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Intervention website: <a href="http://www.incredibleyears.com">http://www.incredibleyears.com</a>

# GUIDEBOOK INTERVENTION INFORMATION SHEET

Incredible Years Child Training (Dinosaur School)

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 sum	nary
Description	Incredible Years Child Training (Dinosaur School) is a targeted indicated school-based intervention for children with behavioural difficulties aged between 4 and 8 years. It is delivered by two therapists, counsellors, psychologists, school psychologists, or teachers, to small groups of children for approximately six months.
Evidence rating	3+
Cost rating	2
Child outcomes	<ul> <li>Supporting children's mental health and wellbeing <ul> <li>Improved social problem solving</li> <li>Improved peer interactions</li> <li>Improved social competence with peers.</li> </ul> </li> <li>Preventing crime, violence and antisocial behaviour <ul> <li>Improved child behaviour.</li> </ul> </li> </ul>
Child age (population characteristic)	4 to 8 years
Level of need (population characteristic)	Targeted Indicated

Intervention summary		
Race and ethnicities (population characteristic)	White	
<b>Type</b> (model characteristic)	Group	
Setting (model characteristic)	<ul> <li>Children's centre or early years setting</li> <li>Primary school</li> <li>In-patient health setting</li> <li>Out-patient health setting.</li> </ul>	
Workforce (model characteristic)	<ul> <li>Therapists</li> <li>Counsellors</li> <li>Psychologists</li> <li>School psychologists</li> <li>Teachers.</li> </ul>	
UK available?	Yes	
UK tested?	No	

# Model description

Incredible Years Child Training (Dinosaur School) is a school-based intervention for children with behavioural difficulties aged between 4 and 8 years with the aim of teaching children self-regulation and problem-solving skills. The intervention is delivered to small groups of children in 18 to 22 sessions of two hours' duration each.

Dinosaur School sessions incorporate videotape modelling depicting children in a variety of situations, and puppet-based fantasy play in which the puppets share their own interpersonal difficulties. Children are asked to identify the emotions of children in the videotapes and to consider the reasons for their feelings, to encourage the development of empathy. The sessions are designed to be developmentally appropriate and also include group activities such as art projects or games, role-plays, and stories. They cover topics including social skills, conflict resolution, loneliness, perspective taking, and problems at school.

In Dinosaur School, children are rewarded for cooperating and sent to Time Out for misbehaviour. In early sessions children are shown videotapes of this in action and taught what to do in Time Out,

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including using positive self-talk. Dinosaur School also includes strategies to improve children's motivation and hold their attention.

Children are provided with weekly homework exercises to practise the concepts covered in the sessions, and additional physical resources such as colouring books and stickers. Weekly letters are sent to parents and teachers explaining the content and rationale of the week's session, and parents and teachers are asked to reinforce skill learning outside of the sessions. They are provided with good behaviour charts to facilitate this reinforcement, and children are rewarded for bringing their charts to Dinosaur School.

# **Target population**

Age of child	4 to 8 years
Target population	Children with behavioural problems

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
A lack of emotion-regulation and problem-solving skills can lead to peer conflict and antisocial behaviour.	Prosocial behaviour and self-regulation improves attention and behaviour, which contributes to school readiness.	Young children with behavioural difficulties may be at increased risk of antisocial behaviour and lack of academic achievement in adolescence.	Children learn about social skills, conflict resolution, loneliness, perspective taking, and problems at school, through video modelling and puppet-based play.	Children have increased emotional literacy and problemsolving skills.	<ul> <li>Improved school readiness</li> <li>Improved compliance and attention in school</li> <li>Reduced antisocial behaviour.</li> </ul>	<ul> <li>Improved child behaviour</li> <li>Improved peer relationships</li> <li>Improved academic achievement.</li> </ul>



# **Implementation requirements**

Who is eligible?	Children aged 4 to 8 with behaviour problems, ADHD, and internalising problems.	
How is it delivered?	Incredible Years Child Training (Dinosaur School) is delivered in 18 to 22 sessions of two hours' duration each by two practitioners, to groups of five to six children.	
What happens during the intervention?	Dinosaur School incorporates interactive videotape modelling, puppet-based fantasy play, group activities, role-plays, and stories to teach self-regulation and problem-solving skills. Children are rewarded for positive behaviours and sent to Time Out for misbehaviour, and intervention content is reinforced outside of sessions with homework, behaviour charts, and parent and teacher involvement.	
Who can deliver it?	The practitioners who deliver this intervention are two therapists, counsellors, psychologists, school psychologists, or teachers.	
What are the training requirements?	The practitioners have 18 hours of intervention training. Booster training of practitioners is recommended.	
How are practitioners supervised?	It is recommended that practitioners are supervised by one intervention developer supervisor.	
What are the systems for maintaining fidelity?	Intervention fidelity is maintained through the following processes:  • Training manual • Other printed material • Video or DVD training • Face-to-face training • Fidelity monitoring • Review of therapy sessions via video • Skype consultation.	
Is there a licensing requirement?	No	



# Implementation requirements (Cont.)

*Contact details	Contact person: Carolyn Webster-Stratton
	Organisation: Incredible Years
	Email address: <a href="mailto:cwebsterstratton1@icloud.com">cwebsterstratton1@icloud.com</a> <a href="mailto:incredibleyears@incredibleyears.com">incredibleyears@incredibleyears.com</a>
	Websites: <a href="http://www.incredibleyears.com">http://www.incredibleyears.com</a> <a href="http://www.incredibleyears.com/early-intervention-programs/child">http://www.incredibleyears.com/early-intervention-programs/child</a>
	*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.

# Evidence summary

Incredible Years Child Training (Dinosaur School)'s most rigorous evidence comes from two RCTs which were conducted in the United States consistent with Foundations' Level 3 evidence strength threshold.

This study identified statistically significant improvements in child social problem solving, peer interactions, social competence with peers, child behaviour, behaviour at home, behaviour at school, positive behaviours, and reductions in negative behaviours. The study also identified statistically significant improvements in parenting, mothers' parenting, and stress resulting from child behaviour, and teachers' classroom management and class atmosphere.

IY Child Training (Dinosaur School)'s 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.

Child outcomes			
Outcome	Improvement index	Interpretation	Study
Improved social problem solving	+36	1.56-point improvement on the Wally Child Social Problem-Solving Detective Game (object acquisition categories: number of different positive solutions) (immediately after the intervention)	1



Improved social problem solving	+29	o.8-point improvement on the Wally Child Social Problem-Solving Detective Game (immediately after the intervention)	1
Improved social problem solving	+27	O.16-point improvement on the Wally Child Social Problem-Solving Detective Game (immediately after the intervention)	1
Improved peer interactions	+26	4.5-point improvement on the Peer Problem-Solving-Interaction Communication-Affect Rating Coding System (total negative conflict management) (immediately after the intervention)	1
Improved peer interactions	+33	o.27-point improvement on the Peer Problem-Solving-Interaction Communication-Affect Rating Coding System (ratio of positive conflict management to negative) (immediately after the intervention)	1
Improved social competence with peers	+14	5.89-point improvement on a child social competence with peers composite score (including the Teacher Assessment of Social Behaviour measure, the Social Health Profile, and the Dyadic Peer Interaction Scale) (immediately after the intervention)	2
Improved child behaviour	+41	33.87-point improvement on the Eyberg Child Behaviour Inventory (Intensity scale) (immediately after the intervention)	1
Reduced stress resulting from child behaviour	+19	10.97-point improvement on the Parent Stress Index (Child Domain Score) (immediately after the intervention)	1



		T	T
Improved behaviour at home	+16	7.09-point improvement on a child conduct problems at home composite score (including the Eyberg Child Behaviour Inventory, the Coders Impressions Inventory for Children, and the Dyadic Parent-Child Interaction Coding System) (immediately after the intervention)	2
Improved behaviour at school	+16	7.32-point improvement on a child conduct problems at school composite score (including the Teacher Assessment of Social Behaviour scale, and the MOOSES classroom observation coding system) (immediately after the intervention)	2
Reduced negative behaviours	+40	3.15-point improvement Parent Daily Report (Number of Target Negative Behaviours) (immediately after the intervention)	1
Reduced negative behaviours	+23	1.5-point improvement on the Parent Daily Report (Number of negative behaviours per 24 hours) (immediately after the intervention)	
Improved positive behaviours	+22	2.07-point improvement on the Parent Daily Report (Number of Target Positive Behaviours) (immediately after the intervention)	1
Improved positive behaviours	+26	2.15-point improvement on the Parent Daily Report (Number of positive behaviours per 24 hours) (immediately after the intervention)	



# **Search and review**

	Number of studies
Identified in search	10
Studies reviewed	2
Meeting the L2 threshold	0
Meeting the L3 threshold	2
Contributing to the L4 threshold	0
Ineligible	8

# Individual study summary: Study 1

Study 1	
Study design	RCT
Country	United States
Sample characteristics	Families of 72 boys and 25 girls aged between 4 and 7 years old with clinically significant child behaviour problems (child misconduct occurring for at least six months; parent reported clinically significant number of child behaviour problems on the Eyberg Child Behaviour Inventory; child met DSM-III-R criteria for oppositional defiant disorder (ODD) and conduct disorder (CD))
Race, ethnicities, and nationalities	85% White



Study 1		
Population risk factors	68.2% of the sample were married	
Timing	<ul> <li>Baseline</li> <li>Two months post-intervention</li> <li>12-month follow-up (no control group at 12-month follow-up).</li> </ul>	
Child outcomes	<ul> <li>Two months post-intervention:</li> <li>Improved social problem solving (child report)</li> <li>Improved peer interactions (observation)</li> <li>Improved child behaviour (parent report).</li> </ul>	
Other outcomes	<ul> <li>Two months post-intervention</li> <li>Reduced parental stress resulting from child behaviour (parent report)</li> <li>Improved parental problem solving (observation of videotaped discussion).</li> </ul>	
Study Rating	3	
Citation	Webster-Stratton, C. & Hammond, M. (1997) Treating children with early-onset conduct problems: A comparison of child and parent training interventions. <i>Journal of Consulting and Clinical Psychology</i> . 65, 93–109.	

# **Brief summary**

# **Population characteristics**

This study involved families of 97 children living in the United States, with a child aged 4 to 7 years old with clinically significant child behaviour problems. 74% were boys, and 85% were White.

Recruitment criteria included child age between 4 and 7 years old, no debilitating physical impairment, intellectual deficit, or history of psychosis for the child, and the child not receiving any form of psychological treatment at time of referral, the primary referral problem being child misconduct that had been occurring for at least six months, parents reporting a clinically significant number of child behaviour problems on the Eyberg Child Behaviour Inventory, and the child meeting criteria for ODD and CD (DSM-III-R).

# Study design

27 families were continuously randomly assigned to the Incredible Years Child Training (CT) condition, 26 to a parent training (PT) condition, 22 to a combined CT + PT condition, and 22 to a wait-list control condition.

The wait-list control group received no treatment or contact with a therapist for eight to nine months, after which the children were reassessed and families were randomly reassigned to one of

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the three intervention conditions. There were no significant differences between groups on demographic variables or outcome measures at baseline.

#### Measurement

Assessments took place at baseline (pre-intervention) and two months after treatment for all groups and at one year follow-up for intervention groups.

- **Child report** measures included the Wally Child Social Problem-Solving Detective Game (WALLY).
- Parent report measures included the Child Behavior Checklist (CBCL), the Eyberg Child Behavior Inventory (ECBI) Intensity Score, the Parenting Stress Index (PSI) Child Domain, and Parent Daily Reports (PDR).
- **Teacher report** measures included the Behar Preschool Behavior Questionnaire (PBQ).
- **Researcher-led** assessments included the Dyadic Parent-Child Interactive Coding System Revised (DPICS-R), the Problem-Solving-Interaction Communication-Affect-Engagement Coding System (PS-I CARE), and the Peer Problem-Solving-Interaction Communication-Affect Rating Coding System (PPS-I CARE) independent observations.

### **Study retention**

#### Post-intervention

100% (97) of the sample participated in the two-month post-intervention assessment, representing 100% (27) of CT participants, 100% (22) of CT+PT participants, 100% (26) of PT participants, and 100% (22) of control.

### One-year follow-up

96% (72) of the intervention group sample participated in the one-year follow-up, representing 89% (24) of CT participants, 100% (22) of CT+PT participants, and 100% (26) of PT participants.

### **Results**

### Data-analytic strategy

At two months post-intervention, four-group analyses of covariance (ANCOVAs) were used to assess intervention effects at two months post-intervention on all child, teacher, and parent measures, and for all researcher observations with the exception of DPICS-R, which was additionally analysed as a comparison of percent reduction in child deviant behaviours.

### **Findings**

### **Two-month post-intervention**

The study observed significantly significant improvements in child behaviour as reported by parents but not teachers, as well as significant improvements in child problem solving and peer interactions in the classroom, in the intervention group compared to the control group. There were no significant improvements in parent—child interactions.

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The study also observed significant reductions in parental stress for both mothers and fathers, and significant improvements in one of four measures of mothers' parental problem solving; there were no significant improvements in fathers' parental problem solving.

There were no significant changes in mothers' spanking behaviour or couple collaboration.

### One-year follow-up

Repeated measures ANOVA was used to assess intervention effects at one-year follow-up in the intervention group only, with t-testing utilised where significant time effects were identified by the ANOVA.

There were significant improvements in parent-reported child behaviour, decreases in parenting stress, reductions in spanking, improvements in child problem solving, and improvements in parenting in all groups when comparing follow-up to baseline, and there was a significant difference in home observations of child deviant behaviour with mothers from post-intervention to one-year follow-up, indicating continued improvement on this measure after the intervention. However, mothers in the Dinosaur School group did not show significant improvements in parenting stress or exhibit higher levels of praise compared to baseline.

At one-year follow up the behaviour problems of 73.7% of the children in the Dinosaur School group were in the normal range.

### **Study 1: Outcomes table**

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
		Child o	outcomes		
Child behaviour	CBCL (parent report - mothers)	N/A	No	49	Two months post-intervention
Child behaviour	CBCL (parent report - fathers)	N/A	Yes*	38	Two months post-intervention
Child behaviour	ECBI (parent report - mothers)	N/A	Yes	49	Two months post-intervention
Child behaviour	ECBI (parent report - fathers)	N/A	Yes*	38	Two months post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child behaviour	PDR total target negative behaviours (parent report - mothers)	N/A	Yes*	49	Two months post-intervention
Child behaviour	PDR total target positive behaviours (parent report - mother)	N/A	Yes	49	Two months post-intervention
Child behaviour	Behar Preschool Behavior Questionnaire (teacher report)	N/A	No	46	Two months post-intervention
Child Social Problem Solving	WALLY – number of different positive solutions (child report)	N/A	Yes	49	Two months post-intervention
Child Social Problem Solving	WALLY – ratio of positive to negative solutions (child report)	N/A	No	49	Two months post-intervention
Parent–child interactions at home	DPICS-R total child deviance (researcher-led observation)	N/A	No	49	Two months post-intervention
Parent–child interactions at home	DPICS-R total positive affect and warmth (researcher-led observation)	N/A	No	49	Two months post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Peer interactions in classroom	PPSI-CARE total negative management conflict skills (researcher-led observation)	N/A	Yes	49	Two months post-intervention
Peer interactions in classroom	PPSI-CARE ratio of positive to negative conflict management skills (researcher-led observation)	N/A	Yes	49	Two months post-intervention
		Parent	outcomes		
Reduced parental stress resulting from child behaviour	Parenting Stress Index (PSI) Child Domain (parent report - mother)	N/A	Yes	49	Two months post-intervention
Reduced parental stress resulting from child behaviour	Parenting Stress Index (PSI) Child Domain (parent report - father)	N/A	Yes*	38	Two months post-intervention
Parental problem solving (mothers)	PS-I CARE total commands and criticisms (observation of videotaped discussion)	N/A	Yes	49	Two months post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Parental problem solving (father)	PS-I CARE total commands and criticisms (observation of videotaped discussion)	N/A	No	38	Two months post-intervention
Parental problem solving (mothers)	PS-I CARE total praise (observation of videotaped discussion)	N/A	No	49	Two months post-intervention
Parental problem solving (fathers)	PS-I CARE total praise (observation of videotaped discussion)	N/A	No	38	Two months post-intervention
Parental problem solving (mothers)	PS-I CARE positive affect (observation of videotaped discussion)	N/A	No	49	Two months post-intervention
Parental problem solving (fathers)	PS-I CARE positive affect (observation of videotaped discussion)	N/A	No	38	Two months post-intervention
Parental problem solving (mothers)	PS-I CARE negative valence (observation of videotaped discussion)	N/A	No	49	Two months post-intervention
Parental problem solving (fathers)	PS-I CARE negative valence (observation of videotaped discussion)	N/A	No	38	Two months post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Mothers' spanking behaviour	Parent Daily Reports (PDR) total spanks (parent report)	N/A	No	49	Two months post-intervention
Parental problem solving	PS-I CARE couple collaboration (observation of videotaped discussion)	N/A	No	25	Two months post-intervention

<sup>\*</sup> These outcomes for fathers are based on a sample size which is too small to meet the Level 3 threshold according to Foundations' strength of evidence criteria, and so do not contribute to the rating.

# Individual study summary: Study 2

Study 2	
Study design	RCT
Country	United States
Sample characteristics	159 families of children (90% boys) aged between 4 and 8 years old with clinically significant child behaviour problems (child misconduct occurring for at least six months; parent reported clinically significant number of child behaviour problems on the Eyberg Child Behaviour Inventory; child met DSM-III-R criteria for oppositional defiant disorder (ODD))
Race, ethnicities, and nationalities	79% Euro-American
Population risk factors	25.8% of families were single mother households, where the father had little or no contact with the child
Timing	<ul><li>Baseline</li><li>Post-intervention</li><li>One-year follow-up</li></ul>



Study 2	
	Two-year follow-up.
Child outcomes	<ul> <li>Improved social competence with peers</li> <li>Improved behaviour at home</li> <li>Improved behaviour at school.</li> </ul>
Other outcomes	<ul> <li>Improved mothers' parenting</li> <li>Improved teachers' classroom management and class atmosphere.</li> </ul>
Study Rating	3
Citations	Study 2a: 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.  Study 2b: Reid, M. J. Webster-Stratton, C. & Hammond, M. (2003) Follow-up of children who received the Incredible Years intervention for oppositional defiant disorder: Maintenance and prediction of 2-year outcome. <i>Behavior Therapy</i> . 34, 471–491.

# **Brief summary**

# **Population characteristics**

This study involved 159 families living in the United States, with a child 4 to 8 years old with conduct problems. 90% of the children in the study were boys and 79% were Euro-American. The children's mean score on a problem behavioural scale (ECBI) was in the clinical range.

Recruitment criteria included child age between 4 and 8 years old, no debilitating physical impairment, intellectual deficit, or history of psychosis for the child, and the child not receiving any form of psychological treatment at time of referral, the primary referral problem being child misconduct that had been occurring for at least six months, parents reporting more than 10 child behaviour problems on the Eyberg Child Behaviour Inventory, the child meeting criteria for ODD (DSM-III-R), and the child being enrolled in preschool or elementary school.

# Study design

30 families were randomly assigned by lottery to the Incredible Years Child Training (CT) condition, 31 to a parent training (PT) condition, 24 to a combined parent training and teacher training condition (PT + TT), 23 to a combined CT + TT condition, 25 to a combined PT + CT + TT condition, and 26 to a wait-list control condition. Families entered the study in three cohorts (1995-1997). Incredible Years Child Training (CT) is the group of interest for this intervention.

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The wait-list control group received no treatment or contact with a therapist for eight to nine months. After post-assessment control families were offered the parent training intervention.

There was no significant difference between conditions on demographic variables or composite outcome scores at baseline.

### Measurement

Assessments took place at baseline (pre-intervention) and post-intervention for all groups, and at one- and two-year follow-ups for intervention groups. Parent and teacher report measures were collected at all timepoints; researcher-led home and school observations were conducted at baseline, post-intervention, and one-year follow-up.

- **Parent report** measures included the Eyberg Child Behavior Inventory (ECBI), the Parent Practices Interview and the Daily Discipline Inventory (DDI).
- **Teacher report** measures included the Teacher Assessment of School Behavior (TASB) and the Perceived Competence Scale for Young Children (PCSC).
- Researcher-led assessments included the Social Health Profile (SHP), the Dyadic Peer Interaction Scale (DPIS), the Dyadic Parent-Child Interactive Coding System Revised (DPICS-R), the MOOSES classroom observation, the Coder Impressions Inventory (CII), the Classroom Atmosphere Measurement, and the Teacher Coder Impressions Inventory (TCI).

### **Study retention**

### Post-intervention

100% (159) of the sample participated in the two-month post-intervention assessment, representing 100% (30) of CT participants, 100% (31) of PT participants, 100% (24) of PT + TT participants, 100% (23) of CT + TT participants, 100% (25) of PT + CT + TT participants, and 100% (26) of control.

Four families dropped out of both the study and interventions after completing the baseline assessments and were not included in reported figures.

### One-year follow-up

100% (159) of the sample participated in the one-year follow-up assessment, representing 100% (30) of CT participants, 100% (31) of PT participants, 100% (24) of PT + TT participants, 100% (23) of CT + TT participants, 100% (25) of PT + CT + TT participants, and 100% (26) of control.

### Two-year follow-up

91% (121) of the sample allocated to an intervention condition participated in the two-year post-intervention assessment, representing 73% (22) of CT participants, 97% (30) of PT participants, 100% (24) of PT + TT participants, 96% (22) of CT + TT participants, and 92% (23) of PT + CT + TT participants.

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Significantly more families dropped out of the CT condition than any other condition at two-year follow-up, and children who dropped out of the CT condition had significantly lower post-treatment behaviour problems as measured by the CBCL.

### Results

### Data-analytic strategy

Six-group analysis of covariance (ANCOVA), with pretest scores included as covariates, was used to assess intervention effects, and preplanned comparisons between each intervention condition and the control group were conducted on all measures.

At one-year follow-up (with no control group), mixed design (Time x Condition) ANOVAs were computed for each composite score to investigate change from post-intervention to follow-up.

In instances of missing data, individual summary scores were computed if at least 60% of items making up a scale were present. Similarly, an individual composite score required at least 60% of the relevant summary scores to be included; participants with composite scores not reaching this threshold were excluded from analysis for the composite score in question.

### **Findings**

#### **Post-intervention**

The study identified significant decreases in child behavioural problems with mothers, decreases in conduct problems at school, and increases in child social competence as well as decreases in mothers' negative parenting for families in the CT group, compared to the control group.

Assessments of clinical significance found that children in the CT group had clinically significant reductions in child negative behaviour at home as measured by the DPICS, and clinically significant reductions in conduct problems at school, compared to the control group.

### One-year follow-up

At one year follow up, for the intervention group only, there was no significant change from post-intervention to follow-up on seven of the eight composite measures, indicating that effects identified at post-intervention were maintained. Assessments of clinical significance found that there were clinically significant improvements in child behaviour at home from post-intervention to one-year follow-up for all groups that included CT. Clinically significant improvements in child behaviour at school were maintained for the CT group.

### Two-year follow-up

The study identified that clinically significant improvements in the CT group compared to control in conduct problems at school were maintained at two-year follow-up.



# **Study 2: Outcomes table**

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
		Child or	utcomes		
Child social competence with peers	Composite score comprising of the Teacher Assessment of School Behavior (TASB) prosocial and social acceptance subscales (teacherreport), the Social Health Profile (SHP) social contact score (independent observation), and the Dyadic Peer Interaction Scale (DPIS) positive communication score (independent observation)	d = 0.35	Yes	56	Post-intervention





Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child behaviour at home with mothers	Composite score comprising of the Eyberg Child Behavior Inventory (ECBI) intensity score (parent report), the Coder Impressions Inventory – Child overall poor conduct and percentage time inappropriate scales (independent observation) and the Dyadic Parent-Child Interactive Coding System – Revised (DPICS-R) total deviance-noncompliance and child negative affect scores (independent observation)	d = 0.41	Yes	55	Post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child behaviour at home with fathers	Composite score comprising of the Eyberg Child Behavior Inventory (ECBI) intensity score (parent report), the Coder Impressions Inventory – Child overall poor conduct and percentage time inappropriate scales (independent observation) and the Dyadic Parent-Child Interactive Coding System – Revised (DPICS-R) total deviance-noncompliance and child negative affect scores (independent observation)	NA	No	46	Post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child behaviour in school	Composite score comprising of the Teacher Assessment of School Behavior (TASB) Aggressive Behavior scale (teacher report), the Perceived Competence Scale for Young Children (PCSC) behavior conduct score (teacher report), the MOOSES classroom observation frequency of child negative behaviours with teachers and peers (independent observation), the Social Health Profile (SHP) poor authority acceptance rating (independent observation) and the Dyadic Peer Interaction Scale (DPIS) total inappropriate behavior with peers subscale (independent observation)	d = 0.41	Yes	56	Post-intervention



Outcome	Measure	Effect size	Statistical significance		Measurement time point
		Parent o	utcomes		
Positive parenting (mother)	Composite score comprising of the Parent Practices Interview supportive parenting scale (parent report), the Dyadic Parent-Child Interactive Coding System – Revised (DPICS-R) positive parenting score (independent observation), and the Coder Impressions Inventory - Parenting Style nurturing- supportive parenting score (independent observation)	NS	No	56	Post-intervention



Outcome	Measure	Effect size	Statistical significance		Measurement time point
Positive parenting (father)	Composite score comprising of the Parent Practices Interview supportive parenting scale (parent report), the Dyadic Parent-Child Interactive Coding System – Revised (DPICS-R) positive parenting score (independent observation), and the Coder Impressions Inventory - Parenting Style nurturing-supportive parenting score (independent observation)	NS	No	46	Post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Negative parenting (mother)	Composite score comprising of the Parenting Practices Interview harshinappropriate discipline scale (parent measure), the Coder Impressions Inventory for parents harshcritical and family needs intervention variables (independent observation), the Dyadic Parent-Child Interactive Coding System – Revised (DPICS-R) total number of critical statements made by the parent to the child (independent observation), and the Daily Discipline Inventory (DDI) ratio of critical to positive discipline (parent report)	d = 0.51	Yes	55	Post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Negative parenting (father)	Composite score comprising of the Parenting Practices Interview harshinappropriate discipline scale (parent measure), the Coder Impressions Inventory for parents harshcritical and family needs intervention variables (independent observation), the Dyadic Parent-Child Interactive Coding System – Revised (DPICS-R) total number of critical statements made by the parent to the child (independent observation), and the Daily Discipline Inventory (DDI) ratio of critical to positive discipline (parent report)	NS	No	46	Post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point	
Other outcomes						
Teacher classroom management style	Composite score comprising the MOOSES classroom observation total teacher criticism score (independent observation), the Classroom Atmosphere Measure (independent observation), and the Teacher Coder Impressions Inventory harsh discipline, nurturing, and percent time teacher inappropriate variables (independent observation)	d = 0.35	Yes	56	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.

Drugli, M. B. & Larsson, B. (2006) Children aged 4-8 years treated with parent training and child therapy because of conduct problems: Generalizing effects to day-care and school settings. *European Child and Adolescent Psychiatry*. 15 (7), 392–399.

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**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.