

How Effective is Early Intervention?

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National Autism Plan for Children (NAPC)

*Plan for the identification,
assessment, diagnosis and access to
early interventions for pre-school and
primary school aged children with
autism spectrum disorders (ASD)*

Le Couteur et al (2003)

NAP-C: Next Steps

- Written report on Multi-Agency Assessment
 - diagnosis
 - skills & needs
- Key worker to support family
- Information on autism & on local services
- Family care plan and specific support
- **Child-focused interventions**
- Regular reviews

Current knowledge

“... research suggests that early intervention can result in significant improvements for some children with autism, though for how many children and for how much gain has varied considerably across studies.”

Lord et al 2005 JADD

Evaluation of interventions

Challenges

- Children with ASD are heterogeneous group
- Outcome: need validated measures sensitive to change in core features
- Subjects: numbers, representativeness
- Design: control, length of follow-up
- Context: specific vs comprehensive, economic evaluation

Evaluated approaches to intervention

Comprehensive

eg. nursery plus parent support, TEACCH

Salt et al '02; Jocelyn et al '98; Ozonoff & Cathcart '98

Specific methods

eg. milieu teaching vs PECS *Yoder & Stone '06*

eg. joint attention vs symbolic play *Kasari et al '06*

Evaluated approaches to intervention

Specific methods

eg. Early intensive behavioural intervention

Smith et al '00, Sallows & Graupner '05 RCT

4 year follow-up, best for children with ASD,
IQ primary outcome.

Bibby et al '02 UK children on EIBI programmes,
change not dramatic.

Howard et al '05 Compared EIBI with eclectic
educational interventions, but not randomised.

Evaluated approaches to intervention

Specific methods : parent training

- to increase communication

Drew et al '02, Aldred et al '04 individual

McConachie et al '05 group

- to manage difficult behaviour

Howlin et al '87

Key findings of parent training

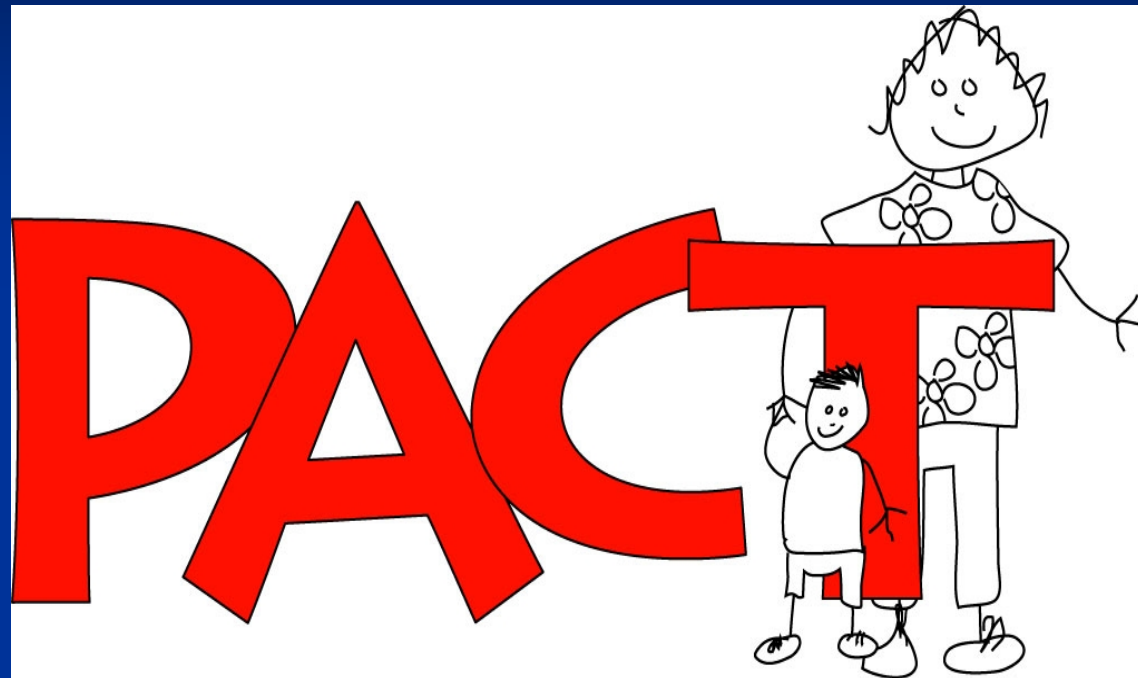
Increase in

- child social-communication skills
- child use & understanding of words
- child rate of communication acts
- shared attention between parent & child

- nb. no change in parental stress

Early intervention: next steps

- Controlled studies show parent training makes a difference to child skills
- Evaluation of change in core features, especially social interaction and communication
- Multi-centre studies for adequate power, with randomisation



**Pre-school Autism
Communication Trial**

PACT: started July 2006

- The first large systematic study of a social-communication treatment for autism (MRC)
- Manchester, South London, N E England
- 144 children aged 2 to 4 years with autism
- Measures at baseline, 6 months, 1 year
- Randomised controlled trial
 - PACT treatment plus services as usual
 - Services as usual

Treatment programme structure

- Manualised treatment, method and pace individualised to child's stage of development and parent-child interaction style
- DoH funded therapists
- First 6 months : Fortnightly clinic visit (2 hrs) + homework (30 mins a day)
- Next 6 months : Consolidation – Monthly clinic visit + homework (30 mins a day)

Outcome measures

1. Child social-communication skills (ADOS)
2. Parent-child interaction
3. Child language
4. Adaptive behaviour in nursery (teacher)
5. Health Economics of services
6. Measure of child and family functioning developed in collaboration with service users and NAS

How effective is early intervention?

We know:

- Efficacy of some elements and types of early intervention

We don't know

- Comparative benefits of intervention approaches
- Which approaches for which parents & children
- How to combine communication intervention and management of difficult behaviours

National Autism Plan for Children

- Written report on Multi-Agency Assessment
 - diagnosis
 - skills & needs
- **Key worker** to support family
- **Information on autism & on local services**
- **Family care plan and specific support**
- **Child-focused interventions** (15 hours a week)
- Regular reviews

Effectiveness

“... need for evaluation of intensive multi-disciplinary interventions that use existing resources and focus on clinically-relevant outcomes ..”

Lord et al 2005 JADD