

Last reviewed: November 2019

Intervention website: www.easypeasyapp.com

GUIDEBOOK INTERVENTION INFORMATION SHEET

EasyPeasy

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	EasyPeasy is a digital intervention for families with a preschool child. A smart phone app provides families with tips and strategies for supporting their child’s early learning days, with no fixed end point. The phone app activities may be augmented through support from an individual practitioner and group activities made available to a local cohort of EasyPeasy users at community centres or early years settings.
Evidence rating	2+* * Intervention’s evidence base includes mixed findings i.e., studies suggesting positive impact alongside studies, which on balance, indicate no effect or negative impact.
Cost rating	1
Child outcomes	<ul style="list-style-type: none"> Enhancing school achievement and employment - Improved cognitive self-regulation
Child age (population characteristic)	2 to 5 years old
Level of need (population characteristic)	Targeted Indicated

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Intervention summary	
Race and ethnicities (population characteristic)	<ul style="list-style-type: none">• Asian or Asian British• Black, Black Caribbean or Black British• Mixed racial or ethnic background• White British, Irish or other.
Type (model characteristic)	Online or app
Setting (model characteristic)	<ul style="list-style-type: none">• Home• Children's centre or early years setting• Community centre.
Workforce (model characteristic)	<ul style="list-style-type: none">• Family or play workers• Health visitors• Early years educators• Midwives.
UK available?	Yes
UK tested?	Yes

Model description

EasyPeasy is an app-based digital intervention for families with a child between the ages of 0 and 5.

EasyPeasy can be delivered as a universal intervention but is more typically targeted at families living in disadvantaged communities. It may be downloaded and used by parents individually, or accessed through a community or early years setting, where parents are connected to local cohorts and offered more locally curated content. There is no fixed end point of the intervention, although the content is designed to be accessed over a period of 18 to 20 weeks.

Parents discover the EasyPeasy app via health or education practitioners, or through digital advertisements on social media and via local community sign-posting (e.g. libraries, word of mouth). Parents can register to the EasyPeasy app for free using codes that connect them to their local cohort (e.g. a local authority area, school, or nursery). Once the app is downloaded, parents receive EasyPeasy communications via text message (SMS). An initial SMS invites them to join EasyPeasy through a personalised message from their local practitioner or teacher and includes a link to 'get started'. When the parent clicks on the link, they are taken to a personal dashboard that presents them with an initial bank of games to explore. Each game is presented through a short video clip, and a short set of written instructions. Parents then receive a series of SMS reminders

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throughout the intervening weeks, releasing new games (weekly), and encouraging them to play with their children.

Although families can access the app on their own, it has been designed specifically to function as a digital outreach service that extends the reach and impact of early years settings. A secondary desktop component allows practitioners in these settings to share and communicate with parents, as well as capture information on parent engagement with the app. When used by settings, parents are typically organised into small groups or ‘Pods’ on the app, providing a virtual support network where they can discuss the games, and the challenges and successes of using them to engage their children. Each ‘Pod’ is overseen by a Pod Administrator, a practitioner from the setting who monitors parents’ progress and offers remote support.

Target population

Age of child	0 to 5 years old
Target population	All families with a child aged between 0 and 5 years old.

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-regulatory skills) during the preschool years are strongly associated with children's later success in primary and secondary school.	An enriching home learning environment during the early years is known to support young children's school readiness.	Family disadvantage negatively impacts parents' ability to provide an enriching home learning environment.	<ul style="list-style-type: none"> • A smartphone app provides parents with personalised advice based on their profile for supporting their child's early learning • Advice provided on the app can be augmented with support from an individual practitioner or group-based activities. 	<ul style="list-style-type: none"> • Parents are better able to support their child's early learning and school readiness • Parents are better able to understand their child's early developmental and learning needs. 	<ul style="list-style-type: none"> • Improved parent–child interaction • Improved school readiness. 	<ul style="list-style-type: none"> • Improved school achievement in secondary and primary school • Reduced income-related learning gaps.



Implementation requirements

Who is eligible?	There are no eligibility requirements, but the content is suited for families with a child aged between the ages of 0 and 5.
How is it delivered?	EasyPeasy is delivered through an app, with no fixed period for the intervention.
What happens during the intervention?	<ul style="list-style-type: none"> • Parents are signposted to download the EasyPeasy app, and register on the app, sharing information about themselves and their child. • Parents receive personalised parenting guidance and activity tips through the app and may use the app in a self-directed way. • Tips could include activities to engage in playful interactions and to create positive connections between parents and children, using everyday materials at home. • If delivered as part of a local offer (e.g. through an early years setting or family centre), parents can connect to their local cohort within the app. • A practitioner may support parents alongside the EasyPeasy app, through recommending content to parents or reinforcing activities and approaches with children in a professional setting.
Who can deliver it?	A wide range of practitioners may provide additional support to parents using the EasyPeasy app, including health visitors, family workers, and early years educators.
What are the training requirements?	The practitioners receive basic training about the intervention. Booster training of practitioners is not required.
How are practitioners supervised?	Supervision is not required.
What are the systems for maintaining fidelity?	<p>Intervention fidelity is maintained through the following processes:</p> <ul style="list-style-type: none"> • Online training • Online support desk • Monitoring of reach and impact.
Is there a licensing requirement?	Yes



Implementation requirements (cont.)

*Contact details	<p>Contact person: Jen Lexmond</p> <p>Organisation: EasyPeasy</p> <p>Email address: hello@easypeasyapp.com</p> <p>Website: www.easypeasyapp.com</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

EasyPeasy has evidence from three RCTs conducted in England, consistent with Foundations' Level 2+ 'mixed' evidence strength criteria.

The first two studies were small-scale evaluations, observing improvements in EasyPeasy parents' reports of their child's cognitive self-regulation (task persistence) in comparison to the children whose families did not receive the intervention.

However, a third, more rigorously conducted RCT failed to replicate these benefits with different but more objective measures. These measures included teacher-led assessments of children's behaviour at school, as well as professionally administered validated tests of child language ability.

EasyPeasy's Level 2+ 'mixed' rating means it has preliminary evidence of improving a child outcome, but we cannot be confident that the intervention caused the improvement.

Search and review

	Number of studies
Identified in search	5
Studies reviewed	3
Meeting the L2 threshold	1
Meeting the L2+ threshold	2
Meeting the L3 threshold	0



	Number of studies
Contributing to the L4 threshold	0
Ineligible	2

Individual study summary: Study 1

Study 1	
Study design	RCT
Country	UK
Sample characteristics	144 families with a child aged 2 years 4 months to 6 years, accessing children's centres in disadvantaged neighbourhoods in Bournemouth, England
Race, ethnicities, and nationalities	76% White British (parents)
Population risk factors	Accessing a children's centre in a disadvantaged neighbourhood
Timing	Baseline, and post-intervention
Child outcomes	Child cognitive self-regulation/persistence (Parent report)
Other outcomes	Parent self-efficacy on discipline and boundaries (Parent report)
Study Rating	2+
Citation	Jelley, F., Sylva, K. & Karemaker, A. (2016) <i>EasyPeasy Parenting App: Findings from an efficacy trial on parent engagement and school readiness skills</i> . University of Oxford, Department of Education.



Brief summary

Population characteristics

This study involved 144 families with a child aged 2 to 6 years (mean age 3.5 years), living in a disadvantaged neighbourhood in Bournemouth, England. 44% of the children were female; 95% of the parents were mothers.

4% of the children had a disability. Families could not participate in the study if there were child protection concerns.

52% of the parents were employed; 29% had a GCSE qualification or lower.

76% of the parents were White British.

Study design

The trial was a within-centre, individual randomised trial involving eight children's centres. 70 families were allocated to EasyPeasy and 74 to the control group. Randomisation was conducted using the minimisation method, balancing for child age, gender, and children's centre.

The EasyPeasy group received 18 weeks of the intervention, while the control group received no additional intervention except what was already available within the community.

The resulting intervention and control groups were equivalent in terms of demographics and baseline scores.

Measurement

Assessments took place at baseline (pre-intervention), and post-intervention, occurring four to six weeks after the intervention had ended.

- **Parent report** measures included the Tool to measure Parenting Self-Efficacy (TOPSE), the Parenting Stress Index (PSI), and the Child Self-regulation and Behaviour Questionnaire (CSBQ).

Study retention

52% (75) of the families completed the online survey post-intervention, including 49% (34) of the families allocated to EasyPeasy group and 55% (41) of those allocated to the control group.

The retained EasyPeasy and control groups were equivalent on all baseline measures.

Results

Data-analytic plan

ANCOVAs, controlling for key demographics and baseline measures, were used to assess intervention effects 22 to 24 weeks post-baseline on parent-report measures with the retained sample, with listwise deletion of missing data and an intent-to-treat approach.



Results

The study observed statistically significant benefits favouring EasyPeasy children, including improved cognitive self-regulation (including persistence with difficult tasks), working things out by oneself and making decisions independently.

Additionally, a statistically significant improvement was observed for parents' self-reports of self-efficacy with discipline and boundaries.

Limitations

The conclusions that can be drawn from this study are limited by the study's high overall attrition, the size of the retained sample and a 14-percentage point difference in the attrition observed between the intervention and control group samples.

Study 1: Outcomes table

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child outcomes					
Child behavioural self-regulation	CSBQ (Parent report)	$d = 0.26$	No	72	Post-intervention, 22–24 weeks after baseline
Child cognitive self-regulation (persistence)	CSBQ (Parent report)	$d = 0.44$	Yes	72	Post-intervention, 22–24 weeks after baseline
Child emotional self-regulation	CSBQ (Parent report)	$d = 0.31$	No	72	Post-intervention, 22–24 weeks after baseline
Parent outcomes					



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Parental play and enjoyment	Tool to measure Parenting Self Efficacy (TOPSE) (Parent report)	$d = 0.2$	No	72	Post-intervention, 22–24 weeks after baseline
Parental control	TOPSE (Parent report)	$d = 0.39$	No	72	Post-intervention, 22–24 weeks after baseline
Discipline and boundaries	TOPSE (Parent report)	$d = 0.51$	Yes	72	Post-intervention, 22–24 weeks after baseline
Parenting Stress	Parenting Stress Index (Parent report)	$d = 0.20$	No	71	Post-intervention, 22–24 weeks after baseline

Individual study summary: Study 2

Study 2	
Study design	Cluster RCT
Country	UK
Sample characteristics	302 families with a child 3 to 4 years old, accessing children's centres in the London borough of Newham, UK



Study 2	
Race, ethnicities, and nationalities	For retained sample: <ul style="list-style-type: none"> • 46% Asian/Asian British • 33% White British/Irish/Other • 15% Black/Black British • 5% Mixed racial/ ethnic background or other.
Population risk factors	Any families attending one of the participating children’s centres could take part in the study
Timing	Baseline, post-intervention
Child outcomes	Cognitive self-regulation (Parent report)
Other outcomes	Parental self-efficacy (Parent report)
Study Rating	2
Citation	Sylva, K. & Jelley., F. (2018) <i>EasyPeasy: Evaluation in Newham: Findings from the Sutton Trust Parental Engagement Fund (PEF) Project</i> . The Sutton Trust.

Brief summary

Population characteristics

This study involved 302 families with a child between 3 to 4 years, accessing eight children’s centres in the London Borough of Newham, England.

The demographic characteristics were only reported for the 200 participants retained in the analytic sample.

- 46% of the children were female; 94% of the parent participants were mothers.
- 33% were White British/Irish/Other; 46% were Asian/Asian British; 15% were Black/Black British and 5% were Mixed racial/ ethnic background or other.
- 78% of the parent participants were married or cohabitating.
- 23% of the participating parents had a GCSE qualification or lower. 42% of the participants were employed and 70% of their partners were employed.
- The average age of the children was 48.7 months. 73% spoke English and an additional language at home, as did 70.3% in the control group.



Study design

Four children's centres in Newham were randomly assigned to EasyPeasy (early starters) and four to the wait-list (later starters) control group. Randomisation was conducted with the minimisation method, to ensure that the centres were balanced with respect to the number of children who spoke English as an Additional Language (EAL), the number of children eligible for free school meals and the proportion of children with special educational needs.

302 families from the eight centres were recruited to the study, including 130 families from the 'early starters' EasyPeasy centres and 172 from the 'later starters' wait-list control.

Families in the EasyPeasy group received 3 months of the intervention, while families in the control group waited to receive the intervention and received business as usual.

There were no substantial differences between the groups at the individual level at baseline.

Measurement

Assessments took place at baseline (pre-intervention), and post-intervention four to six weeks after the intervention had ended.

- **Parent report** measures included the Tool to measure Parenting Self-Efficacy (TOPSE), the Parenting Stress Index (PSI), and the Child Self-regulation and Behaviour Questionnaire (CSBQ).

Study retention

66% (200) of the families completed at least one measure at follow-up, including 62% (ranging from 77 to 80 families completing each measure) of the EasyPeasy families and 69% (ranging from 117 to 119 per measure) of the families in the wait-list control group.

Results

Data-analytic plan

Analysis of covariance (ANCOVA), controlling for key demographics and baseline scores, were used to assess intervention effects four to six weeks post-intervention with the retained sample.

Analysis was intent-to-treat, meaning that families were retained regardless of their participation in the intervention and listwise deletion used to manage missing data.

Results

The study observed statistically significant benefits favouring EasyPeasy children, including improvements in child cognitive self-regulation (which includes persistence with difficult tasks), working things out by oneself and making decisions independently.

Additionally, EasyPeasy parents were significantly more likely to report high levels of self-efficacy with respect to controlling their child's behaviour in comparison to the children whose parents were allocated to the wait-list control group.



Limitations

The conclusions that can be drawn from this study are limited by the fact that the children's centre clusters were not considered in the analysis.

Study 2: Outcomes table

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child outcomes					
Child behavioural self-regulation	CSBQ (Parent report)	$d = 0.14$	No	196	Post-intervention, 22–24 weeks after baseline
Child cognitive self-regulation	CSBQ (Parent report)	$d = 0.35$	Yes	196	Post-intervention, 22–24 weeks after baseline
Child emotional self-regulation	CSBQ (Parent report)	$d = 0.12$	No	196	Post-intervention, 22–24 weeks after baseline
Parent outcomes					
Parenting self-efficacy (control)	TOPSE (Parent report)	0.26	Yes	197	Post-intervention, 22–24 weeks after baseline



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Parenting self-efficacy (discipline and boundaries)	TOPSE (Parent report)	0.18	No	197	Post-intervention, 22–24 weeks after baseline
Parenting Stress (parent-child dysfunctional interaction)	PSI (Parent report)	No information	No information	No information	Post-intervention, 22–24 weeks after baseline

Individual study summary: Study 3

Study 3	
Study design	Cluster RCT
Country	UK
Sample characteristics	1,488 children aged 3 to 4 years old attending 102 nurseries with high levels of deprivation in nine local authorities across England
Race, ethnicities, and nationalities	<ul style="list-style-type: none"> • 66% White • 17% Asian • 5% Black/Caribbean • 1% other Asian background • 1% other • 4% unknown.
Population risk factors	Nurseries were recruited from disadvantaged areas; the majority of nurseries had over 30% of pupils ever eligible for free school meals
Timing	Baseline, post-intervention
Child outcomes	No significant child outcomes



Study 3	
Other outcomes	No other outcomes
Study Rating	-
Citation	Robinson-Smith, L., Menzies, V., Cramman, H., Wang, Y. L., Fairhurst, C., Hallett, S., Beckmann, N., Merrell C., Torgerson C., Stothard S. & Siddiqui, N. (2019) <i>EasyPeasy: learning through play. Evaluation report.</i>

Brief summary

Population characteristics

This study involved a sample of 1,488 children aged 3 to 4 years (mean age 3.75 years) recruited from 102 nurseries in nine local authorities across England.

The nurseries were in state-funded primary schools in England and were selected based on having 30% or more of their eligible for Early Years Pupil Premium (EYPP), although 15 nurseries with a lower rate of EYPP were also included in the sample. The mean percentage per school of pupils eligible for Early Years Pupil Premium was 47% in both groups. None of the families had previously been involved in EasyPeasy.

Demographic characteristics were only reported for the 1,205 pupils who underwent a Clinical Evaluation of Language Fundamentals (CELF) assessment at baseline.

- 48% of the children were male
- 27% of the pupils spoke English as an Additional Language (EAL) and 5% were identified as having Special Educational Needs and Disabilities (SEND)
- 66% of the pupils were white; 17% were Asian; 5% were Black/Caribbean; 1% were other Asian background; 1% was other and 4% were unknown.

Study design

51 of the nurseries were allocated to EasyPeasy and 51 the wait-list control group. Randomisation was conducted using 1:1 minimisation, ensuring that the centres were balanced with respect to the number of children eligible to participate per nursery.

The families of the pupils in the EasyPeasy schools received app messages for a period of 20 weeks.

1,488 pupils were included in the study, although pretest scores were only available for a subset of pupils, depending on the measure.

- Baseline scores involving the CELF – the study's primary measure – were available for 1,205 pupils, including 595 attending EasyPeasy schools and 610 attending schools allocated to the wait-list control.



- Baseline scores involving the Child Self-regulation and Behaviour Questionnaire (CSBQ) were available for 1,433 of the pupils, including 746 from the intervention group and 687 from the control.
- Baseline scores involving the Home Observation Measure of the Environment (HOME) were available for 51 pupils, including 26 receiving EasyPeasy and 25 from the wait-list control. This small subgroup of families were recruited from the 1,205 pupils assessed with the CELF at baseline. The extent to which this group was representative of the entire sample was not clear.

EasyPeasy participants were exposed to the intervention for a 20-week period.

Comparisons involving the CELF sample suggested that the groups were not balanced at baseline. Specifically, a greater proportion of wait-list pupils were eligible for Early Years Pupil Premium, had English as an Additional Language, and had Special Educational Needs and Disabilities.

Measurement

Assessments took place at baseline (pre-intervention) and immediately after the intervention was completed.

- **Child assessments** were conducted by test administrators with the Clinical Evaluation of Language Fundamentals (CELF) Preschool2 UK.
- **Teacher report** measures included the Child Social Behaviour Questionnaire (CSBQ). Teachers were not blind to group allocation.
- **Researcher led** assessments were conducted with a sub-sample of children (including 23 from the EasyPeasy group and 25 in the control) using the Home Observation and Measurement of the Environment.

All test administrators and researchers were blind to group assignment.

Study retention

One school was lost to follow-up, resulting in 99% (101) retention at the school level.

- 94% (1,128) of the pupils completed post-test assessments with the CELF (the primary outcome) post-intervention, including 94% (562) from the EasyPeasy group and 93% (566) from the wait-list control.
- 66% (979) of the pupils had data from the CSBQ completed by their teacher post-intervention, including 70% (529) of the EasyPeasy pupils and 62% (450) of the pupils in the wait-list control. 64% of the scores were available for most subscales.
- 94% (48) of the families underwent a HOME assessment post-intervention, including 88% (23) from the intervention and 100% (25) from the wait-list control.

The retained sample for the CELF was equivalent on all of the baseline measures, with the exception that a higher proportion of control pupils were eligible for EYPP, had ELA, and were SEND compared to the intervention group.

An imbalance was also observed for the HOME participants. Specifically, EasyPeasy parents had high scores for the learning materials, modelling, and variety of activities subscales in comparison



to the control group. The control group, however, had higher scores when it came to parental responsiveness.

Results

Data-analytic plan

The difference in attainment between pupils in the intervention group and those in the control group was compared using a multilevel mixed-effect linear regression model at the pupil level with Core Language Standard Score as the response variable. Group allocation, baseline Core Language Standard Score, and the number of children with parental agreement to participate within the nursery (minimisation factor, in its continuous form) were included as fixed effects in the model. Analysis included the retained sample for each measure, with intent-to-treat.

Results

The study observed no statistically significant benefit for the EasyPeasy pupils in comparison to those not exposed to the intervention on any of the child outcome measures. These analyses considered all of the CELF subscales (the study's primary outcome measure) as well as each of the subscales of the CSBQ.

Statistically significant improvements favouring EasyPeasy families were observed, however, for the total HOME score and two of the subscales. Specifically, EasyPeasy parents demonstrated improved responsiveness and provided more learning activities than those not receiving the intervention. It is important to keep in mind, however, that this sample involved only 3% of the participants and the extent to which it was representative was not reported. Additionally, large baseline imbalances on key demographics and baseline measures could have influenced the findings.

Limitations

The conclusions that can be drawn from this study are limited by the fact that there were imbalances between the EasyPeasy and control sample on key demographics at baseline and in the retained (analytic) sample.

Study 3: Outcomes table

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child outcomes					
Communication	CELF Preschool2 UK (tester administrated)	$g = 0.04$	No	1,128	Post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Sentence structure	CELF Preschool2 UK (tester administrated)	$g = 0.0$	No	1,124	Post-intervention
Word structure	CELF Preschool2 UK (tester administrated)	$g = 0.06$	No	1,120	Post-intervention
Expressive vocabulary	CELF Preschool2 UK (tester administrated)	$g = 0.01$	No	1,112	Post-intervention
Concepts and following directions	CELF Preschool2 UK (tester administrated)	$g = 0.05$	No	1,017	Post-intervention
Sociability	CSBQ (Teacher report)	$g = 0.04$	No	955	Post-intervention
Externalising behaviour	CSBQ (Teacher report)	$g = -0.08$	No	955	Post-intervention
Internalising behaviour	CSBQ Internalising (Teacher report)	$g = -0.08$	No	953	Post-intervention
Prosocial behaviour	CSBQ (Teacher report)	$g = -0.02$	No	953	Post-intervention
Behavioural self-regulation	CSBQ (Teacher report)	$g = -0.02$	No	955	Post-intervention
Cognitive self-regulation	CSBQ (Teacher report)	$g = 0.14$	No	955	Post-intervention



Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Emotional self-regulation	CSBQ (Teacher report)	$g = 0.06$	No	955	Post-intervention
Parent Outcomes					
Total HOME Score	HOME (researcher assessed)	$g = .62$	Yes	48	Post-intervention
Learning materials	HOME (researcher assessed)	$g = .06$	No	48	Post-intervention
Language stimulation	HOME (researcher assessed)	$g = .50$	No	48	Post-intervention
Responsivity	HOME (researcher assessed)	$g = .66$	Yes	48	Post-intervention
Academic stimulation	HOME (researcher assessed)	$g = .39$	No	48	Post-intervention
Modeling	HOME (researcher assessed)	$g = .53$	No	48	Post-intervention
Variety of materials and interaction	HOME (researcher assessed)	$g = .62$	Yes	48	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.

Doherty, N. (2019) *Family disadvantaged negatively impacts parents' ability to provide an enriching home learning environment*. EasyPeasy.

Hilders, A, Sylva, K. & Jelley, F. (2019) *The effect of the EasyPeasy app on children's self-regulation and social development* (University of Oxford, presentation, 9 November 2019).

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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.