

The effectiveness of parent training for children with autism spectrum disorder: a systematic review and meta-analyses

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Background

Various parent training interventions are shown to have some effect on the symptoms of children with autism spectrum disorder, but the interventions used are heterogeneous.

Methods

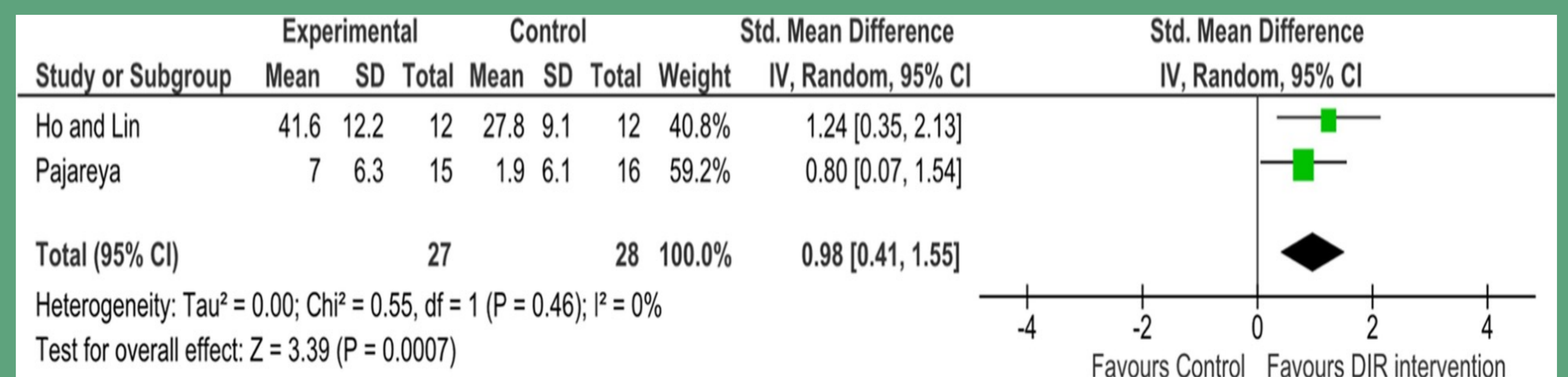
A systematic review and several meta-analyses using random effects method were carried out to assess effectiveness of parental training for children with autism spectrum disorder on their core autism symptoms and associated behaviours such as agitation and irritability, and also parental stress. We searched four electronic databases, namely CINAHL, EMBASE, MEDLINE and PsycINFO for relevant literature. Two reviewers independently and blindly screened titles, abstracts and full articles using an eligibility checklist designed following Cochrane handbook guide and extracted data using a structured proforma adapted from Cochrane handbook. Several meta-analyses were carried out where it was possible to pool data from different studies that used the same outcome measures.

Results

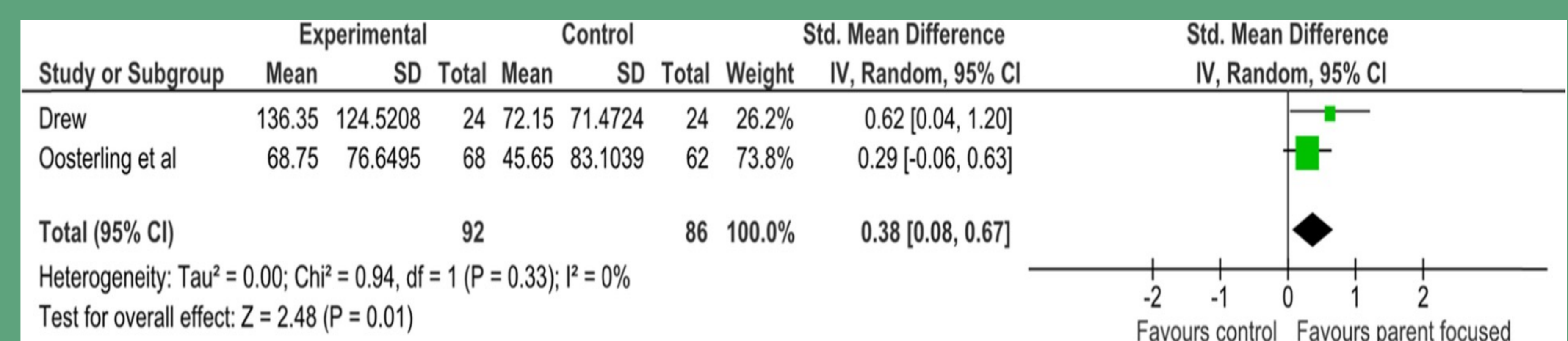
Seventeen papers from 15 studies were included for data analysis. Fifteen papers showed a positive treatment effect when compared with the control group, although not always significant. Meta-analysis based on pooled data from only two studies in each respective intervention, showed small to moderate treatment effects for three interventions, DIR/Floortime, Pivotal Response and Parent focused training.

Conclusions

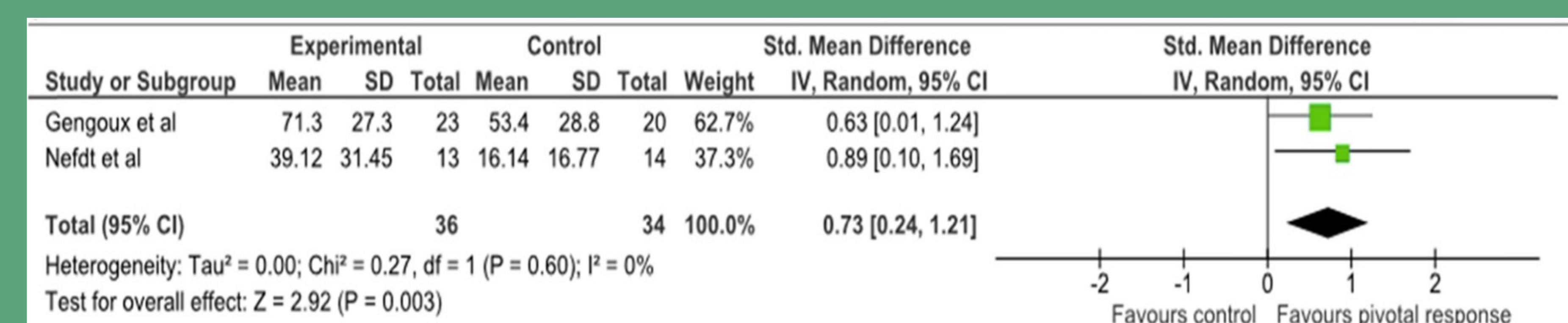
As in previous systematic reviews there was a mild to moderate treatment effects of three specific types of interventions respectively. However, it was difficult to draw any definitive conclusion about the effectiveness and generalisability of any intervention because of the wide variation in the interventions, control groups, outcome measures, small sample size, small number of studies in meta-analysis, overlap between the intervention and control procedures used in the included studies. There is an urgent need for experts in various international centres to jointly standardise a parent training intervention for children with autism and carry out a large scale RCT to assess its clinical and economic effectiveness.



Developmental, Individual Difference, Relationship-based (DIR)/Floortime™ Forest Plot



Parent Focused Training Forest Plot



Pivotal Response Training Forest Plot