2.3 ± 3.7 |
| Rogers et al. 201229, 30US**IG**: Parent-delivered Early Start Denver mode (ESDM), 49/49**CG**: Eclectic therapy, 49/49Quality: Fair | **IG:** 21.02 ± 3.51**CG:** 20.94 ± 3.42 | Modified ADOS social affect | **IG:** 29.45 ± 9.16 **CG:** 34.14 ± 8.69 | **IG:** 26.61 ± 10.14 **CG:** 27.33 ± 10.62 | Change from baselineIG: d= - 0.37CG: d= - 0.63CG showed greater improvement in social affect score than IG (estimated difference between groups = 3.43, SD=1.72, p =0.05). |
| ADOS–Restrictive and Repetitive | **IG:** 3.92 ± 2.01 **CG:** 4.31 ± 1.92 | **IG:** 3.96 ± 1.86 **CG:** 3.82 ± 2.04 | Change from baseline:IG: d=0.02CG: d= - 0.22 |
|  |  |  | No significant group difference in ADOS scoresNo effect of intervention hours on the group difference in both scores , p>0.05 |
| Pajareya et al. 201137Thailand**IG:** DIR/Floortime,16/15**CG:** Usual care, 16/16Quality: Fair | **IG:** 56.6 ± 10.1**CG:** 51.5 ± 13.9 | CARS | **IG:** 37.2 ± 6.2**CG:** 39.7 ± 6.6 | Change scores;**IG:** 2.9 ± 2.0**CG:** 0.8 ±1.2 | No baseline difference between the groups, p=0.86Change CARS scores: Significantly greater decrease for the IG as compared to CG (p=0.002) |
| Carter et al. 201138 US**IG**: More than Words, 32/29**CG**: Eclectic therapy, 30/26Quality: Fair | **IG:** 21.11 ± 2.71**CG**: 21.51 ± 2.82 | PIA-CV nonverbal communication-raw scores  | **IG:** 2.30 ± 0.64**CG:** 2.28 ± 0.73 | **IG:** 2.89 ± 0.67**CG:** 2.92 ± 0.65 | Residualized gain scores from baseline:**IG: -**0.05 ± 0.63**CG:** 0.06 ± 0.58ES=-0.19 , 95%CI :-0.81 to 0.43 |
| Green et al. 201031UK**IG:** Preschool autism communication intervention (PACT), 77/74**CG:** Eclectic therapy, 75/72Quality: Fair | **IG:** 45 **CG:** 45 | ADOS-GTotal social-communication algorithm score | **IG:** 19.6 ± 4.2**CG:** 19.3 ± 4.0 | **IG:** 15.7 ± 6.0**CG:** 16.5 ± 5.7Change from baseline, mean (SD):**IG:** -3.9 ± 4.7**CG:** -2.9 ± 3.9 | Change in ADOS-G diagnosis to ASD, n (%):IG: 22 (30)CG: 17 (24)Change in ADOS-G diagnosis to non-spectrum, n (%):IG: 4 (5)CG: 5 (7)Treatment effect with ANCOVA estimates: without baseline covariate adjustment: -1·06 (95% CI –2·48 to 0·36)with adjustment for center and age:-1·00 (–2·38 to 0·39) No interaction with treatment for ADOS-G algorithm score >17 (p=0.85) |
| Drew et al. 200239UK **IG:** Parent training, 12/12 **CG:** Local/eclectic services, 12/12Quality: Fair | **IG:** 21.4 ± 2.7**CG:** 23.6 ± 3.8 | ADI-R-Non-Verbal Communication | **IG:** 12.8 ± 1.6**CG:** 12 ± 2.4 | **IG:** 11.0 ± 2.8**CG:** 11.9 ± 1.8 | No significant group differences in any of the Severity measures (p>0.05) |
| Reciprocal Social Interaction | **IG:** 19.6 ± 3.0**CG:** 20.3 ± 4.5 | **IG:** 18.3 ± 4.9**CG:** 20.1 ± 4.3 |
| Repetitive & Stereotyped Behavior | **IG:** 3.2 ± 1.1**CG:** 3.7 ± 1.6 | **IG:** 3.9 ± 1.8**CG:** 4.2 ± 2.0 |
| **Prospective cohort studies**  |
| Strauss et al, 201232, 33Italy**IG**: Staff & parent mediated early intervention, 24/24**CG**: Eclectic therapy, 20/20Quality: Good | IG: 55.67 ± 17.63CG: 41.94 ± 13.07  | ADOS-Total | **IG:** 15.96 ± 4.33**CG:** 14.56 ± 5.05 | **IG:** 13.21 ± 3.83**CG:** 13.56 ± 4.72 | Change from baseline: IG: t= - 3.1, p=0.005 CG: t= -1.826, p=0.09 |
| ADOSSocial interaction | **G1:** 10.54 ± 2.34**G2:** 9.63 ± 3.24 | **G1:** 8.83 ± 2.70**G2:**  9.00 ± 2.97 | IG: t= - 3.995, p<0.001CG: t= -1.775, p=0.096 |
| ADOSCommunication | **G1:** 6.04 ± 1.88**G2:** 4.94 ± 2.23 | **G1:** 4.38 ± 1.34**G2:** 4.56 ± 1.97 | IG: t= - 3.745, p<0.001CG: t= - 1.031, p=0.319No age effect on score change differences on ADOS total (F (44) = 1.009, p = .230In both groups, the predictive power of parental stress on autism severity was modified by perception of difficult child, with higher perceptions of difficulty associated with lower decreases in autism severity |

ABA=Applied Behavior Analysis; ADI-R=Autism Diagnostic Interview Revised; ADOS=Autism Diagnostic Observation Schedule; ADOS-G=Autism Diagnostic Observation Schedule-Generic; CARS=Childhood Autism Rating Schedule; CG – Control Group; ESDM=Early Start Denver Model; ES=effect size; GARS=Gilliam Autism Rating Scale; IG=Intervention Group; NR=Not Reported; PACT=Preschool Autism Communication Intervention; PDD-NOS=Pervasive Developmental Disorder-Not Otherwise Specified; PIA-CV =Parent Interview for Autism-Clinical Version; SD=Standard Deviation.