

**Last reviewed:** January 2021

**Intervention website:** <https://www.incredibleyears.com/early-intervention-programs/parents>

# GUIDEBOOK INTERVENTION INFORMATION SHEET

## Incredible Years Preschool Basic + Advance Parent Training Curriculum

Please note that in the ‘Intervention Summary’ table below ‘child age’, ‘level of need’, and ‘race and ethnicities’ information is **as evaluated in studies**. Information in other fields describes the intervention as **offered/supported by the intervention provider**.

Intervention summary	
<b>Description</b>	Incredible Years ADVANCE is an add-on component to the Incredible Years Preschool BASIC intervention. It is designed to be delivered to families after they have received the BASIC intervention and includes opportunities for the parent and child to attend the intervention together. It is delivered by two IY certified facilitators to groups of five to eight families who have already received the Preschool BASIC intervention, for between nine to 12 additional weekly sessions.
<b>Evidence rating</b>	3+
<b>Cost rating</b>	2
<b>Child outcomes</b>	<ul style="list-style-type: none"> <li>• Preventing crime, violence and antisocial behaviour               <ul style="list-style-type: none"> <li>- Improved behaviour.</li> </ul> </li> <li>• Supporting children’s mental health and wellbeing               <ul style="list-style-type: none"> <li>- Improved peer relations</li> <li>- Improved parent–child relationship.</li> </ul> </li> </ul>
<b>Child age</b> (population characteristic)	3 to 8 years old
<b>Level of need</b> (population characteristic)	Targeted Indicated

## Foundations Guidebook – Intervention information sheet

Visit the Foundations Guidebook | [www.foundations.org.uk/guidebook](http://www.foundations.org.uk/guidebook)

Intervention summary	
<b>Race and ethnicities</b> (population characteristic)	<ul style="list-style-type: none"><li>• Asian</li><li>• South American</li><li>• White.</li></ul>
<b>Type</b> (model characteristic)	Group
<b>Setting</b> (model characteristic)	<ul style="list-style-type: none"><li>• Children's centre or early years setting</li><li>• Primary school</li><li>• Community centre</li><li>• Out-patient health setting.</li></ul>
<b>Workforce</b> (model characteristic)	<ul style="list-style-type: none"><li>• Parenting professional</li><li>• Social worker</li><li>• Psychologist.</li></ul>
<b>UK available?</b>	Yes
<b>UK tested?</b>	No

## Model description

Incredible Years ADVANCE is part of the Incredible Years series of interventions for children, parents and teachers. It is designed to be offered after either Incredible Years Preschool BASIC (IY Preschool BASIC) or IY School-Age BASIC interventions for families who may need additional support for child-related issues that are particularly entrenched (e.g. oppositional or aggressive behaviours, ADHD, poor social skills, autism spectrum disorders) or parent risk factors, including mental health problems, social isolation, marital conflict, or emotion regulation difficulties.

IY BASIC is delivered by two certified IY facilitators to groups of up to 12 families for 18 to 20 weekly sessions. During these sessions, parents learn strategies for interacting positively with their child and discouraging challenging behaviour.

Incredible Years ADVANCE adds nine to 12 sessions, each lasting 2 to 2.5 hours, to the BASIC intervention. These additional sessions help parents and practitioners consolidate material covered in the BASIC sessions and address topics involving the parents' behaviour that were not fully explored. These topics include parental communication (both parent to parent and parent to child), emotional self-regulation, problem-solving, and relationship building.

## Foundations Guidebook – Intervention information sheet

Visit the Foundations Guidebook | [www.foundations.org.uk/guidebook](http://www.foundations.org.uk/guidebook)

In both the BASIC and ADVANCE models, parent learning is reinforced through discussions, home assignments, video vignettes, role-play practices, and individual goal setting. Video vignettes demonstrate effective communication, emotion regulation, and problem-solving. Structured homework activities between the sessions encourage parents to practise new skills so they can be reviewed during subsequent sessions.

Both the BASIC and ADVANCE models are structured with a manual, but the content allows supports a considerable amount of tailoring based on each family's individual needs.

### Target population

<b>Age of child</b>	3 to 6 years old
<b>Target population</b>	Parents of children aged 3 to 6 years diagnosed with oppositional-defiant or conduct disorder

Please note that the information in this section on target population is as **offered/supported by the intervention provider**.



## Theory of change

Why		Who	How	What		
Science-based assumption	Science-based assumption	Science-based assumption	Intervention	Short-term outcomes	Medium-term outcomes	Long-term outcomes
<ul style="list-style-type: none"> <li>• Young children naturally exhibit challenging and non-compliant behaviours</li> <li>• Challenging child behaviours during preschool and primary school increase the risk of behavioural problems in adolescence.</li> </ul>	<ul style="list-style-type: none"> <li>• Effective parenting helps children to regulate their own behaviour and reduce the risk of child behavioural problems becoming established</li> <li>• Ineffective parenting strategies can increase the risk of child behavioural problems becoming further entrenched.</li> </ul>	<p>Parents dealing with stressful family circumstances or child behaviour that is particularly challenging often benefit from additional parenting support.</p>	<p>Parents learn:</p> <ul style="list-style-type: none"> <li>• Age-appropriate expectations for their child</li> <li>• Strategies for establishing predictable family routines</li> <li>• Strategies for promoting positive parent–child interaction through non-directive play</li> <li>• Strategies for reinforcing positive child behaviour through labelled praise</li> <li>• Strategies discouraging challenging child behaviour through age-appropriate discipline.</li> </ul>	<ul style="list-style-type: none"> <li>• Parents implement effective parenting strategies in the home</li> <li>• The parent’s confidence and self-efficacy as a parent increases</li> <li>• Parent–child interaction improves.</li> </ul>	<ul style="list-style-type: none"> <li>• Children are better able to regulate their behaviour and emotions</li> <li>• Children’s behaviour improves</li> <li>• Behavioural problems are less entrenched.</li> </ul>	<ul style="list-style-type: none"> <li>• Children are at less risk of antisocial behaviour in adolescence</li> <li>• Children are more likely to engage positively with others.</li> </ul>



## Implementation requirements

<b>Who is eligible?</b>	Parents of children aged 3 to 6 diagnosed with oppositional-defiant or conduct disorder.
<b>How is it delivered?</b>	Incredible Years ADVANCE is delivered in 9 to 12 additional sessions of 2 to 2.5 hours' duration each by two practitioners to groups of five to eight families.
<b>What happens during the intervention?</b>	<ul style="list-style-type: none"> <li>• Parents learn through discussion, home assignments, video vignettes, role-play practices, and individual goal setting.</li> <li>• Video vignettes provide models of effective communication, emotion regulation and problem-solving strategies for parents to discuss and apply to their own lives. There are also less effective video models that are catalysts for parents to discuss what they would do differently. Therapists use a collaborative process to encourage discussion in which parents self-reflect and develop parent principles that help them generalise the material presented to their own parenting situations.</li> <li>• Role-play practice provides opportunities for therapists to help individualise scenarios to the parents' own situations and then to practise skills.</li> <li>• Practices learned during the sessions are then reinforced through 'homework' that parents complete and discuss the following sessions. While the intervention is structured and has a manual and required material to cover, the model is also built on the principle of tailoring the topics, activities, and skills to the individual families in the group.</li> </ul>
<b>Who can deliver it?</b>	Two facilitators with experience in a helping profession, trained in the Incredible Years model.
<b>What are the training requirements?</b>	Practitioners have 18 hours of intervention training for the Incredible Years BASIC intervention plus 16 hours of intervention training for the Incredible Years ADVANCE intervention. Booster training of practitioners is recommended.
<b>How are practitioners supervised?</b>	It is recommended that practitioners are supervised by one clinical host agency supervisor (with and advanced qualification in psychology or social work), with two to three years of intervention training.
<b>What are the systems for maintaining fidelity?</b>	<ul style="list-style-type: none"> <li>• Training manual</li> <li>• Other printed material</li> <li>• Other online material</li> <li>• Video or DVD training</li> <li>• Face-to-face training</li> <li>• Fidelity monitoring.</li> </ul>
<b>Is there a licensing requirement?</b>	No



## Implementation requirements (cont.)

<p><b>*Contact details</b></p>	<p>Contact person: Carolyn Webster-Stratton</p> <p>Organisation: Incredible Years</p> <p>Email address: <a href="mailto:cwebsterstratton1@icloud.com">cwebsterstratton1@icloud.com</a>  <a href="mailto:incredibleyears@incredibleyears.com">incredibleyears@incredibleyears.com</a></p> <p>Website: <a href="https://www.incredibleyears.com/early-intervention-programs/parents">https://www.incredibleyears.com/early-intervention-programs/parents</a></p> <p>Contact person: Lisa Wallace-Gloria, M.Ed</p> <p>Organisation: Incredible Years</p> <p>Email address: <a href="mailto:lisawg@incredibleyears.com">lisawg@incredibleyears.com</a></p> <p>*Please note that this information may not be up to date. In this case, please visit the listed intervention website for up to date contact details.</p>
--------------------------------	--

## Evidence summary

Incredible Years Preschool BASIC + ADVANCE Parent Training Curriculum's most rigorous evidence comes from two RCTS conducted in the United States which are consistent with Foundations' Level 3 evidence strength threshold. Evidence from at least one level 3 study, along with evidence from other studies rated 2 or better qualifies Incredible Years Preschool BASIC + ADVANCE for a 3+ rating.

Both Incredible Years Preschool BASIC + ADVANCE's studies identified statistically significant improvements in child behaviour in comparison to children whose parents did not receive the intervention. One study also observed improvements favouring IY Preschool BASIC + ADVANCE children's interaction with their peers. However, neither study compared the 'value added' of IY Preschool BASIC plus ADVANCE to IY BASIC without the ADVANCE components.

IY Preschool BASIC + ADVANCE does have 'value added' evidence from a US study consistent Foundations' L2 evidence strength threshold. This study observed IY Preschool BASIC + ADVANCE was superior to IY BASIC in improving children's social problem-solving skills and their parents' problem-solving and communication skills.

Incredible Years BASIC + ADVANCE can be described as evidence-based: it has evidence from at least one rigorously conducted RCT or QED demonstrating a statistically significant positive impact on at least one child outcome.



## Search and review

	Number of studies
Identified in search	8
Studies reviewed	N/A
Meeting the L2 threshold	2
Meeting the L3 threshold	2
Contributing to the L4 threshold	0
Ineligible	4

## Individual study summary: Study 1

Study 1	
Study design	RCT
Country	United States
Sample characteristics	159 families with concerns about the behaviour of a child between 4 and 8 years old living in the vicinity of Seattle, Washington. All children met the DSM-IV criteria for oppositional-defiant disorder (ODD).
Race, ethnicities, and nationalities	71% White European
Population risk factors	26% of participants were single mothers
Timing	<ul style="list-style-type: none"> <li>Baseline</li> <li>Post-intervention.</li> </ul>



Study 1	
<b>Child outcomes</b>	<ul style="list-style-type: none"> <li>• Reduced child conduct problems at home (composite score – mother report)</li> <li>• Reduced child conduct problems at home (composite score – father report)</li> <li>• Reduced conduct problems at school (composite score – teacher report).</li> </ul>
<b>Other outcomes</b>	<ul style="list-style-type: none"> <li>• Reduced negative parenting (mothers – researcher observation; composite score)</li> <li>• Reduced negative parenting (fathers – researcher observation; composite score)</li> <li>• Improved positive parenting (mothers – researcher observation composite score)</li> <li>• Improved positive parenting (fathers – researcher observation composite score).</li> </ul>
<b>Study Rating</b>	3
<b>Citation</b>	Webster-Stratton, C., Reid, M. J. & Hammond, M. (2004) Treating children with early-onset conduct problems: Intervention outcomes for parent, child, and teacher training. <i>Journal of Clinical Child and Adolescent Psychology</i> . 33 (1), 105–124.

## Brief summary

### Population characteristics

This study involved 159 children between 4 and 8 years old (average age 5.9 years) living in the vicinity of Seattle, Washington and meeting the DSM-IV criteria for oppositional-defiant disorder. 90% of the children were boys, and 79% identified as White European American. No children had intellectual deficits or a history of psychosis.

### Study design

Families were randomly assigned to one of six groups by drawing names over the course of three years:

1. Incredible Years Preschool BASIC+ADVANCE (31 families). Parents attended group sessions where they watched and discussed 17 videotaped programs aimed at reducing negative parent–child interactions and improve their relationship with their child.
2. IY Preschool Basic + Advance in addition to teacher training (24 families). Children’s parents received IY Preschool BASIC + Advance and their teachers attended four full days of training in the use of effective classroom management strategies for handling misbehaviour and promoting positive relationships with difficult students.





3. Incredible Years Dinosaur School (30 families). Children attend weekly two-hour sessions for 18 to 19 weeks (lasting approximately six months) with two therapists and six to seven children. Children learn strategies for engaging positively with their peers.
4. IY Dinosaur + teacher training (23 families).
5. IY Preschool BASIC+ADVANCE, IY Dinosaur and teacher training (25 families).
6. A wait-list control group (26 families). Families received no treatment from the parenting clinic and had no contact with a therapist during the waiting period. Families were offered treatment after the post-intervention assessments were completed.

The groups were equivalent on key demographic characteristics and baseline measures.

## Measurement

Assessments were conducted at baseline (pre-intervention) and post-intervention. A one-year follow-up assessment also took place with the children assigned to the IY treatment groups. Families completed the same assessments at all three time points.

- **Parent report** measures included the Eyberg Child Behaviour Inventory (ECBI), Parenting Practices Interview (PPI), and the Daily Discipline Inventory (DDI).
- **Teacher report** measures included the Teacher Assessment of School Behaviour (TASB), and the teacher rating scales of Perceived Competence Scale for Young Children (PCSC).
- **Researcher-led** assessments included videotaped recordings of parent–child interaction (involving both the father and mother) using the Dyadic Parent-Child Interaction Coding System (DPICS–R), the Coder Impressions Inventory for parents (CII–Parenting Style), and the CCI-Child. Videotaped recordings of child peer and teacher interaction were also made and coded, using the Dyadic Peer Interaction Scale (DPIS), the Social Health Profile (SHP), the MOOSSES classroom observation system, the Classroom Atmosphere Measure, and the teacher coder impressions inventory. Researchers were blind to group assignment.

Findings from the above measures were converted into the following nine composite scores:

- Child conduct problems at home – mother
- Child conduct problems at home – father
- Child social problems with peers
- Child conduct problems in the classroom
- Negative parenting behaviours – mothers
- Negative parenting behaviours -- fathers
- Positive parenting behaviours – mothers
- Positive parenting behaviours – fathers
- Negative teacher classroom management.



## **Study retention**

98% (155) of the sample completed measures post-intervention. No information is provided about the extent to which the retention rates differed across six intervention groups.

## **Results**

### ***Data-analytic plan***

Analysis of covariance (ANCOVA) with pre-test scores as covariates were used to examine the differences between each treatment condition. Planned comparisons contrasting each treatment condition with the control condition were also conducted. A per-protocol analysis was used. Participants were excluded from the analysis if more than 60% of the data for a given item was missing. Only the comparisons between IY BASIC + ADVANCE and the wait-list control group are reported here.

### ***Findings***

The study observed statistically significant improvements in IY BASIC + ADVANCE father and mothers' reports of child conduct problems compared to parents in the wait-list control group. These improvements were based on composite scores incorporating Parent reports and expert observations. Additionally, there were statistically significant improvements favouring the IY BASIC + ADVANCE children's conduct problems at school in comparison to the wait-list control, as reported by their teachers and assessed through expert observations. However, no statistically significant benefits were observed for IY BASIC + ADVANCE children's social competence with peers' post-intervention in comparison to the wait-list children.

The study also reported statistically significant reductions in negative parenting behaviours for the IY BASIC + ADVANCE mothers and fathers in comparison to the wait-list control. These reductions included decreased harsh and inappropriate discipline practices as measured by observational and self-report methods. Furthermore, statistically significant improvements were noted in positive parenting behaviours of IY BASIC + ADVANCE mothers and fathers in comparison to parents in the wait-list control condition.

The study additionally observed that the positive effects of IY BASIC + ADVANCE were maintained at the one-year follow-up for all composite outcomes, except for children's conduct at school.

High levels of satisfaction were reported by the parents and teachers receiving the intervention.



## Study 1: Outcomes table

Outcome	Measure	Effect size	Statistical significance	Number of participants*	Measurement time point
<b>Child outcomes</b>					
Child conduct problems at home – mother	A composite score consisting of the ECBI (Parent report), the DPICS-R (expert observation of behaviour), and the CII-Parenting Style (researcher observation)	d = 0.67	Yes	57	Post-intervention
Child conduct problems at home – father	A composite score consisting of the ECBI (Parent report), the DPICS-R (expert observation of behaviour), and the CII-Parenting Style (researcher observation)	d = 0.63	Yes	45	Post-intervention
Child social competence with peers	A composite score consisting of the TASB (teacher report), SHB (researcher observation), and the DPIS (expert observation of behaviour)	N/A	No	56	Post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants*	Measurement time point
Child conduct problems at school	A composite score consisting of the TASB (teacher report), SHB (researcher observation), and the DPIS (expert observation of behaviour)	$d = 0.35$	Yes	56	Post-intervention
<b>Parent outcomes</b>					
Negative parenting - mother	Composite score including one scale from the PPI, the CII; and the DPICS-R and DDI (Mother report)	$d = 0.81$	Yes	57	Post-intervention
Negative parenting – father	Composite score including one scale from the PPI, the CII; and the DPICS-R and DDI (Father report)	$d = 0.51$	Yes	45	Post-intervention
Positive parenting- Mother	Composite score including one scale from the supporting parenting scale from the PPI, the positive parenting scale from the DPICS-R and the nurturing supportive scale from the CII (Mother report)	$d = 0.51$	Yes	56	Post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants*	Measurement time point
Positive parenting – Father	Composite score including one scale from the supporting parenting scale from the PPI, the positive parenting scale from the DPICS–R and the nurturing supportive scale from the CII (father report)	$d = 0.35$	Yes	46	Post-intervention
Negative teacher classroom management	Composite score involving the Classroom Atmosphere measure, MOOSES classroom management system, and the teacher coded impressions inventory	$d = 0.35$	No	56	Post-intervention
*Sample is for the comparison between IY BASIC + ADVANCE and the control group only.					



## Individual study summary: Study 2

Study 2	
<b>Study design</b>	RCT
<b>Country</b>	United States
<b>Sample characteristics</b>	Families of 97 children aged 4 to 7 years with conduct problems.
<b>Race, ethnicities, and nationalities</b>	86% White
<b>Population risk factors</b>	Families were spread evenly across the income spectrum
<b>Timing</b>	<ul style="list-style-type: none"> <li>• Baseline</li> <li>• Post-intervention (two months post-treatment),</li> <li>• One-year follow-up (intervention group only).</li> </ul>
<b>Child outcomes</b>	<ul style="list-style-type: none"> <li>• Reduced total child behaviour problems (mother &amp; father report)</li> <li>• Reduced intensity of child behaviour problems (mother &amp; father report)</li> <li>• Reduced conflict with peers (researcher observation)</li> <li>• Reduced negative behaviours (Mother report)</li> <li>• Increased positive behaviours (Mother report)</li> <li>• Increased positive interactions (mother and father report)</li> <li>• Improved peer interactions (expert observation of behaviour).</li> </ul>
<b>Other outcomes</b>	<ul style="list-style-type: none"> <li>• Reduced child-related stress (mother and father report)</li> <li>• Reduced commands and criticisms (expert observation of mother behaviour)</li> <li>• Increased praise (expert observation of mother &amp; father behaviour)</li> <li>• Increased positive affect (expert observation of mother &amp; father behaviour)</li> <li>• Decreased negative valence with child (expert observation of mother and father behaviour)</li> <li>• Reduced spanking (Mother report).</li> </ul>
<b>Study Rating</b>	3
<b>Citation</b>	Webster-Stratton, C. & Hammond, M. (1997) Treating children with early-onset conduct problems: A comparison of child and parent training



## Study 2

interventions. *Journal of Consulting and Clinical Psychology*. 65 (1), 93–109.

## Brief summary

### Population characteristics

This study involved 97 children aged 4 to 7 years old (average age 5.7 years old) living in the vicinity of Seattle, Washington and identified as having clinically significant behaviour problems. 74% of the children were boys. Of the parents that took part, 95 were mothers and 71 were fathers. 68% had a partner, while 32% were single. 86% of the children were reported as White.

### Study design

Children were randomly assigned on a rolling basis to one of four conditions:

1. Incredible Years Preschool BASIC+ADVANCE (26 families). Parents attended group sessions where they watched and discussed 17 videotaped programmes aimed at reducing negative parent–child interactions and improve their relationship with their child.
2. Incredible Years Dinosaur School (27 families). Children attend weekly two-hour sessions for 18 to 19 weeks (lasting approximately six months) with two therapists and six to seven children. Children learn strategies for engaging positively with their peers.
3. IY Preschool BASIC+ADVANCE and IY Dinosaur School (22 families).
4. A wait-list control group (22 families). Families received no treatment from the parenting clinic and had no contact with a therapist during the waiting period. Families were assessed at the same post-assessment time point as the three other treatment groups, and then rerandomised into one of the three remaining treatment conditions.

The groups were equivalent on key demographic characteristics and baseline measures.

### Measurement

Assessments were conducted at baseline (pre-intervention) and post-intervention (two months after the intervention) and a follow-up assessment taking place approximately one-year post-treatment. The same measures were completed at all assessment points.

- **Parent report** measures included the Child Behaviour Checklist (CBCL), the Eyberg Child Behaviour Inventory (ECBI), and the Parent Daily Reports (PDR).
- **Teacher report** measures included the Behar Preschool Behaviour Questionnaire (PBQ).
- **Researcher-led** assessments included videotaped recordings of the child interacting 30 minutes with their mother and 30 minutes with their father. These interactions were coded with the Dyadic parent–child interaction coding system – revised (DPICS-R). 15-minute parental conversations about child behaviour problems were coded with the Parenting Problem Solving and Collaboration (PS I-Care) system. 20-minute sessions of the target child interacting with a peer was coded with the Peer Problem-Solving-Interaction



Communication-Affect Rating Coding System (PPS-I CARE). Child social problem-solving skills were assessed with the Wally Child Social Problem-Solving Detective Game. Researchers were blind to group assignment.

## Study retention

### *Post-intervention*

100% of the sample completed measures post-intervention.

### *One-year follow-up*

97% (75) of the treatment groups completed the measures at the one-year follow-up, including 89% (24) of the child training group and 100% of both the parent training (27) and the child + parent training group (22).

## Results

### *Data-analytic plan*

Analysis of covariance (ANCOVA) with pretest scores as covariates were used to examine the differences between each treatment condition. Planned comparisons contrasting each treatment condition with the control condition were also conducted.

### *Findings*

The study observed a number of statistically significant improvements favouring IY Preschool BASIC + ADVANCE children in comparison to the wait-list control. These included reduced behavioural problems, as reported by mothers and fathers, as well as improved peer interactions as observed by researchers.

The study also observed statistically significant improvements favouring IY Preschool BASIC + ADVANCE mothers' parenting behaviours in comparison to the wait-list control. These included a reduced use of commands and criticisms, increased praise, increased positive affect with child, decreased negative valence with child and reduced spanking.

The one-year follow-up involving the three treatment groups observed that the majority of child and parent benefits were retained in the IY BASIC + ADVANCE families.

## Study 2: Outcomes table

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child outcomes					





Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Total behaviour problems - mother	CBCL (Mother report)	N/A	Yes	48	Post-intervention
Total behaviour problems - father	CBCL (Father report)	N/A	Yes	35**	Post-intervention
Behaviour problems - mother	ECBI – Intensity (Mother report)	N/A	Yes	48	Post-intervention
Behaviour problems – father	ECBI – Intensity (Father report)	N/A	Yes	35	Post-intervention
Total behaviour problems	PBQ - Total problems (Teacher report)	N/A	No	43	Post-intervention
Problem solving (object acquisition – number of positive solutions)	Wally Child Social Problem-Solving Detective Game (Researcher observation)	N/A	No	48	Post-intervention
Problem solving (object acquisition – proportion of positive to negative solutions)	Wally Child Social Problem-Solving Detective Game (researcher observation)	N/A	No	48	Post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Problem solving (Friendship, number of positive solutions)	Wally Child Social Problem-Solving Detective Game (researcher observation)	N/A	No	48	Post-intervention
Problem solving (Friendship, proportion of positive to negative solutions)	Wally Child Social Problem-Solving Detective Game (researcher observation)	N/A	No	48	Post-intervention
Negative behaviour	PDR (Mother report)	N/A	Yes	48	Post-intervention
Number of negative behaviours per 24 hr	PDR (Mother report)	N/A	Yes	48	Post-intervention
Positive behaviours	PDR (Mother report)	N/A	Yes	48	Post-intervention
Number of positive behaviours per 24hr	PR (Mother report)	N/A	Yes	48	Post-intervention
Deviance with mothers	DPICS-R (researcher observation)	N/A	No	48	Post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Deviance with fathers	DPICS-R (researcher observation)	N/A	No	48	Post-intervention
Child positive affect with mothers	DPICS-R (researcher observation)	N/A	No	48	Post-intervention
Child positive affect with fathers	DPICS-R (researcher observation)	N/A	Yes	35**	Post-intervention
Conflict management with peers	PPS-ICARE (researcher observation)	N/A	Yes	48	Post-intervention
Ratio of positive conflict management to negative	PPS-I CARE (researcher observation)	N/A	No	48	Post-intervention
<b>Parent outcomes</b>					
Reduced child related stress	PSI - child domain (Mother report)	N/A	Yes	48	Post-intervention
Reduced child related stress	PSI - child domain (Father report)	N/A	Yes	35**	Post-intervention
Total commands and criticisms - mother	DPICS-R (researcher observation)	N/A	Yes	48	Post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Total commands and criticisms – father	DPICS-R (researcher observation)	N/A	No	35**	Post-intervention
Total praise – mother	DPICS-R (researcher observation)	N/A	Yes	48	Post-intervention
Total praise – father	DPICS-R (researcher observation)	N/A	Yes	35**	Post-intervention
Positive affect - mother	DPICS-R (researcher observation)	N/A	Yes	48	Post-intervention
Positive affect – father	DPICS-R (researcher observation)	N/A	Yes	35**	Post-intervention
Negative valence-mother	DPICS-R (researcher observation)	N/A	Yes	48	Post-intervention
Negative valence – father	DPICS-R (researcher observation)	N/A	Yes	35**	Post-intervention
Total spansks – Mother	PDR (Mother report)	N/A	Yes	48	Post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
<b>Couple outcomes</b>					
Couple collaboration	PSI-Care System (researcher observation)	NA	No	48	Post-intervention
<p>Sample represents the comparisons for the IY BASIC + ADVANCE and wait-list control group only.</p> <p>**Sample size is below Foundations' L2 evidence strength threshold, so does not contribute to the rating.</p>					

## Individual study summary: Study 3

<b>Study 3</b>	
<b>Study design</b>	QED (quasi-experimental design).
<b>Country</b>	Netherlands
<b>Sample characteristics</b>	144 families with children aged 4 years living in the vicinity of Utrecht, exhibiting conduct problems
<b>Race, ethnicities, and nationalities</b>	<ul style="list-style-type: none"> <li>• 97% White</li> <li>• 2% Asian</li> <li>• 1% South American.</li> </ul>
<b>Population risk factors</b>	23 families were receiving other professional help (educational or mental health support) during the intervention
<b>Timing</b>	<ul style="list-style-type: none"> <li>• Baseline</li> <li>• Post-intervention</li> <li>• One-year follow-up</li> <li>• Two year follow-up</li> </ul>
<b>Child outcomes</b>	Improved behaviour (expert observation of behaviour)



Study 3	
Other outcomes	<ul style="list-style-type: none"> <li>Improved appropriate discipline (Parent report)</li> <li>Reduced harsh &amp; inconsistent discipline (Parent report)</li> <li>Increased parents' use of praise and incentives (Parent report; expert observation of behaviour)</li> <li>Reduced use of critical statements (expert observation of behaviour).</li> </ul>
Study Rating	2
Citation	Posthumus, J.A ., Raaijmakers, M. A. J., Maassen, G. H., van Engeland, H. & Matthys, W. (2012) Sustained effects of Incredible Years as a preventive intervention in preschool children with conduct problems. <i>Journal of Abnormal Child Psychology</i> . 40, 487–500.

## Brief summary

### Population characteristics

This study involved 144 families with concerns about the behaviour of a four-year-old child, living in the province of Utrecht, the Netherlands.

Children were included in the study if they scored at or above the 80th percentile on the aggressive behaviour scale of the child behaviour checklist measure. 71% of children were boys. Parents had a mean age of 35.5, and the majority (86%) were mothers.

### Study design

This study used a quasi-experimental matched design (QED). 72 participants were assigned to IY Preschool Basic + Advance and 72 to a business-as-usual matched control group. Participants were assigned to either the intervention group or the control group based on their geographical location; intervention groups were recruited from four urban and four rural areas, and similarly the control group were recruited from four other urban and rural areas. Participants were matched on the child's gender, level of aggression, IQ, parents' educational level, stress level of parents, and location. An independent administrator who was not involved in this study performed person-to-person matching using Mahala Nobis metrics to ensure equivalence.

### Measurement

Assessments were conducted at baseline (pre-intervention) and post-intervention. The same measures were completed at all assessment points.

- Parent report** measures included the Child Behaviour Checklist (screening) (CBC), the Eyberg Child Behaviour Inventory (ECBI), and the Parent Practices Interview (PPI).
- Observations of behaviour** included the Dyadic Parent-Child Interaction Coding System-Revised (DPICS-R).



## Study retention

For child outcomes, 78% (112) of the sample completed the DPICS-R. 74% (106) completed the ECBI-Intensity scale and 60% (86) completed the ECBI-Problem scale at two years post-intervention. For parent outcomes, 92% (132) of the sample completed the Parent Practices Interview.

## ResultsData-analytic plan

Repeated measures ANOVA with Helmert contrasts were used to assess the effect over time between groups, and structural equation modelling for mediation analysis. Intent-to-treat analysis was used, but matched pairs were excluded from the analysis if any data was missing. For scale scores, if more than 25% of the items were missing then the score was excluded from analysis.

## Results

The study observed statistically significant improvements in child outcomes based on expert observations and parent reports two years post-intervention. Improvements included reductions in conduct problems as observed through the DPICS-R tool, although no significant changes were detected in compliance behaviours. Parent-reported data from the Eyberg Child Behaviour Inventory indicated no significant reductions in the intensity or number of child behaviour problems.

The study also observed statistically significant improvements in parenting outcomes two years post-intervention. Expert observations showed reductions in critical statements made by parents and increases in praise. Parent reports indicated improvements in appropriate discipline and reductions in harsh and inconsistent discipline practices. Positive changes were also observed in the use of praise and incentives. However, no significant improvements were found in positive verbal discipline, physical punishment, or setting clear expectations.

## Limitations

Confidence in these findings is limited by the lack of randomisation and high levels of attrition.

## Study 3: Outcomes table

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child outcomes					



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Compliance	DPICS-R (researcher observation)	N/A	No	112	All later assessments (post-intervention, 1- and 2-year follow-up combined)
Conduct problems	DPICS-R (researcher observation)	N/A	Yes	112	All later assessments (post-intervention, 1- and 2-year follow-up combined)
Child behaviour problems – intensity	ECBI (Parent report)	N/A	No	106	All later assessments (post-intervention, 1- and 2-year follow-up combined)
Child behaviour problems – number of problems	ECBI (Parent report)	N/A	No	86	All later assessments (post-intervention, 1- and 2-year follow-up combined)





Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
<b>Parent outcomes</b>					
Parenting: Critical statements	DPICS-R (researcher observation)	N/A	Yes	132	All later assessments (post-intervention, 1- and 2-year follow-up combined)
Parenting: Praise	DPICS-R (researcher observation)	N/A	Yes	132	All later assessments (post-intervention, 1- and 2-year follow-up combined)
Appropriate discipline	Parent Practices Interview (Parent report)	N/A	Yes	132	All later assessments (post-intervention, 1- and 2-year follow-up combined)
Harsh and inconsistent discipline	Parent Practices Interview (Parent report)	N/A	Yes	132	All later assessments (post-intervention, 1- and 2-year follow-up combined)



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Positive verbal discipline	Parent Practices Interview (Parent report)	N/A	No	132	All later assessments (post-intervention, 1- and 2-year follow-up combined)
Physical punishment	Parent Practices Interview (Parent report)	N/A	No	132	All later assessments (post-intervention, 1- and 2-year follow-up combined)
Praise and incentives	Parent Practices Interview (Parent report)	N/A	Yes	132	All later assessments (post-intervention, 1- and 2-year follow-up combined)
Clear expectations	Parent Practices Interview (Parent report)	N/A	No	132	All later assessments (post-intervention, 1- and 2-year follow-up combined)



## Individual study summary: Study 4

Study 4	
<b>Study design</b>	RCT
<b>Country</b>	United States
<b>Sample characteristics</b>	77 families with a child between 3 and 8 years old diagnosed with oppositional-defiant or conduct disorder
<b>Race, ethnicities, and nationalities</b>	Not reported
<b>Population risk factors</b>	<ul style="list-style-type: none"> <li>• 34% mothers had experienced spouse abuse</li> <li>• 45% families reported alcoholism or drug abuse in the immediate family, and 65.4% reported alcoholism or drug abuse in the extended family.</li> <li>• 14% mothers reported that they were abused as children</li> <li>• 31% mothers and 22% fathers reported mild-to-moderate depression.</li> </ul>
<b>Timing</b>	<ul style="list-style-type: none"> <li>• Baseline</li> <li>• Interim measurement (once both groups had completed the Basic training)</li> <li>• Post-intervention (once the Advance group had completed the intervention)</li> </ul>
<b>Child outcomes</b>	Improved social problem-solving (expert observation of behaviour)
<b>Other outcomes</b>	Improved couple problem-solving (expert observation of behaviour)
<b>Study Rating</b>	2
<b>Citation</b>	Webster-Stratton, C. (1994) Advancing videotape parent training: A comparison study. <i>Journal of Consulting and Clinical Psychology</i> . 62 (3), 583–593.



## Brief summary

### Population characteristics

This study involved 78 families with a child between 3 to 8 years old living in the vicinity of Seattle, Washington and who met the DSM-III criteria for oppositional-defiant disorder or conduct disorder. Children were not eligible if they had a debilitating physical impairment, intellectual deficit, or history of psychosis. 74% of the children were boys.

Most parents were married (69%), had a median yearly family income of \$35,000 with over 40% living below the poverty line. High rates of domestic abuse, substance misuse, depression and a history of child abuse were also reported among the parents. The ethnicity of participants was not reported.

### Study design

39 families (including 39 mothers and 30 fathers) were randomly assigned to IY Preschool BASIC group with no further treatment and 39 (including 38 mothers and 28 fathers) to IY Preschool BASIC plus ADVANCE. No differences were observed on any child variables, parent–child interactions, parent demographics, or psychological variables between the two groups at baseline.

### Measurement

Assessments were conducted at baseline (pre-intervention), mid-intervention (after both groups completed BASIC treatment), and post-intervention. The same measures were completed at all assessment points.

- **Parent report** measures included Eyberg Child Behaviour Inventory (ECBI), the Child Behaviour Checklist (CBCL), the Marital Adjustment Test (MAT), the Brief Anger Aggression Questionnaire (BAAQ), and the Parenting Stress Index (PSI).
- **Research-led assessments** included videotaped recordings of parent–child interaction, coded with the Dyadic Parent-Child Interaction Coding System (DPICS), the Child Social Problem-Solving Test Revised (SPST)-R, and the Problem-Solving Interaction Communication-Affect Rating-Engagement System (PS I-CARE).

### Study retention

96% of the families participated in assessments post-intervention. This included 100% of the mothers and fathers in the IY BASIC group. 95% (37) of mothers in the BASIC plus ADVANCE group completed measures for marital adjustment, depression, anger, and parental stress and distress at post-intervention. Among fathers, 96% (27) completed these same measures. Observational measures of parent–child interactions, including criticisms, praise, and deviance & non-compliance, were completed by 95% (36) of mothers and 96% (27) of fathers.



## Results

### *Data-analytic plan*

Repeated measures MANOVA was used to assess group-by-time interaction effects and within-group changes over time. Univariate ANOVA and paired t-tests were also used to conduct contrasts for specific outcomes.

### *Findings*

The study observed statistically significant improvements in social problem-solving skills (prosocial solutions) for the IY BASIC + ADVANCE group post-intervention in comparison to the IY BASIC only group. However, the study found no statistically significant difference between the two groups in child behaviour problems or social competence post-intervention.

Parents in the IY BASIC + ADVANCE group also demonstrated notable improvements in problem-solving and communication skills post-intervention. Mothers in the IY Preschool BASIC + ADVANCE group showed significant improvements in comparison to the IY BASIC group across multiple items, including problem definition, generating solutions, making plans, collaboration skills, and communication ratios. Fathers exhibited enhanced abilities in making plans and communication ratios. However, measures of parental stress, depression, anger, and marital adjustment for both mothers and fathers showed no significant differences compared to the IY BASIC group post-intervention. Observations of parent–child interactions also revealed no significant differences in criticisms, praise, or deviant child behaviours.

### **Study 4: Outcomes table**

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
<b>Child outcomes</b>					
Behaviour problems	CBCL (Mother report)	N/A	No	50	Post-intervention
Behaviour problems	CBCL (Father report)	N/A	No	37	Post-intervention
Social competence	CBCL (Mother report)	N/A	No	50	Post-intervention
Social competence	CBCL (Father report)	N/A	No	37	Post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Behaviour problems	ECBI (Mother report)	N/A	No	50	Post-intervention
Behaviour problems	ECBI (Father report)	N/A	No	37	Post-intervention
Child interactions with mother (deviance & non-compliance)	DPICS (researcher observation)	N/A	No	74	Post-intervention
Child interactions with father (deviance & non-compliance)	DPICS (researcher observation)	N/A	No	55	Post-intervention
Social problem-solving (proposed prosocial solutions)	(SPST-R) (researcher observation)	N/A	Yes	54	Post-intervention
Social problem-solving (Antagonistic Solutions)	(SPST-R) (researcher observation)	N/A	No	54	Post-intervention
<b>Mother outcomes</b>					
Marital adjustment	MAT (Mother report)	N/A	No	56	Post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Depression	BDI (Mother report)	N/A	No	56	Post-intervention
Anger	BAAQ (Mother report)	N/A	No	56	Post-intervention
Parental stress & distress	PSI (Mother report)	N/A	No	56	Post-intervention
Total criticisms	DPICS (researcher observation)	N/A	No	70	Post-intervention
Reflective/descriptive statements	DPICS (researcher observation)	N/A	No	70	Post-intervention
Total praise	DPICS (researcher observation)	N/A	No	70	Post-intervention
<b>Father outcomes</b>					
Marital adjustment	MAT (Father report)	N/A	No	39	Post-intervention
Depression	BDI (Father report)	N/A	No	39	Post-intervention
Anger	BAAQ (Father report)	N/A	No	39	Post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Parental stress & distress	PSI (Father report)	N/A	No	39	Post-intervention
Total criticisms	DPICS (researcher observation)	N/A	No	51	Post-intervention
Reflective/descriptive statements	DPICS (researcher observation)	N/A	No	51	Post-intervention
Total praise	DPICS (researcher observation)	N/A	No	51	Post-intervention
<b>Couple outcomes</b>					
Problem solving skills (mother)	PS I-CARE (researcher observation)	N/A	Yes	22 couples	Post-intervention
Problem definition (mother)	PS I-CARE (researcher observation)	N/A	Yes	22 couples	Post-intervention
Solution generating (mother)	PS I-CARE (researcher observation)	N/A	Yes	22 couples	Post-intervention
Making plans (mother)	PS I-CARE (researcher observation)	N/A	Yes	22 couples	Post-intervention





Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Collaboration skills (mother)	PS I-CARE (researcher observation)	N/A	Yes	22 couples	Post-intervention
Communication ratio (mother)	PS I-CARE (researcher observation)	N/A	Yes	22 couples	Post-intervention
Problem solving skills (father)	PS I-CARE (researcher observation)	N/A	Yes	22 couples	Post-intervention
Problem definition (father)	PS I-CARE (researcher observation)	N/A	No	22 couples	Post-intervention
Solution generating (father)	PS I-CARE (researcher observation)	N/A	No	22 couples	Post-intervention
Making plans (father)	PS I-CARE (researcher observation)	N/A	Yes	22 couples	Post-intervention
Collaboration skills (father)	PS I-CARE (researcher observation)	N/A	No	22 couples	Post-intervention
Communication ratio (father)	PS I-CARE (researcher observation)	N/A	Yes	22 couples	Post-intervention



## Other studies

The following studies were identified for this intervention but did not count towards the intervention's overall evidence rating. An intervention receives the same rating as its most robust study or studies.

Brotman, L. M., Gouley, K. K., Huang, K.-Y., Rosenfelt, A., O'Neal, C. & Klein, R.G. (2008) Preventive intervention for preschoolers at high risk for antisocial behaviour: Long-term effects on child physical aggression and parenting practices. *Journal of Clinical Child & Adolescent Psychology*. 37 (2), 386–396.

Brotman, L. M., Klein, R. G., Kamboukos, D., Brown, E. J., Coard, S. I. & Stout Sosinsky, L. (2003) Preventive intervention for urban, low-income preschoolers at familial risk for conduct problems: A randomized pilot study. *Journal of Clinical Child and Adolescent Psychology*. 32 (2), 246–257.

Webster-Stratton, C. H. and Reid, M. J. (2011) Combining parent and child training for young children with ADHD. *Journal of Clinical Child & Adolescent Psychology*. 40 (2), 191–203.

Webster-Stratton, C., Reid, M. J. & Hammond, M. (2001) Preventing conduct problems, promoting social competence: A parent and teacher training partnership in Head Start. *Journal of Clinical Child Psychology*. 30 (3), 283–302.

—

**Note on provider involvement:** This provider has agreed to Foundations' terms of reference (or the Early Intervention Foundation's terms of reference), and the assessment has been conducted and published with the full cooperation of the intervention provider.