

Last reviewed: November 2019

Intervention website: <http://www.parent-child.org/>

GUIDEBOOK INTERVENTION INFORMATION SHEET

Parentchild+

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	
Description	ParentChild+ is a home-visiting intervention for disadvantaged families with a child between of 2 and 3 years old. It is delivered by early learning specialists in the family home for a period of 23 weeks. During these sessions, parents learn strategies for supporting their child’s school readiness.
Evidence rating	3+
Cost rating	4
Child outcomes	<ul style="list-style-type: none"> • Enhancing school achievement & employment <ul style="list-style-type: none"> - Improved early learning - Improved child speech, communication, and language. • Supporting children’s mental health and wellbeing <ul style="list-style-type: none"> - Improved social emotional skills.
Child age (population characteristic)	2 to 3 years old
Level of need (population characteristic)	Targeted Selected

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Intervention summary	
Race and ethnicities (population characteristic)	<ul style="list-style-type: none">• African American• Hispanic.
Type (model characteristic)	Individual
Setting (model characteristic)	Home
Workforce (model characteristic)	Early years specialist
UK available?	Yes
UK tested?	No

Model description

ParentChild+ – formerly known as Parent Child Home Programme (or PCHP) – is a home-visiting intervention for low-income families with a child between 2 and 3 years old. It is delivered by trained early learning specialists to individual families in their home.

ParentChild+ aims to improve the home learning environment, the parent–child relationship and key cognitive and social-emotional skills contributing to children’s school readiness.

The curriculum is delivered by home visitors in two cycles. Each cycle involves a minimum of 23 weeks of visits (46 visits), so every family will receive at least 92 home visits. At the start of the cycle, home visitors work to develop a strong relationship with families as a trusted advisor, with the aim of empowering parents to their children’s learning through age-appropriate scaffolding skills.

During each visit, the home visitor arrives with a book or toy that remains with the family and is used to model behaviours for enhancing children’s early learning, rather than directly instructing parents. These interactions are informed by the curriculum, which encourage playful parent–child interactions aimed at supporting the child’s early language development and key social-emotional and self-regulatory skills. For example, the home visitor might model verbal interactions which provide information (e.g. ‘This is a circle’ and ‘That’s the yellow school bus’); elicit information

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from the child (e.g. ‘Where is the yellow school bus going?’); and verbalise social interaction (e.g. inviting participation, taking turns, or following the parent’s and child’s lead). Home visitors also provide referrals to social supports and educational services as needed.

Target population

Age of child	2 to 3 years old
Target population	Families with a child between 2 and 3 years old living in disadvantaged communities.

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
School readiness skills (including vocabulary and self-regulation) during the preschool years are strongly associated with children's success in preschool and primary school.	An enriching home learning environment during the early years is known to support young children's school readiness.	Low family income negatively impacts parents' ability to provide an enriching home learning environment.	Parents with a child between the ages of 2 and 3 receive 92 home visits from an early years specialist who models age-appropriate parental scaffolding behaviours through learning activities involving toys and books.	<ul style="list-style-type: none"> • Parents are better able to support their child's school readiness • Parents are better able to understand their child's early developmental and learning needs. 	<ul style="list-style-type: none"> • Improved child school readiness • Improved parent-child interaction. 	<ul style="list-style-type: none"> • Reduced income-related learning gaps • Improved child school achievement.



Implementation requirements

Who is eligible?	ParentChild+ is for families eligible for income or housing benefits.
How is it delivered?	ParentChild+ is delivered in 92 30-minute sessions by one practitioner to individual families in their home for a minimum of 23 weeks.
What happens during the intervention?	<p>At each visit, home visitors provide the family with a high-quality book or educational toy that is a gift to the family.</p> <p>Using the book or toy, the home visitor models reading, conversation, and play activities designed to stimulate parent–child interaction, develop language and literacy skills, and build school-readiness.</p>
Who can deliver it?	The practitioner who delivers this intervention is an Early Learning Specialist (or Home Visitor).
What are the training requirements?	Practitioners have at least 16 hours of intervention training. Booster training of practitioners is recommended.
How are practitioners supervised?	It is recommended that practitioners are supervised by one host-agency supervisor, with 19.5 hours of intervention training.
What are the systems for maintaining fidelity?	<p>Intervention fidelity is maintained through the following processes:</p> <ul style="list-style-type: none"> • Training manual • Other printed material • Other online material • Video or DVD training • Fidelity monitoring • National centre implementation support and recertification process.
Is there a licensing requirement?	Yes



Implementation requirements (cont.)

<p>*Contact details</p>	<p>Contact person: Pamela Park</p> <p>Organisation: Family Lives</p> <p>Email address: pchp@familylives.org.uk</p> <p>Websites: http://www.parent-child.org/ https://www.familylives.org.uk/about/our-services/parent-child-home-programme/</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>
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Evidence summary

ParentChild+’s most rigorous evidence comes from two RCTs conducted in the United States that 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 ParentChild+ for a 3+ rating.

The first study observed improvements in independent assessments of ParentChild+’s children’s language, behavioural self-regulation, intellectual, and social and emotional development compared to children not receiving the intervention. This study also observed statistically significant improvements in ParentChild+’s parents’ interactions with their children relative to parents not receiving the intervention.

The second study observed statistically significant improvements in independent assessments of ParentChild+’s children’s auditory comprehension relative to children whose parents did not receive the intervention.

ParentChild+ 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 and emotional competence	+24	66.4% decrease in likelihood of falling into the range for possible problem behaviours (measured using the Ages & Stages Questionnaires: Social-Emotional subscale) Immediately after the intervention	2
Improved cognitive capabilities	Not reported	5.3-point improvement on the Stanford-Binet Intelligence Scale Immediately after the intervention	1
Improved child language	+14	4.53-point improvement on the Preschool Language Scale Fourth Edition Immediately after the intervention	2
Improved parent child-interaction	Not reported	101-point improvement on the Maternal Interactive Behaviour Record	1



Search and review

	Number of studies
Identified in search	20
Studies reviewed	3
Meeting the L2 threshold	0
Meeting the L3 threshold	3
Contributing to the L4 threshold	0
Ineligible	17

Individual study summary: Study 1

Study 1	
Study design	RCT
Country	United states
Sample characteristics	55 English-speaking families with a child between 21 and 33 months.
Race, ethnicities, and nationalities	88% African American
Population risk factors	All families were receiving income benefits or qualified for low-income housing, were educated no higher than twelfth-grade level and had an occupation level no higher than semi-skilled.
Timing	<ul style="list-style-type: none"> • Baseline • Post-intervention • Three-year follow-up.
Child outcomes	Improved child intelligence



Study 1	
Other outcomes	Improved parent–child interaction
Study Rating	3
Citation	Madden, J., O’Hara, J. & Levenstein, P. (1984) Home again: Effects of the Mother-Child Home Program on mother and child. <i>Child Development</i> . 55, 636–647.

Brief summary

Population characteristics

This study involved a sample of 55 families with a child between 21 and 33 months living in four suburban areas of New York City. The families were recruited successively in four cohorts from 1973, 1974, 1975, and 1976.

Families were eligible if they qualified for low-income housing and neither resident parent had more than a twelfth-grade education nor occupation higher than semiskilled. 88% of the sample was African American. This study involves the 1976 cohort.

Study design

71 families were randomly assigned to ParentChild+ or the Early Screening Program, which served as the comparison treatment. The Early Screening Program only involved the screening and pre/post interventions – but no additional treatment. Families were blind to treatment assignment. Participants were randomised using a factorial design.

Measurement

The parent and child underwent assessments immediately after intervention completion and then at a 36-month follow-up. Researchers and teachers were blind to group assignment.

Post-intervention

- Researcher assessment: Child intelligence was assessed with the Stanford Binet Intelligence Scale; Parent–child interaction was videotaped and coded with the Maternal Interactive Behaviour Record.

36-month follow-up

- Researcher assessment: Parent–child interaction was videotaped and coded with the Maternal Interactive Behaviour Record by researchers who were blind to group assignment.



- Teacher assessment: Children’s self-regulatory skills were assessed by teachers with the Child Behaviour Traits instrument. Child intelligence was assessed by teachers with the Wide Range Achievement Test.

Study retention

Post-intervention

71% (55) of the originally recruited families participated in a post-intervention assessment. Between group attrition was less than 10%, but further details are not reported.

36-month follow-up

58% (41) of the original sample returned for a follow-up assessment 36 months post-intervention completion. No significant differences between those who attrited and those who remained in the study were reported.

Results

Data-analytic plan

Repeated measures ANOVAs and ANCOVAs, controlling for key variables with intent-to-treat, were used to analyse the findings, but missing data was not imputed.

Findings

Statistically significant improvements were observed in children’s cognitive capabilities and parent–child interaction post-intervention. The positive impacts involving parent–child interaction were retained for the ParentChild+ group at the 36-month follow-up.



Study 1: Outcomes table

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child outcomes					
Intelligent Quotient	Stanford-Binet Intelligence Scale (researcher coded)	Not available	Yes	47	Post-intervention
Social and emotional development	Child Behaviour Traits (teacher rated)	Not available	No	41	36-month follow-up
Reading and arithmetic scores	Wide-Range Achievement Test (teacher rated)	Not available	No	41	36-month follow-up
Parent outcomes					
Parent-child interaction	Maternal Interactive Behaviour record (coded observation)	Not available	Yes	55	Post-intervention
Parent-child interaction	Maternal Interactive Behaviour Record (coded observation)	Not available	Yes	41	36-month follow-up



Individual study summary: Study 2

Study 2	
Study design	RCT
Country	United states
Sample characteristics	166 low-income families, with a child between 2.4 and 3.8 years
Race, ethnicities, and nationalities	100% identified as Latino
Population risk factors	Families needed to be below the poverty line and receiving income benefits
Timing	<ul style="list-style-type: none"> • Baseline • 12-month follow-up.
Child outcomes	<ul style="list-style-type: none"> • Enhancing school achievement and employment • Improved child language • Supporting children's health and wellbeing • Improved child social and emotional skills.
Other outcomes	None
Study Rating	3
Citation	Astuto, J. & Allen, L. (2017) <i>Improving school readiness for children living in urban poverty through home-based intervention</i> . New York University.

Brief summary

Population characteristics

This study involved 166 families with a child between 18 and 30 months living in an urban, Spanish-speaking community in the United States. 46% of child participants were boys.

Families were eligible if they were below the poverty line, receiving government benefits. All of the sample identified as Latino American, and all parents were born outside of the United States. Regarding parental education, 45% of parents reported having less than a high school education,



32% had obtained a GED or high school diploma, 10% had some college or trade school experience, and 13% had attended a four-year college or beyond.

Study design

Families were randomly assigned in paired lotteries on a rolling basis to ParentChild+ (83) or the comparison condition (83), which was a healthy eating intervention. The ParentChild+ and control groups were equivalent at baseline.

Measurement

Assessment took place at baseline (pre-intervention), immediately post-intervention, and at a six-month follow-up (18 months post-baseline).

Baseline measurement

- **Parent report** measures included the Brief Infant-Toddler Social Emotional Assessment (BITSEA)
- **Researcher administrated** assessments included the Pre-school Language Scale Fourth Edition (PLS-4), the Preschool Self-Regulation Assessment (PRSA).

Post-intervention

- **Parent report** measures included the Ages and Stages Questionnaire – Social Emotional (ASQ-SE), the Parent as a Teacher Inventory (PAAT)
- **Researcher administrated** assessments included Pre-school Language Scale Fourth Edition (PLS-4), the Preschool Self-Regulation Assessment (PRSA), . and Effortful Control Batteries (EF).

Six-month follow-up

- **Parent report** measures included the Ages and Stages Questionnaire – Social Emotional (ASQ-SE), the Parent as Teacher Inventory
- **Researcher administrated** assessments included Pre-school Language Scale Fourth Edition (PLS-4), the Preschool Self-Regulation Assessment (PRSA), Preschool Self-Regulation Assessment (PRSA), and Effortful Control Batteries (EF).

Study retention

Study retention is reported for the six-month follow-up only. 93% (154) of the sample was retained, involving 96% (80) from the ParentChild+ group and 89% (74) from the control group. However, this level of retention was not retained for each measure, fluctuating between 80 and 85%, as described in the Study 2 table. Differential attrition for each of these contrasts was low, falling below 5%.

Results

Data-analytic plan

An intent-to-treat analysis was conducted, meaning that all intervention group families were included in the analysis, regardless of level of participation in the intervention (i.e. number of home visits received). Ordinary least squares regression and logistic regression were used to assess



the interventions impact on the intended outcomes. Regression analyses were used to obtain adjusted group differences at the six-month follow-up. Missing data was not imputed, meaning that sample sizes fluctuated for each analysis, per the Study 2 table.

Findings

Statistically significant improvements favouring the ParentChild+ group were observed with respect to children's early language development and social and emotional competence. All other comparisons were non-significant.

Study 2: Outcomes table

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child outcomes					
Auditory comprehension	Preschool Language Scale 4th Edition (PLS-4) (Researcher assessment)	$d = .38$	Yes	133	18 months post-baseline
Expressive child language	Preschool Language Scale 4th Edition (PLS-4) (Researcher assessment)	$d = .20$	No	136	18 months post-baseline
Child language – total score	Preschool Language Scale 4th Edition (PLS-4) (Researcher assessment)	$d = .37$	Yes	127	18 months post-baseline
Child self-regulation	Preschool Self-Regulation Assessment (PRSA) and Effortful Control Batteries Day and Night Task (Coded observation)	$d = .18$	No	136	18 months post-baseline



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child self-regulation	Preschool Self-Regulation Assessment (PRSA) and Effortful Control Batteries Tower Clean-up (Coded observation)	$d = .17$	No	137	18 months post-baseline
Child self-regulation	Preschool Self-Regulation Assessment (PRSA) Tower Task (Coded observation)	$d = .18$	No	136	18 months post-baseline
Child social and emotional competence	Ages & Stages Social Emotional (ASQ-SE)	$d = 0.31$	Yes	106	18 months post-baseline
Parent outcomes					
Parent expectations of child's development	Parent as a Teacher Inventory (PAAT)	$d = .08$	No	144	18 months post-baseline

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.

Allen, L., Sethi, A. & Astuto, J. (2007) An evaluation of a toddlerhood home visiting program at kindergarten age. *NHSA Dialog*. 10 (1), 36–57. **This reference refers to a study, conducted in the USA.**



DeVito, P. J. & Karon, J. P. (1984) *Pittsfield Parent-Child Home Program, Chapter 1. Longitudinal evaluation Pittsfield Public Schools. Final report. This reference refers to a quasi-experimental design, conducted in the USA.*

Fagan, B. (2011) Parent Child Home Programme (PHCP). In: *Childhood Unfolding, World Organisations for Early Childhood Education (OMEP) Ireland Annual Research Conference* (2nd April 2011, Cork). **This reference refers to a study, conducted in Ireland.**

Gfeller, B. M., McLaren, L. & Metcalfe, A. (2008) The Parent-Child Home Program in Western Manitoba: A 20-year evaluation. *Child Welfare*. 87 (5), 49–67. **This reference refers to a pre-post study, conducted in Canada.**

Joint Dissemination Review Panel of U.S. Department of Education. (1978) *Unanimous approval of research findings, 1967-1978, Mother-Child Home Program of Verbal Interaction Project. Verbal Interaction Project. This reference refers to a randomised control trial, conducted in the USA.*

Levenstein, P. (1970) Cognitive growth in preschoolers through verbal interaction with mothers. *American Journal of Orthopsychiatry*. 40, 426–432. **This reference refers to a quasi-experimental design, conducted in the USA.**

Levenstein, P. (1998) *High school graduation effects of a Verbal Interaction Program for at-risk toddlers: A study of long-term outcomes in a replication of the Mother-Child Home Program. Paper presented at the Head Start National Research Conference* (4th, Washington, DC, July 9-12, 1998). **This reference refers to a randomised control trial, conducted in the USA.**

Levenstein, P., Levenstein, S. & Oliver, D. (2002) First grade school readiness of former child participants in a South Carolina replication of the Parent-Child Home Program. *Applied Developmental Psychology*. 23, 331–353. **This reference refers to a quasi-experimental design, conducted in the USA.**

Levenstein, P., Levenstein, S., Shiminski, J. A. & Stolzberg, J. E. (1998) Long-term impact of a verbal interaction program for at-risk toddlers: An exploratory study of high school outcomes in a replication of the mother-child home program. *Journal of Applied Developmental Psychology*. 19 (2), 267–285. **This reference refers to a randomised control trial, conducted in the USA.**

Mann, V., Sandoval, M., Garcia, L. & Calderon, D. (2009) Using Spanish in the home to promote school readiness in English. In A. E. Harrison (Ed.), *Speech disorders: Causes, treatment and social effects* (Chapter 4). Nova Science. **This reference refers to a quasi-experimental design, conducted in the USA.**

Manz, P. H., Bracaliello, C. B., Pressimone, V. J., Eisenberg, R. A., Gernhart, A. C., Fu, Q. & Zuniga, C. (2016) Toddlers' expressive vocabulary outcomes after one year of Parent-Child Home Program services. *Early Child Development and Care*. 186 (2), 229–248. **This reference refers to a quasi-experimental design, conducted in the USA.**

Organizational Research Services [ORS] (2010) *Evaluation of the Parent-Child Home Program/Play & Learn group demonstration project 2005–2010: Final report. This reference refers to a quasi-experimental design, conducted in the USA.*



ORS Impact. (2016) *Long-term academic outcomes of participation in the Parent-Child Home Program in King County, WA*. **This reference refers to a quasi-experimental design, conducted in the USA.**

Rafoth, M. & Knickelbein, B. (2005) *Cohort one final report: Assessment summary for the Parent Child Home Program. An evaluation of the Armstrong Indiana County Intermediate Unit PCHP program, Center for Educational and Program Evaluation located at Indiana University of Pennsylvania*. **This reference refers to a study, conducted in the USA.**

Scarr, S. & McCartney, K. (1988) Far from home: An experimental evaluation of the Mother-Child Home Program in Bermuda. *Child Development*. 59, 531–543. **This reference refers to a randomised control trial, conducted in Bermuda.**

Scarr, S., McCartney, K., Miller, S., Hauenstein, E. & Ricciuti, A. (1994) Evaluation of an Islandwide Screening, Assessment and Treatment Program. *Early Development and Parenting*. 3 (4), 199–210. **This reference refers to a randomised control trial, conducted in Bermuda.**

Share, M., Doyle, E., Callahan, A., Greene, S., Wachtler, M. & Boyd, E. (2011) *Baseline evaluation of the Dublin Docklands Parent Child Home Programme*. Children's Research Centre, Trinity College, Dublin. **This reference refers to a pre-post study, conducted in Ireland.**

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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.