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Last reviewed: February 2018

Intervention website: https://www.weareparentcorps.org/

GUIDEBOOK INTERVENTION INFORMATION SHEET

ParentCorps

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	ParentCorps is for families with a 4-year-old child living in disadvantaged communities. It is delivered by seven practitioners to groups of 12 to 15 parents and their children concurrently through 14 two-hour sessions. A mental health practitioner delivers the parent component and pre-school teachers, supported by three assistant teachers, deliver the child component.
Evidence rating	3+
Cost rating	2
Child outcomes	 Enhancing school achievement & employment Improved academic achievement. Preventing crime, violence and antisocial behaviour Improved behaviour.
Child age (population characteristic)	4 years old
Level of need (population characteristic)	Targeted Selected

Intervention sumr	nary
Race and ethnicities (population characteristic)	 African American Afro-Caribbean Asian Latino Mixed racial or ethnic background White.
Type (model characteristic)	Group
Setting (model characteristic)	Early years settingPrimary school.
Workforce (model characteristic)	 Mental health practitioner (parent component) Three pre-kindergarten teachers and three assistant teachers (child component).
UK available?	No
UK tested?	No

Model description

ParentCorps is for families living in disadvantaged communities with a 4-year-old child. It is designed to be offered to families with a child enrolled in preschool or nursery to support the child's self-regulatory development and future school success.

ParentCorps consists of 14 weekly sessions of two hours' duration each, with additional components dependent on individual family need. ParentCorps is delivered by a team of seven practitioners to groups of between 12 and 15 parents and their chlidren attend concurrent sessions that take place in separate classrooms.

All family members are invited to participate in Parent Group sessions, delivered to groups of 12 to 15 parents and run by a mental health professional. The parent sessions are run in parralel to Child Group sessions, delivered by three kindergarten teachers and three assistant teachers to groups of 18 to 20 children.

During Parent Group, mental health professionals follow a manual to present specific strategies: daily routines; positive parent—child interactions during non-directive play; sharing books; positive reinforcement; proactive strategies; selectively ignoring mild misbehaviour; consequences for serious misbehaviour; helping children manage emotions; and parent self-care. Early sessions

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include activities which allowed parents to discuss their culture and how culture can influence parenting. Parents then set goals for their children and shared them with the group, Child Group leaders, and other caregivers.

Sessions used introductory videos, questions regarding the role of culture on the topic of the session, activities such as role-plays to reinforce the new skill, discussion about parents' readiness to try a new skill with their children, and group problem solving to address any issues raised.

Child Group sessions use puppets and play, positive behaviour support, and behaviour management to promote social-emotional skills. Children are exposed to the strategies being taught in Parent Group, such as sticker charts and Time Out, to increase familiarity and acceptance of practices.

The content of the Parent and Child Group sessions are integrated to reinforce child learning. At the end of each session, Child Group leaders provide feedback to parents about their individual child's progress against the goals set in Parent Group, and parent—child activities are incorporated to provide opportunities to practise skills within the sessions.

Target population

Age of child	4 years old
Target population	Families with a 4-year-old child, living in disadvantaged, urban communities.

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

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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
Young children naturally exhibit challenging and non-compliant behaviours Challenging child behaviours during preschool and primary school increase the risk of behavioural problems in adolescence.	Effective parenting behaviours help children to regulate their own behaviour and reduce the risk of child behavioural problems becoming entrenched Ineffective parenting strategies occasionally increase the risk of child behavioural problems becoming entrenched.	Higher levels of family stress and disadvantage can increase the risk of child behavioural problems.	Parents learn: • Strategies for establishing predictable family routines • Strategies for promoting positive parent—child interaction through non-directive play • Strategies for reinforcing positive child behaviour through labelled praise • Strategies for discouraging challenging child behaviour through age-appropriate discipline.	 Parents implement effective parenting strategies in the home Parents' confidence increases Parent-child interaction improves. 	Children's self-regulatory capabilities and behaviour improves.	Children are at less risk of antisocial behaviour in adolescence Children are more likely to engage positively with others.



Implementation requirements

Who is eligible?	Families with a 4-year-old child, living in a disadvantaged community.		
How is it delivered?	ParentCorps is delivered in 14 sessions of two hours' duration each by seven practitioners (one delivering the parent component and six delivering the child component), to groups of parents and children.		
What happens during the intervention?	Parents attend Parent Group and are taught positive behavioural strategies taking cultural context into consideration. Children attend Child Group sessions run in parallel, and are exposed to strategies taught in Parent Group. Parents set specific aims for their children in early sessions, and group activities allow parents and children to practise new skills together.		
Who can deliver it?	The practitioners who deliver this intervention are one mental health practitioner (parent component), three pre-kindergarten teachers (child component), and three assistant teachers (child component).		
What are the training requirements?	The mental health practitioners have 56 hours of intervention training. The pre-kindergarten teachers and assistant teachers have 42 hours of training.		
How are practitioners supervised?	It is recommended that practitioners are supervised by one host-agency supervisor, with 14 hours of intervention training, and two intervention developer supervisors with no required training.		
What are the systems for maintaining fidelity?	Intervention fidelity is maintained through the following processes: Training manual Other online material Face-to-face training Supervision Fidelity monitoring Self-paced e-learning modules.		
Is there a licensing requirement?	No		
*Contact details	Contact person: Spring Dawson-McClure Organisation: New York University Email address: spring.dawson-mcclure@nyulangone.org Website: https://www.weareparentcorps.org/		

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	*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.
	Υ

Evidence summary

ParentCorps qualifies for a Level 3+ rating, as it has evidence from at least one Level 3 study, along with evidence from other studies rated 2 or better.

The first study was a cluster RCT conducted in the United States with evidence consistent with Foundations' Level 3 evidence strength criteria. This study observed statistically significant post-intervention improvements in ParentCorps children's performance on a validated intelligence test and teacher assessments of their behaviour compared to children not participating in the intervention. This study also observed significant improvements in ParentCorps parents' post-intervention assessment of their own parenting practices, as well as increased school engagement, as rated by their child's teacher.

The second study was also a cluster RCT conducted in the United States with evidence consistent with Foundations' Level 2+ evidence criteria. This study observed statistically significant improvements in teacher assessment of ParentCorps children's behaviour in comparison to children not receiving the intervention. ParentCorps parents were also significantly more likely to report improved parenting behaviours in comparison to parents not receiving the intervention.

ParentCorps 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 kindergarten achievement test scores	+7	2.64-point improvement on the Kaufman Test of Educational Achievement (KTEA) Brief Form Second Edition – immediately after the intervention		
Improved academic performance	+10	5.65-point improvement on the New York Teacher Rating Scale for disruptive and antisocial behaviour – immediately after the intervention	1	
Reductions in behavioural problems	N/a	N/a	2	

Search and review

	Number of studies
Identified in search	5
Studies reviewed	2
Meeting the L2 threshold	1
Meeting the L3 threshold	1
Contributing to the L4 threshold	0
Ineligible	3



Individual study summary: Study 1

Study 1	
Study design	Cluster RCT
Country	United States
Sample characteristics	1,050 families with children aged 4 attending Pre-K classes in one of 10 schools in highly disadvantaged urban neighbourhoods
Race, ethnicities, and nationalities	 85% Black (Afro-Caribbean, African American) 10% Latino 4% Other.
Population risk factors	 Schools eligible for the trial had a student population that was greater than 80% Black and 70% low income. 68% of parents/caregivers were immigrants, 45% were single parents, 36% were unemployed, and 47% of parents were educated to high school diploma level or below.
Timing	 Baseline (beginning of pre-kindergarten year) Post-intervention (end of pre-kindergarten year) Follow-up 1 (beginning of kindergarten year) Follow-up 2 (end of kindergarten year).
Child outcomes	 Improved kindergarten achievement test scores (follow-up 2 (end of kindergarten year), child report) Improved academic performance (post-intervention, teacher report).
Other outcomes	 Improved parent involvement (post-intervention, teacher report) Improved parenting knowledge (post-intervention, parent report) Improved positive behaviour support (post-intervention, parent report)
Study Rating	3
Citations	Study 1a: Brotman, L. M., Dawson-McClure, S., Calzada, E. J., Huang, KY., Kamboukos, D., Palamar, J. J. & Petkova, E. (2013) Cluster (school) RCT of ParentCorps: Impact on kindergarten academic achievement. <i>Pediatrics</i> . 131 (5), e1521–e1529. Study 1b: Dawson-McClure, S., Calzada, E., Huang, K. Y., Kamboukos, D., Rhule, D., Kolawole, B., & Brotman, L. M. (2014) A population-level approach to promoting healthy child development and school success in low-income, urban neighborhoods: Impact on parenting and child conduct problems. <i>Prevention Science</i> . 1–12.

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Brief summary

Population characteristics

This study involved 1,050 families living in New York city, USA, with a child 4 years old attending Pre-K classes in one of 10 schools in two school districts in highly disadvantaged urban neighbourhoods. Schools eligible for the trial had a student population that was greater than 80% Black and 70% low income.

85% of the children in the study were non-Latino Black (Afro-Caribbean, African American) and 10% were Latino. 49% were boys. 68% of parents/caregivers were immigrants, 45% were single parents, 36% were unemployed, and 47% of parents were educated to high school diploma level or below.

To be eligible for study participation at least one parent had to be proficient in English.

Study design

Five schools with 561 children were randomly assigned to the ParentCorps condition and five schools with 489 to a business-as-usual control condition. Prior to randomisation, schools were matched by an independent statistician on size and split into pairs; within each pair one was randomised to the intervention and the other to control. All eligible consenting families attending study classrooms were recruited over a period of four years.

Control condition children received full-day or half-day Pre-K classes providing their usual curriculum. Key elements of ParentCorps were not provided in control schools.

There was baseline equivalence between groups on neighbourhood, school, classroom, family, and child factors.

Study 1b is a follow-up study which examined a subset of the original randomised sample, focusing on 792 children from three of the four initial cohorts (those enrolled after the first year of implementation). This study assessed outcomes three years later.

Measurement

Assessments took place at baseline (start of pre-kindergarten year), post-intervention (end of pre-kindergarten year), follow-up 1 (start of kindergarten year), and follow-up 2 (end of kindergarten year).

Baseline (beginning of pre-kindergarten year)

- Kindergarten achievement test scores were measured using the Kaufman Test of
 Educational Achievement (KTEA) Brief Form, where teachers administering the measure
 were blind to allocation condition. (Direct assessment). In addition, the Speed Diagnostic
 Indicators for the Assessment of Learning (DIAL) was used to obtain a baseline score for
 school readiness (Direct assessment).
- Academic performance was measured using the New York Teacher Rating Scale (Teacher report) and a 5-item scale rating academic progress (Teacher report).

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- Knowledge of positive parenting was measured using the Effective Practices Test (EPT) (Parent report).
- Parenting practices, including positive behaviour support and harsh and inconsistent behaviour management, was measured using the Parenting Practices Interview (PPI) (Parent report).
- Parent involvement in early learning was measured using the Involve Interview (Parent report) (Teacher report) in addition to the Parent Perceptions of Parent Efficacy (PPPE) (Parent report).
- Child behaviour was measured using the New York Rating Scale (NYRS) (Parent report).

Post-intervention (end of pre-kindergarten year)

- Knowledge of positive parenting was measured using the Effective Practices Test (EPT) (Parent report).
- Parenting practices, including positive behaviour support and harsh and inconsistent behaviour management, was measured using the Parenting Practices Interview (PPI) (Parent report).
- Parent involvement in early learning was measured using the Involve Interview (Parent report) (Teacher report) in addition to the Parent Perceptions of Parent Efficacy (PPPE) (Parent report).
- Academic performance was measured using the New York Teacher Rating Scale (Teacher report) and a 5-item scale rating academic progress (Teacher report).

Follow-up 1 (beginning of kindergarten year)

- Academic performance was measured using the New York Teacher Rating Scale (Teacher report) and a 5-item scale rating academic progress (Teacher report).
- Parent involvement in early learning was measured using the Involve Interview (Teacher report).

Follow-up 2 (end of kindergarten year)

- Kindergarten achievement test scores were measured using the Kaufman Test of Educational Achievement (KTEA) Brief Form, where teachers administering the measure were blind to allocation condition. (Direct assessment).
- Knowledge of positive parenting was measured using the Effective Practices Test (EPT) (Parent report).
- Knowledge of positive parenting was measured using the Effective Practices Test (EPT) (Parent report).
- Child behaviour was measured using the New York Rating Scale (NYRS) (Parent report).
- Academic performance was measured using the New York Teacher Rating Scale (Teacher report) and a 5-item scale rating academic progress (Teacher report).
- Parent involvement in early learning was measured using the Involve Interview (Teacher report).

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Study retention

Post-intervention

92% (969) of families participated in post-intervention assessments, representing 92% (516) of ParentCorps participants and 93% (453) of control group participants.

Teacher report data was obtained at baseline and at least one other timepoint for 96% of the sample (1,003). Parent report data was obtained for at least one timepoint for 79% of the sample (831).

There were no differences in neighbourhood characteristics, school readiness or teacher-rated performance between the analytic sample, including parent report data from at least one timepoint, and participants with no parent report data available.

Results

Data-analytic strategy

Multilevel modelling was used to assess intervention effects from baseline to the end of kindergarten year, using an intent-to-treat approach. Missing data was imputed in cases of incomplete parent report data with at least data from one timepoint available. Teacher and child report data was not imputed.

Findings

This study observed statistically significant improvements in academic performance and kindergarten achievement test scores. Statistically significant increases in teacher-rated parent involvement and improved parent knowledge of effective discipline and use of positive behaviour support were also observed.

This study also found that there was an intervention effect on behaviour problems specifically for 'high-risk' boys (not girls) with higher levels of behaviour problems at baseline. The intervention also resulted in increased parent-rated parent involvement and decreased parental harsh and inconsistent behaviour for high-risk children.



Study 1: Outcomes table

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
		Child or	utcomes		
Behaviour problems	Modified New York Rating Scale (NYRS) (parent report)	Not reported	No	831	Post- intervention*
Kindergarten achievement test scores	Diagnostic Indicators for the Assessment of Learning (child report – baseline) Kaufman Test of Educational Achievement (KTEA) Brief Form, second edition (child report – follow-up)	d=0.18	Yes	813	Follow-up 2: end of Kindergarten year
Academic performance	The New York Teacher Rating Scale (teacher report) and a rating of academic progress developed for the study (teacher report)	d=0.25	Yes	approx. 942	Post- intervention*
Knowledge of positive parenting	Effective Practices Test (parent report)	d=0.32	Yes	831	Post- intervention*

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Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Positive behaviour support	Parenting Practices Interview – positive reinforcement subscale and clear expectations subscale (parent report)	d=0.16	Yes	831	Post- intervention*
Harsh and inconsistent behaviour management	Parenting Practices Interview – harsh subscale and inconsistent discipline subscale (parent report)	d=0.28	No	831	Post- intervention*
Parent involvement	Involve Interview subscale (teacher report)	d=0.38	Yes	1,003	Post- intervention*
Parent involvement	Involve Interview Commitment to Education subscale (parent report) and Parent Perceptions of Parent Efficacy (four items) (parent report)	d=0.30	No	831	Post- intervention*

^{*} all timepoints incorporated in single analysis.



Individual study summary: Study 2

Study 2			
Study design	Cluster RCT		
Country	United States		
Sample characteristics	171 families		
Race, ethnicities, and nationalities	 24% Latino 20% Afro-Caribbean 19% African American 13% White 12% Asian 12% mixed race/ethnicity. 		
Population risk factors	 32% of the children were in single-parent families 75% of the student population of participating schools were from ethnic minority backgrounds and 64% were eligible for free lunch. 		
Timing	BaselinePost-intervention.		
Child outcomes	Reduced behavioural problems (teacher report)		
Other outcomes	Improved parenting practices (parent report)		
Study Rating	2+		
Citation/s	Brotman, L. M., Calzada, E., Huang, K. Y., Kingston, S., Dawson-McClure, S., Kamboukos, D. & Petkova, E. (2011) Promoting effective parenting practices and preventing child behaviour problems in school among ethnically diverse families from underserved, urban communities. <i>Child Development</i> . 82, 258–276.		

Brief summary

Population characteristics

This study involved 171 families, living in New York City, USA, with a child 4 years old attending a federally subsidised universal Pre-K (UPK) class in one of eight participating schools. 75% of the student population of participating schools were from ethnic minority backgrounds and 64% were eligible for free lunch.

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To be eligible for the study children needed to be enrolled in a participating UPK class for lower-income children and have at least one caregiver who spoke English.

Of the participating children, 44% were boys. 39% were Black (20% Afro-Caribbean, 19% African American), 24% Latino, 13% White, 12% Asian, and 12% were of mixed race/ethnicity. 32% were in single-parent families.

Study design

Four schools with 118 participating families were randomly assigned to the ParentCorps group and four schools with 53 participating families to a business-as-usual control group using a matched-pairs procedure to assign schools to condition based on the number and type of UPK classes and school-level student demographics. Two consecutive cohorts of students were recruited; in the second year, one control school discontinued its UPK programme. To compensate for the loss of available control participants, enrolment was extended in one of the three remaining control schools to included children attending two half-day classes that were not designated specifically for lower-income children.

Families in the control condition received business-as-usual Pre-K classes; full- or half-day classes, a drop-in room for parents and occasional workshops held by Pre-K family workers. Teachers in both the intervention and control groups received training on the content of the intervention prior to randomisation.

There were no significant differences between groups for baseline measures, with the exception of gender; there were significantly more boys in the control groups, which was reflective of the gender balance in the school populations from which the sample was recruited. Gender was included as a covariate in analyses of intervention effects.

Measurement

Assessments took place at baseline, at the start of the Pre-K year, and at post-intervention, in late spring of the Pre-K year.

- Effective parenting practices were measured using three methods: the Parenting Practices Interview (Parent report), the Effective Parenting Test (Parent report), and an expert observation using the Global Impressions of Parent-Child Interactions (GIPCI-R) (Observer report).
- Child behaviour problems were measured using the Behavior Assessment System for Children–Preschool Version (BASC) (Teacher report) and the New York Teacher Rating Scale (NYTRS) (Teacher report).
- Predictors of academic achievement was measured using the Involvement Questionnaire (INVOLVE-T) (Teacher report) and the short version of the Developmental Indicators for the Assessment of Learning-3 (Speed DIAL-3) was used to assess school readiness skills (Direct assessment).

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Study retention

Post-intervention

95% (162) of families participated in post-intervention assessment. Differential attrition information is not provided. There were no baseline differences between children with and without post-intervention data available.

Results

Data-analytic strategy

Multivariate analyses were employed to assess the effect of ParentCorps on effective parenting practices (parent report of effective practices and test of parenting knowledge) and child behaviour problems using an intent-to-treat approach. Home observation was not included in the multivariate analyses due to large amounts of missing data. The impact of intervention condition on parental involvement in education and child school readiness were analysed using univariate mixed effects models. Multiple imputation was used to account for missing data on all measures except home observation. The extent of missing data differed across data source, with baseline teacher, child, parent, and home observation data available from 161 (94%), 151 (88%), 136 (80%), and 100 (58%) of participants, respectively, and post-intervention data available from 150 (88%), 139 (81%), 124 (73%), and 85 (50%) of participants respectively for each data source. There were no differences in the extent of missing data by intervention condition.

Findings

The study found that families in the ParentCorps group demonstrated statistically significant improvements in effective parenting practices and reductions in child behaviour problems in school compared to families in the control group.

Moderator analysis showed that parents with lower baseline parenting effectiveness experienced significantly greater improvements, while those with higher initial effectiveness saw only small gains. Additionally, attending more sessions was significantly linked to greater improvements in effective parenting practices.

Limitations

The conclusions that can be drawn from this study are limited by methodological issues pertaining to non-blind data collection, hence why a higher rating is not achieved.



Study 2: Outcomes table

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point			
Child outcomes								
Behaviour problems	Behaviour Assessment System for Children- Preschool Version (BASC) Externalising Problems cale (teacher report) and New York Teacher Rating Scale (NYTRS) Defiance scale (teacher report) combined; Behaviour Assessment System for Children- Preschool Version (BASC) Internalising Problems scale (teacher report); Behaviour Assessment System for Children- Preschool Version (BASC) Adaptive Behaviour scale (teacher report)	d=0.56	Yes	171	Post-intervention			
School readiness skills	Developmental Indicators for the Assessment of Learning-3, short version (Speed DIAL-3) (child report)	d=0.11	No	171	Post- intervention			



Outcome	Measure	Effect size	Statistical significance		Measurement time point				
Parent outcomes									
Effective parenting practices	Parenting Practices Interview – Appropriate Discipline scale and Clear Expectations scale (parent report); Effective Parenting Test – % correct responses (parent report) (multivariate analyses)	d=0.50	Yes	171	Post-intervention				
Parent involvement	Involvement Questionnaire (INVOLVE-T) (teacher report)	d=0.22	No	171	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., Dawson-McClure, S., Huang, K. Y., Theise, R., Kamboukos, D., Wang, J., ... & Ogedegbe, G. (2012) Early childhood family intervention and long-term obesity prevention among high-risk minority youth. *Pediatrics*. 129 (3), e621–e628.

Hajizadeh, N., Stevens, E. R., Applegate, M., Huang, K. Y., Kamboukos, D., Braithwaite, R. S. & Brotman, L. M. (2017) Potential return on investment of a family-centered early childhood intervention: A cost-effectiveness analysis. *BMC Public Health*. 17 (1), 796.

Huang, K. Y., Nakigudde, J., Rhule, D., Gumikiriza-Onoria, J. L., Abura, G., Kolawole, B., Ndyanabangi, S., Kim, S., Seidman, E., Ogedegbe, G. & Brotman, L. M. (2017) Transportability of an evidence-based early childhood intervention in a low-income African country: Results of a cluster randomized controlled study. *Prevention Science*. 18 (8), 964–975.

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