

**Programmes to promote the social and emotional well-being of vulnerable children aged 0-5 years: Summary of information from application of the *Evidence2Success* standards of evidence**

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## 1. INTRODUCTION

The objective of this paper is to summarise the evidence provided on early years interventions by the *Evidence2Success* project. *Evidence2Success* is a collaboration between the Social Research Unit, Dartington (UK), the Social Development Research Group at the University of Washington (US) and several other partners and is funded by the Annie E. Casey Foundation.

One part of the project involves reviewing evidence derived from primary evaluation studies on effective interventions. Preliminary work on this element informed the Independent Review on early interventions conducted by Graham Allen MP for the UK Government (Allen, 2011). This paper draws on the application of the standards to programmes aimed at promoting the social and emotional well-being of vulnerable children aged 0-5 years. (The project also looked at older age groups and a wider range of outcomes.)

The paper:

- sets out the method used for review of the early years programmes, and
- provides analysis and findings of the review work.

The paper is intended to inform the NICE Public Health Intervention Advisory Committee in the formulation of guidance and recommendations on this subject area. The NICE guidance is focusing on vulnerable children who are already experiencing, or at risk of developing, social and emotional difficulties and behavioural problems. It aims to address the following questions based on the best available evidence:

- What are the most effective and (if there is any evidence) cost-effective progressive early interventions in promoting the social and emotional well-being of vulnerable children (0-5 years) and their families?
- What characteristics of an intervention are critical to achieving positive social and emotional outcomes for vulnerable children and families, such as the timing (age of child), the duration, the level of expertise required for its delivery?

The NICE guidance is adopting the term 'progressive interventions: where the scale and intensity of provision is proportionate to level of disadvantage' (this is a term adopted in research and policy statements). Interventions can include home-visiting, early education, childcare and parenting programmes.

## 2. REVIEW METHODS

### 2.1 Evidence2Success

*Evidence2Success* is a new approach that uses the best research to guide public investment in evidence-based interventions for children. It changes how schools, public agencies and communities work together so that more children and young people grow up to be healthy and successful. Critically, it aims to get service systems to invest in implementing evidence-based programmes at scale (Appendix A).

A programme is a discrete, organised package of practices, spelled out in a manual, that explains what should be delivered to whom, when, where and how – including in what order. There should also be an explanation of why it is effective – an understanding of the process of change that leads to improved outcomes. In order to help develop a menu of evidence-based programmes for *Evidence2Success* it was decided to develop standards of evidence. In the future new standards will be developed and applied to identify evidence-based *policies*, *practices* and *processes*.

Thus, to date the review process has not considered, for example, one-to-one tutoring (a practice), changes in the tax and benefit system (a policy) or assessment methods (process).

## 2.2 Developing standards of evidence

These standards are designed to enable system and community leaders in the cities using *Evidence2Success* and beyond to select and deliver the best interventions, confident that they work (they produce the desired effects on child and youth well-being), that they are capable of being implemented in service systems, and that financial and human resource requirements are fully known at the outset. They were developed by leading experts in the field of prevention and early intervention at the Social Research Unit, Dartington (UK) and the Social Development Research Group at the University of Washington, the University of Colorado at Boulder, Johns Hopkins University and Child Trends – all in the US (Appendix B).

## 2.3 The standards of evidence

The standards have four dimensions:

- *Evaluation quality* – whether the investigation into the efficacy and effectiveness of the intervention is reliable
- *Intervention impact* – how much change in key developmental outcomes can be attributed to the intervention
- *Intervention specificity* – whether the intervention is focused, practical and logical
- *System readiness* – whether the intervention is accompanied by the necessary support and information to enable its implementation in service systems.

Within each dimension the standards contain criteria that are divided into the categories 'Good enough' and 'Best'. Those in the 'Good enough' category set a basic standard: an intervention must meet all 'good enough' criteria across all four dimensions in order to meet the *Evidence2Success* standards and thereby qualify for the menu. Criteria in the 'Best' category are considered desirable but not essential. A programme is considered to meet the 'Best' standard overall if (1) it has (a) two or more good enough randomised controlled trials (RCTs) or (b) at least one good enough RCT and one good enough quasi-experimental design (QED) study, and (2) these studies show consistent evidence of a positive effect and no evidence of a harmful effect, and (3) there is evidence of a sustained impact (at least 6 months after the end of intervention).

The full set of criteria for each dimension can be found in Appendix C.

## 2.4 Applying the standards

Programmes were selected for review on the basis that they seek to address one or more key developmental outcomes<sup>2</sup> and have been evaluated in at least one RCT or

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<sup>2</sup> Key developmental outcomes represent those child outcomes that are most critical for children's subsequent health and development. If children are not meeting these outcomes at particular stages of development, there is a strong likelihood that their future health and development will suffer. Each key developmental outcome was selected because there is consistent and compelling evidence that it is predictive of children's subsequent health and development. In *Evidence2Success* they are arranged across five broad domains: Positive relationships; Emotional well-being; Positive behaviour; Educational skills and attainment; and Physical health. Within each domain, key developmental outcomes fall under four developmental stages: Infancy (0-2 years); Early childhood (3-5 years); Middle childhood (6-11 years); and Adolescence (12-18 years).

two QED evaluations. A literature search was conducted to identify all relevant literature on each programme, and the programme developer/purveyor was asked to provide a list of references and written information about the system readiness criteria (see Appendix D for the search strategy). Relevant materials were obtained. A trained reviewer examined these materials and completed a review form to indicate whether or not criteria are met, giving their reasons for each judgement. These reviews were checked by the review coordinator and revised if necessary. An Executive Group comprising experts in the field of prevention science met to deliberate completed reviews.<sup>3</sup> This Group determined whether each programme meets the 'Good enough' standard (i.e. it meets all good enough criteria across all four dimensions) and, for those that do, whether they should additionally be deemed 'Best'.

### **3. ANALYSIS: PROFILE OF PROGRAMMES AND OUTCOMES**

#### **3.1 Selection of programmes**

For the *Evidence2Success* project 100 programmes were reviewed in 2011. Given the focus of the NICE Public Health Intervention Advisory Committee on the social and emotional well-being of vulnerable children aged 0-5 years, this paper focuses on the programmes that target one or more of the following key developmental outcomes in infancy (0-2 years) and early childhood (3-5 years):

##### *Positive relationships*

0-2 years Positive relationships with positive parents<sup>4</sup>

0-2 years Positive relationships with positive peers<sup>5</sup>

3-5 years Positive relationships with positive parents

3-5 years Positive relationships with positive peers

##### *Emotional well-being*

3-5 years Self-regulation

3-5 years Free from depression and anxiety

##### *Positive behaviour*

3-5 years Absence of enduring negative behaviour

3-5 years Prosocial behaviour

##### *Educational skills and attainment*

3-5 years Ready for school

Of the 100 programmes reviewed in 2011, 25 programmes target these outcomes and can be delivered with 0-5s (Appendix E). Of these, 11 were approved in principle – of which four were deemed 'best' – and 13 were not approved. One programme (Homebuilders) is 'pending'. Table 1 summarises all 24 programmes for which decisions in principle were made in terms of the following:

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<sup>3</sup> Nick Axford from the Social Research Unit, Dartington, UK, coordinated the review process and also coordinated the Executive Group with support from Michael Little, also from the Social Research Unit. The Executive Group comprised the following members: Professor Delbert S. Elliott (University of Colorado at Boulder, US); Professor J. David Hawkins (University of Washington at Seattle, US); and Professor Robert E. Slavin (Johns Hopkins University, US, and University of York, UK).

<sup>4</sup> 'Positive relationships' refers to strong bonding and attachment to parents. 'Positive parents' refers to parents who do not use drugs, engage in crime or use violence against their children.

<sup>5</sup> 'Positive relationships' refers to having a friend(s) to talk to and help one out if needed. 'Positive peers' refers to peers who do not smoke, drink alcohol or take drugs and who do not engage in antisocial behaviour but rather engage in prosocial behaviour.

- Level of intervention
- Target group
- A brief description of the programme
- Summary of study design(s)
- Quality rating
- Outcomes targeted that relate to social and emotional well-being
- Cost benefit [only for programmes approved in principle]

The next two sections look respectively at the outcomes achieved by the programmes approved in principle (3.2) and the reasons why the other programmes were not approved (3.3). It is important to note that the paper focuses on outcomes in the 0-5 age range and not outcomes that might be achieved by these programmes in later stages of child development and even into adulthood. It should also be noted that the types of programmes included are delivered in a full range of early years settings and also that certain programmes are universal (i.e. for all children in the specified age-group).

### **3.2 Programmes approved in principle**

#### *Breakthrough to Literacy*

This is a literacy and language programme for 4-5 year-olds in early years settings. There is one RCT (Abt Associates, 2007) and one QED (Flanagan, 2006). The RCT met the evaluation quality criteria and showed that by the end of kindergarten children who received Breakthrough to Literacy outperformed the control group, with a positive effect on the TOPEL measure of early literacy/phonemic awareness (ES = +0.48,  $p < .001$ ).

#### *Bright Beginnings*

This is a language and literacy curriculum for children in early childhood settings. There is one RCT, which met the evaluation quality criteria. This showed significant effects (ES = +.39) on the TERA measure of reading ability at end of pre-school immediately when the intervention ended (PCER Consortium, 2008). However, it should be noted that there was no significant difference on the two other literacy measures at the end of pre-school, and that the significant effect on the TERA had faded by the spring of kindergarten (to ES = +0.03), a year after the intervention had ended.

#### *Carolina Abecedarian*

This is a pre-school educational programme for 2-5 year-olds in impoverished families. Two RCTs have been conducted on the programme; one of the studies combined the Carolina Abecedarian model with other elements. Both studies met the evaluation quality criteria. The programme was found to increase goal-directed behaviour and social confidence at 18 months of age (Ramey & Campbell, 1979), increase task-oriented behaviour during infancy and improve IQ scores at ages 12-96 months (Burchinal et al, 1997; Martin et al, 1990).

#### *Curiosity Corner*

This is a classroom/curriculum-based course for 3-5 year-olds in high-poverty communities. Two studies met the evaluation quality criteria. The first study, an RCT, found that after adjusting for pre-test scores there were no significant differences at the end of pre-school but there were significant differences favouring the Curiosity Corner pre-school attendees on literacy at the end of kindergarten (Effect size (ES) = +0.39  $p < .05$ ) (PCER, 2008). Analysis was done at individual level, with correction for

clustering. The second study, a QED, conducted analyses at the individual level and found significant effects for the 3 year-olds on expressive language (ES = +0.40  $p < .05$ ) (Chambers et al, 2001).

#### *Early Literacy and Learning Model*

This is a language and literacy intervention implemented in addition to the regular curriculum for 4-5 year-olds in high-poverty communities. There was one RCT, which met the evaluation quality criteria. It showed a positive effect on multiple oral language measures (Peabody Picture Vocabulary Test (PPVT) and the Test of Oral Language Development (TOLD)) at the end of kindergarten (weighted mean effect size +.39) (PCER Consortium, 2008). There were no significant effects on other child outcomes (cognitive, reading, beginning reading and maths skills).

#### *High/Scope Perry Pre-School*

This is an early education programme with a home-visiting component for 3-4 year-olds living in poverty. The programme has been evaluated in four studies, two of which were deemed to meet the evaluation quality criteria. (They are referred to in the papers as RCTs but were treated as QEDs in the review work because of problems in both cases with randomisation.) The first of these found intervention effects on standardised aptitude tests in first and second pre-school years, with effects decreasing but remaining significant through to third grade (Berruta-Clement et al, 1984). The children who received the intervention were also less likely to be placed in special education programmes (through age 14) or repeat a grade (through grade 4). The second study compared High/Scope to two other pre-school curricula (Direct Instruction and a traditional nursery school model). The mean IQ score of the children rose dramatically in the first year of intervention but High/Scope was no more or less effective than the other curricula (Schweinhart et al, 1986).

#### *Incredible Years BASIC*

This is a group-based parent training programme for parents of 2-9 year-olds with conduct problems. It is typically delivered in a community agency, outpatient clinic or school setting. There have been 8 RCTs. Of these, four met the evaluation criteria and three had positive effects. In the first RCT, in Norway, Incredible Years BASIC was found to reduce several child conduct problems ( $d = 0.58$  to  $0.8$ ) in children diagnosed with oppositional defiant disorder or conduct disorder (by parent report) (Larsson et al, 2009). About two-thirds of the treated children functioned within normal variation after treatment. The programme was also found to improve significantly several parental practices ( $d = 0.61$  to  $2.24$ ) and reduce overall parental stress ( $d = 0.67$  for mothers;  $d = 0.86$  for fathers). The second RCT, with parents of children with conduct problems, found that Incredible Years BASIC significantly reduced deviant child behaviour and increased positive parental affect and parenting behaviours as measured by direct observation (Webster-Stratton et al, 1988). It was also found to significantly reduce child problem behaviour according to teacher, mother and father reports (Webster-Stratton et al, 1988). The third RCT showed significant reductions in child problem behaviours by parent-report ( $d = 0.48$ ) and direct observation ( $d = 0.78$ ) (Gardner et al, 2006).

#### *Interactive Book Reading*

This involves teacher-guided reading sessions for the whole class and is aimed at 3-4 year-olds in high-poverty settings. There have been three RCTs on the programme, all of which met the evaluation quality criteria. The first found that Interactive Book Reading significantly increased child vocabulary (ES = +0.63) (Wasik & Bond, 2001). The second study found positive intervention effects on receptive and expressive language (ES = +0.73 and +0.44 respectively) but it also found a non-significant negative effect on alphabet knowledge (ES = -0.33) (Wasik et

al, 2006). The third study found significant effects on increased receptive vocabulary (ES = +0.26) and phonological sensitivity (ES = +0.35) but not on alphabet knowledge (ES = +0.11) (Wasik & Hindman, 2011).

#### *Multidimensional Treatment Foster Care (MTFC)*

This is a training programme for foster parents and children who cannot be maintained at home. It was originally designed for adolescents but has been adapted for pre-school children. It is implemented across multiple settings, including home, school and the community, and often includes residential, outpatient and correctional settings. There are six RCTs and one QED on the programme but only one RCT on the MTFC-P version for pre-school children (3-6 years) (Fisher & Kim, 2007). The study met all of the evaluation quality criteria and showed significant effects on the attachment of 3-5 year old foster children of mainly European American descent. Secure behaviour increased (regression coefficient = 0.18, standard error (SE) = 0.08,  $p < 0.05$ ) and avoidant behaviour decreased (regression coefficient = -.13, SE = 0.06,  $p < 0.05$ ) post-intervention, as measured by foster parent report. The older the children were at first placement, the more of an effect MTFC-P had on secure attachment, in comparison to regular foster care. Effects on resistant behaviour were not significant and long-term effects were not measured.

#### *Nurse Family Partnership*

This is an intensive home-visiting programme for first-time pregnant mothers from disadvantaged backgrounds. There have been three RCTs, with papers from all three studies meeting the evaluation quality criteria and covering outcomes for children aged 0-5. The first trial was in Elmira, New York with a low-income white sample (Olds, Henderson, Tatelbaum & Chamberlin, 1986; Olds, Henderson, Chamberlin & Tatelbaum, 1986; Olds, Henderson & Kitzman, 1994; Olds, Henderson & Tatelbaum, 1994; Olds et al, 1995). The programme was replicated in Memphis with a primarily low-income African American population (Kitzman et al, 2000; Olds et al, 2004) and also in Denver with primarily Hispanic and African American women (Olds et al, 2004).

Findings from studies of Nurse Family Partnership (NFP) are extensive and compelling (see Olds et al, 1998/2006), so only a few examples pertaining to the 0-5 age-group are given here. Thus, amongst NFP families, interaction between mother and child was more responsive and at six months infants were less likely to exhibit emotional vulnerability in response to fear stimuli. At 21 months, nurse-visited children were significantly less likely to exhibit language delays than children in the control group. Further, children in families born to women with low psychological resources demonstrated better language development and executive functioning at 48 months.

#### *Parent Child Interaction Therapy (PCIT)*

This is a therapy for parents and children together aimed at parents of 2-12 year-olds with prior abuse reports who are at risk for engaging in future physical child abuse. It is typically clinic-based and delivered in outpatient clinics and community mental health centres. There have been 11 RCTs and nine QEDs of the programme. Three RCTs met all the good enough evaluation quality criteria. (All include children in the 0-5 age range.) In the first RCT, involving physically abusive parents with children aged 4-12 years, 19% of parents assigned to PCIT had a re-report for physical abuse compared with 49% of parents assigned to the standard community group at a median follow-up of 850 days (Chaffin et al, 2004). Parent report of child behaviour also improved. In the second RCT, PCIT combined with motivational interviewing techniques was found to reduce future child welfare reports, compared to motivational interviewing and services as usual ( $p < .05$ ), and this effect was stronger

when children were returned to the home sooner rather than later (Chaffin et al, 2011).<sup>6</sup> In the third RCT, with pre-school children aged 4-6, PCIT was found to significantly reduce hyperactivity ( $d = 1.85$ ), aggressive ( $d = 1.37$ ) and oppositional-defiant behaviours ( $d = 1.65$ ), problem behaviours ( $d = 2.04$ ), problem intensity ( $d = 1.49$ ) and parenting stress (Matos et al, 2009). It was also found to increase the use of adequate parenting practices. The average effect size for all primary outcome measures was 1.57.

### 3.3 Programmes not approved

#### *AI's Pals*

This is a classroom-based curriculum for 3-8 year-olds. There are two RCTs (Lynch, 1998; Lynch et al, 2004) and two QEDs (Lynch & McCracken, 2001a, 2001b) but none met the evaluation quality criteria unequivocally. One of the RCTs came closest and demonstrated reductions in teacher reports of children's aggressive/antisocial behaviour (Lynch et al, 2004), but it has methodological limitations, including reliance on report by the people (teachers) delivering the intervention, which could introduce bias.

#### *Dare To Be You*

This is a parent-child group programme for 2-5 year-olds in families likely to be at risk for substance misuse. There have been three RCTs and three QEDs on the programme overall but only one RCT (Miller-Heyl et al, 1998) and two QEDs (MacPhee & Fritz, 1999; MacPhee & Miller-Heyl, 2000) on the pre-school version. None of them fully met the evaluation criteria. The RCT came closest and demonstrated decreased problem behaviour, reduced oppositional behaviour and greater average increases in development (all  $p < .05$ ) but it had possible attrition bias and evidence of impact was from parent report only.

#### *Direct Instruction (Pre-school)*

This is an instructional teacher-directed programme delivered in early childhood settings for 4-5 year-olds living in high poverty. There have been five studies, including two RCTs (Miller & Dyer, 1975; Salaway, 2008) and three QEDs (Bereiter & Englemann, 1966; Schweinhart & Weikart, 1997; Weisberg, 1988). None met the evaluation quality criteria. Problems included: analysis at individual level without allowance for clustering; lack of intent-to-treat analysis in some studies; lack of baseline equivalence on outcome measures; and differential attrition.<sup>7</sup>

#### *Even Start*

This is a multifaceted programme for parents and children up to age 8 years from low-income families. Two QEDs and two RCTs have been used to evaluate the programme but none met all evaluation quality criteria. Neither RCT consistently used an intention-to-treat design and both had possible bias due to differential attrition (St. Pierre et al, 1993, 2003, 2005). In both QEDs the class instructors collected all outcome measures, which could introduce bias. The first QED also had possible attritional bias (St. Clair et al, 2006) and the second involved parents self-selecting into the intervention group, resulting in the comparison group not being equivalent with the treatment group (Ryan, 2007). Further, only the first QED (St.

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<sup>6</sup> Parents in this study had at least one child aged 2.5 – 12 years (the precise number of children at different ages is not stated).

<sup>7</sup> Although not relevant to the age group under scrutiny in this report, it should be noted that a follow-up study showed that children who had received Direct Instruction did worse in adolescence and early adulthood than the High/Scope group and traditional nursery group in terms of misconduct and crime. This was also a reason for not approving the programme.

Clair et al, 2006) found significant programme effects on children's verbal reasoning, letter and word identification and writing all at the end of first grade.

#### *Healthy Families America*

This is an intensive home-visiting programme for families with children aged 0-5 who are at risk for child abuse, neglect and other adverse childhood experiences. There have been six RCTs (Alaska, Hawaii, New York (twice), San Diego and Arizona), three of which have multiple studies. There have also been three QEDs – in Florida, New England and Virginia respectively. Two studies were deemed to meet the evaluation quality criteria: the San Diego RCT (Lansdverk et al, 2002) and one study based on the Healthy Families New York RCT (Mitchell-Herzfeld et al, 2005). However, the studies showed conflicting and limited evidence of impact.

#### *Let's Begin with the Letter People*

This is a supplementary language and literacy programme for 4-5 year-olds in early childhood settings. There have been three RCTs (PCER Consortium, 2008; Assel et al, 2007; Fischel et al, 2007) but only one met the evaluation quality criteria (PCER Consortium, 2008) and it found no statistically significant positive effect on the outcomes measured (cognitive, language, beginning reading, maths and writing skills).

#### *Parents as Teachers*

This is a parent education programme for families of children from pre-birth to 5 years. This has been evaluated in three RCTs (Wagner & Clayton, 1999 [this describes two studies]; Wagner et al, 2002) and two QEDs (Albritton et al, 2004; Pfannenstiel & Seltzer, 1989). Owing to various problems, including high and possibly differential attrition, none of these studies met the evaluation quality criteria. The study that came closest to meeting the criteria – the first RCT described in Wagner and Clayton (1999) – showed small positive effects on parent knowledge, attitudes and behaviour but no effect on child development and health.

#### *Parent Child Home Programme*

This is a two-year home-visiting programme for families of low-income and at-risk 1-3 year-olds. There have been four RCTs and five QEDs (two of the RCTs were based on the same population). None of these studies met all of the evaluation quality criteria. Reasons included failure to test for differential effects at baseline and/or attrition, and constructing comparison groups after the fact so that baseline measures were not available. The strongest study only found a positive effect on two of 17 outcomes (sorting task and communication skills), with no effect on IQ scores (Scarr & McCartney, 1988).

#### *PATHS (Pre-school)<sup>8</sup>*

This is a school-based social and emotional learning curriculum for 3-6 year-olds. The programme has been subjected to one RCT (Domitrovich et al, 2007) but analyses were at the individual level with no control in the analysis for clustering, there was no analysis of differential attrition, and outcomes were mixed (in part depending on the source of data).

#### *Ready Set Leap!*

This is a pre-school curriculum for 4-5 year-olds in early childhood settings. There have been three RCTs (PCER Consortium, 2008; Abt Associates, 2007; RMC

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<sup>8</sup> It should be noted that the PATHS programme for children aged 6-11 has also been reviewed as part of *Evidence2Success* and was deemed to reach the 'Best' standard.

Research Corporation, 2003) but the only one that met the evaluation quality criteria showed no positive effect on language or literacy and evidence of a negative effect on mathematics achievement (PCER Consortium, 2008). It is unclear if the other two studies used intention-to-treat in the analyses.

#### *Trauma-focused CBT*

This is an individualised therapy for children who have been diagnosed with post-traumatic stress disorder. There have been eight RCTs on the programme, three of which included children in the 0-5 age range (Cohen & Mannarino, 1996, 1997; Deblinger et al, 2001; King et al, 2000). Seven of the studies had possible bias due to differential attrition and three did not use an intent-to-treat design. One study came close to meeting the evaluation quality criteria (King et al, 2000) and demonstrated improvements in post-traumatic stress disorder symptoms and child self-reports of fear and anxiety, but it had methodological limitations, including high attrition, the use of pre-test carried forward for missing data and a small sample (n=36).<sup>9</sup>

#### *Triple P Self-directed*

This is a self-directed parent training programme for parents of children aged 0-16 with more severe behaviour difficulties, such as aggressive or oppositional behaviour. There have been seven RCTs, of which two (Markie-Dadds & Sanders, 2006a, 2006b) met the evaluation quality criteria *and* assessed the programme's impact on families with young children (ages 2-6 years). Both studies showed a positive effect on child behaviour problems. However, the only significant findings of effect are by parent self-report, which could be biased because parents are direct recipients of the programme. The findings are not corroborated by other reports.

#### *Triple P Level 4 Group*

This is a group parent training programme for parents of children aged 0-16 with more severe behaviour difficulties, such as aggressive or oppositional behaviour. It has been evaluated in seven RCTs (Bodenmann et al, 2008; Gallart & Matthey, 2005; Hahlweg et al, 2010; Leung et al, 2003; Martin & Sanders, 2003; Matsumoto et al, 2007, 2010) and one QED (Zubrick et al, 2005). All included pre-school children: in five studies they were part of a larger group, in one of the RCTs pre-schools were randomly assigned, and the QED focused exclusively on pre-school children and their families. However, all evidence of impact on children's behaviour came from parent-report, with a lack of corroborating evidence from observation. (The Hahlweg et al (2010) RCT did have multiple raters, but the observations showed no effect in the two-parent condition and an effect in the single parent condition on only one of four outcomes.)

## **4. OVERALL FINDINGS**

### **4.1 Summary**

Of the 100 programmes to be reviewed for *Evidence2Success* in 2011, 25 address outcomes relating to the social and emotional well-being (including school readiness) of children aged 0-5 years. Decisions in principle have been made on 24 of these programmes.

Eleven programmes have been approved in principle, meaning that they meet the criteria for 'Good enough' evaluation quality and 'Good enough' impact and that they now need to be checked for system readiness. Four of the 11 programmes are deemed 'Best', meaning that (1) they have (a) two or more good enough RCTs or (b)

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<sup>9</sup> For the purposes of this paper it is also worth noting that the study sample comprised 5-17 year-olds.

at least one good enough RCT and one good enough QED, and (2) they show consistent evidence of a positive effect and no evidence of a harmful effect, and (3) there is evidence of a sustained impact (at least 6 months after the end of intervention).

The 11 programmes represent a range of types of programme (Table 1). Specifically, there are:

- Seven school/pre-school curricula (Curiosity Corner, Breakthrough to Literacy, Bright Beginnings, Carolina Abecedarian, Early Literacy and Learning Model, High/Scope and Interactive Book Reading)
- One parenting group programme (Incredible Years BASIC)
- One parent and child therapy programme (Parent Child Interaction Therapy)
- One home-visiting programme (Nurse Family Partnership)
- One intensive child and family support programme (Multidimensional Treatment Foster Care).

They also represent a range of levels of intervention (Table 1), defined using the list in Appendix F:

- Four Level 1 ('Promotion') programmes (Curiosity Corner, Breakthrough to Literacy, Bright Beginnings, Early Literacy and Learning Model)
- Four Level 3 ('Selective prevention') programmes (Carolina Abecedarian, High/Scope, Interactive Book Reading, Nurse Family Partnership)
- One Level 4 ('Indicated prevention') programmes (Incredible Years BASIC)
- Two Level 5 ('Treatment') programmes (Multidimensional Treatment Foster Care, Parent Child Interaction Therapy)

The outcomes affected by the programmes approved in principle are as follows:

- Eight programmes enhance children's readiness for school, in particular skills in language and literacy (Curiosity Corner, Breakthrough to Literacy, Bright Beginnings, Carolina Abecedarian, Early Literacy and Learning Model, High/Scope, Interactive Book Reading, Nurse Family Partnership)
- Three programmes improve children's behaviour (Incredible Years BASIC, Multidimensional Treatment Foster Care, Parent Child Interaction Therapy)
- Two programmes improve children's relationships with their parents/carers (Incredible Years BASIC, Multidimensional Treatment Foster Care)

Amongst the programmes approved in principle the following have been analysed for cost-benefit by the Washington State Institute for Public Policy (WSIPP, 2011) (see Table 1 for further details):<sup>10</sup>

- Incredible Years parent training has a benefit to cost ratio of \$4.20.
- Multidimensional Treatment Foster Care has a benefit to cost ratio of \$5.28; however, this is calculated for the programme as applied to adolescents who have problems with chronic antisocial behavior, emotional disturbance and delinquency. The evaluation of the pre-school version of the programme was not included in the cost-benefit analysis.
- Parent Child Interaction Therapy (Disruptive behaviour) has a benefit to cost ratio of \$7.37.

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<sup>10</sup> The WSIPP report and technical appendices should be consulted for a full understanding of how these figures were calculated as it is beyond the remit of this report to provide this information.

- Parent Child Interaction Therapy (Child welfare) has a benefit to cost ratio of \$6.27.
- Nurse Family Partnership has a benefit to cost ratio of \$3.23.

WSIPP (2011) has also completed an analysis of the cost-benefit of early education for low-income 3- and 4-year olds. This includes the programmes High/Scope Perry Pre-school and Carolina Abecedarian (both included in the review here and approved in principle) and Chicago Parent Child Centers as well as larger scale programmes, such as Head Start and state-funded programmes. This showed a benefit to cost ratio of \$3.60. Other educational programmes are currently under review by WSIPP, so new cost-benefit data for those not cited here may become available in due course.

#### **4.2 Applicability to the UK**

All programmes approved in principle are currently being checked for system readiness. It is expected that this work will be completed in February 2012. Until this analysis is complete it is not possible to state with confidence whether or not the programmes are suitable for a UK context. It is possible, however, to identify those that are already available in or being implemented in the UK:

- Breakthrough to Literacy is available in the UK, although it is unclear who provides training and technical assistance.
- Curiosity Corner is available in the UK, with training and technical assistance provided by Success for All UK: [www.successforall.org.uk](http://www.successforall.org.uk).
- High/Scope is implemented in various locations, and there is a national support centre called High/Scope GB.
- Incredible Years BASIC has been implemented in various locations, perhaps most notably in Wales, where it has received funding from the Welsh Assembly Government and is supported by the Centre for Evidence-based Early Intervention at Bangor University: [www.incredibleyears.wales.co.uk](http://www.incredibleyears.wales.co.uk).
- Multidimensional Treatment Foster Care is being implemented in various locations, with support from MTFCE England: [www.mtfce.org.uk](http://www.mtfce.org.uk)
- Nurse Family Partnership is being implemented in England as Family Nurse Partnership, with funding and support from central government.

We are not aware of the following programmes having been implemented in the UK:

- Bright Beginnings
- Carolina Abecedarian
- Early Literacy and Learning Model
- Interactive Book Reading
- Parent Child Interaction Therapy

Thirteen of the 24 programmes for which decisions in principle have been made were not approved. For 10 programmes this is because the evaluations conducted on them did not meet the evaluation quality criteria. For the other three programmes the evaluation quality criteria were met in at least one study but the relevant study (or studies) showed no, limited or mixed impact (Healthy Families America, Let's Begin with the Letter People, and Ready Set Leap!).

It is important to note that the developers/evaluators of the programmes not approved in principle will have the opportunity in 2012 to respond to the points summarised in 3.3 above, so it is possible that additional information or clarification will mean that the programmes will be approved subsequently. Further, new

programme evaluations that are conducted may well meet the criteria, ensuring that one or more of these programmes may be approved at some future date.

### **5. Next stages of the project**

The work drawn on in this report will be developed in various ways in 2012. First, the standards of evidence on which the work was based will be published in early 2012. New standards of evidence for policy, practice and processes will be developed in due course. Second, once all system readiness checks have been completed and the necessary content has been generated, the final list of approved programmes will appear on a website (due Spring 2012). This will contain information about key aspects of each programme, including: outcomes targeted; target group; logic model; effect size; cost; financing strategies; cost-benefit; requirements for implementation. Website users will be able to compare different programmes on the same criteria and explore the requirements for and benefits of implementing a portfolio of programmes. Eventually it is planned to add provider or commissioner ratings to the website. The website will be linked to a publication produced by the Social Research Unit on how to develop a system-ready evidence-based programme. Third, the *Evidence2Success* method described earlier in this report will start to be implemented in US sites and, soon afterwards, in UK sites. Fourth, a separate but connected piece of work involves translating the WSIPP cost-benefit model drawn on in this report for application in the UK. This is well underway, with reports in the areas of education, youth justice and child protection based on UK data due in 2012. Fifth, and finally, the Social Research Unit is working on various products relating to how evidence-based programmes of the type described in this report can be taken to scale.

## References

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O'Connell, M. E., Boat, T., & Warner, K. E. (2009) *Preventing mental, emotional, and behavioral disorders among young people: progress and possibilities*. Washington DC: National Academies Press.

WSIPP (Washington State Institute for Public Policy) (2011) *Return on investment: Evidence-based options to improve statewide outcomes (July 2011 Update)*. Olympia WA: WSIPP.

## **Appendix A: Evidence2Success**

*Evidence2Success* is designed to help system and community leaders in the US initially to use data to make decisions about what aspects of child and youth well-being should be prioritised. It guides them on how to select and fund evidence-based interventions, and offers training and support with implementing those interventions. It also uses data to track progress.

Millions of taxpayer dollars are spent on problems that endanger children's chances to learn and thrive. However, most of that funding is directed at interventions that have no track record of success. *Evidence2Success* rests on the belief that investing in implementing evidence-based interventions can help more children succeed for less money.

*Evidence2Success* will work with children in low-income urban neighbourhoods. To start with, communities will be located in US cities where public agencies, schools, and the community are ready to work together to help children succeed. The first two cities were engaged as demonstration sites in April 2011.

*Evidence2Success* is supported by the Annie E. Casey Foundation and a number of partners with experience of developing and testing interventions that promote public agency reform, community change, and child and youth well-being.

## **Appendix B: The team that developed the standards of evidence**

The standards of evidence were developed for *Evidence2Success* by leading experts in the field of prevention and early intervention at the Social Research Unit, Dartington, UK and the Social Development Research Group at the University of Washington, Seattle, the University of Colorado at Boulder, Johns Hopkins University and Child Trends – all in the US. The lead individuals (in alphabetical order) were:

- Delbert S. Elliott – University of Colorado, Boulder, and developer of the Blueprints for Violence Prevention database
- J. David Hawkins – Social Development Research Group, University of Washington, and developer of the Prevention Strategies Guide that is part of Communities that Care
- Michael Little – The Social Research Unit, Dartington, UK, and developer of the Greater London Authority Project Oracle Standards of Evidence
- Kristin Moore – Child Trends, Washington, and developer of the LINKS (Lifecourse Interventions to Nurture Kids Successfully) database
- Robert E. Slavin – Johns Hopkins University, and developer of the Best Evidence Encyclopedia

## Appendix C: The standards of evidence

### 1. Evaluation quality

#### *Good enough*

The intervention has been evaluated by at least one randomised controlled trial (RCT) OR two quasi-experimental (QED) evaluations (initial quasi-experimental evaluation and a replication) with the following characteristics:

- Assignment to the intervention is at a level appropriate to the unit targeted for change, i.e. individual, school, community etc.
- There is use of measurement instruments that are appropriate for the intervention population of focus and desired outcomes.
- Analysis is based on 'intent-to-treat'.
- There are appropriate statistical analyses.
- Analysis of baseline differences indicates equivalence between intervention and comparison or control groups on outcome measures.
- There is a clear statement of the demographic characteristics of the population with whom the intervention was tested.
- There is documentation regarding what participants received in the intervention and counterfactual conditions.
- There is no evidence of significant differential attrition.
- Outcome measures are not dependent on the unique content of the intervention.
- Outcome measures reflect *Evidence2Success* key developmental outcomes or outcome domains.
- Outcome measures are not rated solely by the person or people delivering the intervention.

#### *Best*

- There are two RCTs OR one RCT and one QED evaluation (in which analysis and controls rule out plausible threats to internal validity).
- There is a minimum of one long-term follow-up (at least 6 months following completion of the intervention) on at least one outcome measure indicating whether results are sustained over time.
- The evaluation results indicate the extent to which fidelity of implementation affects the impact of the intervention.
- Dose-response analysis is reported.
- Where possible or appropriate there is analysis of the impact on sub-groups (e.g. do the results hold up for different age groups, boys and girls, ethnic minority groups?).
- There is verification of the theoretical rationale underpinning the intervention, provided by mediator analysis showing that effects are taking place for the reasons expected.

### 2. Intervention impact

#### *Good enough*

- There is a positive impact on an *Evidence2Success* key developmental outcome or outcome domain.
- There is a positive and statistically significant effect size, with analysis done at the level of assignment (or, if not, with appropriate correction made).
- OR

- There is a reported sample size weighted mean effect size of .2, with a sample size of more than 500 individuals across all studies.
- There is an absence of iatrogenic effects for intervention participants. (This includes all sub-groups and important outcomes.)

*Best*

- If two or more RCTs or at least one RCT and one QED have been conducted, and they meet the 'good enough' methodological criteria stipulated for Evaluation quality, there is evidence of a positive effect and an absence of iatrogenic effects from a majority of the studies.
- There is evidence of a positive dose-response relationship that meets the 'best' methodological standard for identifying this in Evaluation quality.

### **3. Intervention specificity**

*Good enough*

- The intended population of focus is clearly defined.
- The outcomes of the intervention are clearly specified and meet one of the *Evidence2Success* key developmental outcomes or outcome domains.
- Please identify the risk and protective factors (using the agreed list if possible) that the intervention seeks to change, using the intervention's logic model or theory explaining why the intervention may lead to better outcomes.
- There is documentation about what the intervention comprises.

*Best*

- There is a research base summarising the prior empirical evidence to support the causal mechanisms (risk and protective factors) that underlie the change in outcomes being sought.

### **4. System readiness**

*Good enough*

- There are explicit processes for ensuring that the intervention gets to the right people.
- There are training materials and implementation procedures.
- There is a manual(s) detailing the intervention.
- There is reported information on the financial resources required to deliver the intervention.
- There is reported information on the human resources required to deliver the intervention.
- The intervention that was evaluated is still available.

*Best*

- The intervention is currently being widely disseminated.
- The intervention has been tested in 'real world' conditions.
- Technical support is available to help implement the intervention in new settings.
- There is a fidelity protocol or assessment checklist to accompany the intervention.

## **Appendix D: Literature search strategy**

For each programme, literature searches were made on bibliographic databases as well as professional online databases and the Google search engine. Search terms used included all the known names of each of the programmes. Several electronic databases were searched: ASSIA, CINAHL, ERIC, InformaWorld, IngentaConnect, International Bibliography of the Social Sciences (IBSS), Jstor, MEDLINE, Pubmed, PsycARTICLES, PsycINFO, Scirus, Scopus, SocINDEX and the Web of Knowledge/Web of Science.

A number of online databases that list evidence-based programmes were also searched to identify evaluation studies for each programme: Best Evidence Encyclopedia (BEE), Blueprints for Violence Prevention, Child Trends/LINKS Database, California Evidence-Based Clearinghouse, Find Youth Info, National Registry of Evidence-based Programs and Practices (NREPP), Office of Juvenile Justice and Delinquency Prevention Model Programs Database (OJJDP), Promising Practices Network, Home-visiting Evidence of Effectiveness and What Works Clearinghouse.

Further, programme websites were studied to locate evaluation studies and programme developers were contacted and asked to provide lists of publications and unpublished research papers.

From the selection of articles identified, the research team focused on material written in English that covered evaluations of the programme's effectiveness, used a sample with children aged 0-18 years and included a comparison group.

**Appendix E: List of 25 programmes for 0-5s concerned with social and emotional well-being and reviewed for the *Evidence2Success* project**

Al's Pals  
Breakthrough to Literacy  
Bright Beginnings  
Carolina Abecedarian  
Curiosity Corner  
Dare to Be You  
Direct Instruction (pre-school)  
Early Literacy and Learning Model  
Even Start  
Healthy Families America  
High/Scope Perry Pre-school  
Homebuilders  
Incredible Years BASIC  
Interactive Book Reading  
Let's Begin with the Letter People  
Multidimensional Treatment Foster Care (MTFC)  
Nurse Family Partnership  
Parent Child Home Program  
Parent Child Interaction Therapy (PCIT)  
Parents as Teachers  
PATHS (pre-school) (Promoting Alternative Thinking Strategies)  
Ready Set Leap!  
Trauma-focused CBT  
Triple P Level 4 Group  
Triple P Level 4 Self-directed

## **Appendix F: Categories for level of intervention<sup>11</sup>**

### *1. Promotion interventions*

Usually targeted at the general public or a whole population. Aim to enhance individuals' ability to achieve developmentally appropriate tasks (developmental competence) and a positive sense of self-esteem, mastery, well-being, and social inclusion and to strengthen their ability to cope with adversity. Focus is on healthy outcomes like competence and well-being rather than on prevention of illness and disorder, although it may decrease the likelihood of disorder.

Example: Programmes based in schools, community centres, or other community-based settings that promote emotional and social competence through activities emphasising self-control and problem solving.

### *2. Universal preventive interventions*

Targeted at the general public or a whole population that has not been identified on the basis of individual risk. The intervention is desirable for everyone in that group.

Example: School-based programmes offered to all children to teach social and emotional skills or to avoid substance abuse. Programmes offered to all parents of sixth graders to provide them with skills to communicate to their children about resisting substance use.

### *3. Selective preventive interventions*

Targeted at individuals or a population sub-group whose risk of developing mental disorders is significantly higher than average. The risk may be imminent or it may be a lifetime risk. Risk groups may be identified on the basis of biological, psychological, or social risk factors that are known to be associated with the onset of a mental, emotional, or behavioural disorder.

Example: Programmes offered to children exposed to risk factors, such as parental divorce, parental mental illness, death of a close relative, or abuse, to reduce risk for adverse mental, emotional, and behavioural outcomes.

### *4. Indicated preventive interventions*

Targeted at high-risk individuals who are identified as having minimal but detectable signs or symptoms foreshadowing mental, emotional, or behavioural disorder, or biological markers indicating predisposition for such a disorder, but who do not meet diagnostic levels at the current time.

Example: Interventions for children with early problems of aggression or elevated symptoms of depression or anxiety.

### *5. Treatment*

Targeted at people who are identified (either by themselves or by others) as currently suffering from a recognisable disorder (i.e. case identification). Recipients enter treatment with the expectation of receiving some form of relief from the disorder. Includes interventions to reduce the likelihood of future co-occurring disorders.

### *6. Maintenance*

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<sup>11</sup> Taken from Chapter 3 of *Preventing Mental, Emotional, and Behavioral Disorders Among Young People: Progress and Possibilities* (O'Connell et al, 2009).

Focus is on recipient's compliance with long-term treatment to reduce relapse and recurrence, and provision of after-care services to recipient, including rehabilitation.



**Table 1: Programmes relevant to social and emotional well-being for children aged 0-5 (listed in alphabetical order)**

Programme	Type <sup>12</sup>	Target group	Brief description	Study design	Quality rating <sup>13</sup>	Outcomes targeted <sup>14</sup>	Cost benefit <sup>15</sup>
Al's Pals	Promotion (1)	3-8 year-olds	Classroom-based curriculum of 46 lessons taught by teachers twice a week for 15-20 minutes each session. Lessons focus on improving children's social competence, problem-solving, and autonomy.	<b>2 RCTs:</b> - Lynch et al (2004) - Lynch (1998)  <b>2 QEDs:</b> - Lynch & McCracken (2001a) - Lynch & McCracken (2001b)	Not approved	Early childhood: Absence of enduring negative behaviour (Positive behaviour)	-
Breakthrough to Literacy	Promotion (1)	4-5 year-olds in early childhood settings	School-based literacy and language programme.	<b>1 RCT:</b> - Abt Associates Inc (2007)	Good enough	Early childhood: Ready for school (Educational skills and attainment)	Not available

<sup>12</sup> There are six possible categories, ranging from the most universal to the most targeted as follows: (1) Promotion, (2) Universal prevention, (3) Selected prevention, (4) Indicated prevention, (5) Treatment and (6) Maintenance (see Appendix E for details). They are taken from Chapter 3 of *Preventing Mental, Emotional, and Behavioral Disorders Among Young People: Progress and Possibilities* (O'Connell et al, 2009).

<sup>13</sup> See main paper for details. These are decisions *in principle*.

<sup>14</sup> These are presented using *Evidence2Success* terminology in terms of: Developmental stage / Key developmental outcome (Outcome area). The focus is on outcomes targeted in infancy (0-2 years) and early childhood (3-5 years) that relate to social and emotional well-being. Outcomes targeted in later life, such as in adolescence, or that relate to other aspects of children's well-being, such as health, are not cited here.

<sup>15</sup> The source for these figures is a report by the Washington State Institute for Public Policy (2011). The figures are only provided for programmes that have been reviewed and approved. WSIPP has also completed an analysis of the cost-benefit of early education for low-income 3- and 4-year olds. This includes the programmes High/Scope Perry Preschool, Carolina Abecedarian (both included in the review here and approved in principle) and Chicago Parent Child Centers as well as larger scale programmes such as Head Start and state-funded programmes. This showed the following results: Total benefits \$26,480, Total costs \$7,420, Benefits minus costs \$19,060, Benefit to cost ratio \$2.57.

				<b>1 QED:</b> - Flanagan (2006)			
Bright Beginnings	Promotion (1)	4-5 year old children in early childhood settings	An integrated curriculum with a focus on language and early literacy. The curriculum is literacy-focused and includes nine curriculum units that cover on all domains of learning.	<b>1 RCT:</b> - PCERC (2008)	Good enough	Early childhood: Ready for school (Educational skills and attainment)	Not available
<b>Programme</b>	<b>Type</b>	<b>Target group</b>	<b>Brief description</b>	<b>Study design</b>	<b>Quality rating</b>	<b>Outcomes targeted</b>	<b>Cost benefit</b>
Carolina Abecedarian	Selective prevention (3)	2-5 year-olds in impoverished families	Pre-school educational programme to boost parenting skills, foster prosocial early childhood development, and improve academic achievement in mothers and prepare their children for academic success. Includes child-oriented and parent problem-solving curriculum, but also provides informal family support resources.	<b>2 RCTs:</b> - Burchinal et al (1997), Campbell et al (2001), Campbell & Ramey (1994), Campbell & Ramey (1995), Campbell et al (2002), Campbell et al (2008), Clarke & Campbell (1998), Horacek et al (1987), McLaughlin et al (2007), Muening et al (2011), Ramey et al	Good enough	Infancy & Early childhood: Ready for school (Educational skills and attainment)	See footnote 4

				(2000), Ramey et al (1984)			
Curiosity Corner	Promotion (1)	3-5 year-olds in high poverty communities	Cognitive-developmental programme that aims to prepare children for school success, emphasising language and literacy skills. Comprises 38 weekly thematic units and is used for the entire time the child is at school.	<b>1 RCT:</b> - PCERC (2008)  <b>1 QED:</b> - Chambers et al (2001)	Best	Early childhood: Ready for school (Educational skills and attainment)  Early childhood: At least adequate academic performance (Educational skills and attainment)	Not available
<b>Programme</b>	<b>Type</b>	<b>Target group</b>	<b>Brief description</b>	<b>Study design</b>	<b>Quality rating</b>	<b>Outcomes targeted</b>	<b>Cost benefit</b>
Dare To Be You	Selective prevention (3)	2-5 year-olds in high-risk families who are likely to be at risk for substance abuse	Parent-child group sessions over 10-12 weeks covering effective parenting practices and children's development.	<b>1 RCT for pre-school version:</b> - Miller-Heyl et al (1998)  <b>2 QEDs for pre-school version:</b> - MacPhee & Fritz (1999) - MacPhee & Milley-Heyl (2000)  <b>2 RCTs for programme in general:</b>	Not approved	Early childhood: Ready for School (Educational skills and attainment)  Early childhood: Absence of enduring negative behaviour (Positive behaviour)	-

				<ul style="list-style-type: none"> <li>- Rattenborg et al (no date)</li> <li>- Miller-Heyl et al (no date)</li> </ul> <p><b>1 QED for programme in general:</b></p> <ul style="list-style-type: none"> <li>- MacPhee et al (no date)</li> </ul>			
Direct Instruction (pre-school version)	Selective prevention (3)	4-5 year-olds living in high poverty	An instructional teacher-directed programme delivered in early childhood settings and designed to improve basic academic skills, such as arithmetic and reading.	<p><b>2 RCTs:</b></p> <ul style="list-style-type: none"> <li>- Miller &amp; Dyer (1975)</li> <li>- Salaway (2008)</li> </ul> <p><b>3 QEDs:</b></p> <ul style="list-style-type: none"> <li>- Bereiter &amp; Englemann (1966)</li> <li>- Schweinhart &amp; Weikart (1997)</li> <li>- Weisberg (1988)</li> </ul>	Not approved	Early childhood: Ready for school (Educational skills and attainment)	-
Early Literacy and Learning Model	Promotion (1)	4-5 year-olds in high poverty communities	A language and literacy intervention that is implemented for about 90 minutes per day in addition to the regular curriculum.	<p><b>1 RCT:</b></p> <ul style="list-style-type: none"> <li>- Preschool Curriculum Evaluation Research Consortium (2008)</li> </ul>	Good enough	Early childhood: Ready for school (Educational skills and attainment)	Not available
Even Start	Selective	Parents and	Adult education and	<b>2 RCTs:</b>	Not approved	Early childhood: Ready	-

	prevention (3)	children up to age 8 from low-income families	literacy, parenting education, early childhood education, and other support services. Designed to improve family literacy / basic education skills, help parents educate their children, and help children reach their full potential as learners.	<ul style="list-style-type: none"> <li>- St Pierre et al (1993)</li> <li>- St Pierre et al (2003), St Pierre et al (2005)</li> </ul> <p><b>2 QEDs:</b></p> <ul style="list-style-type: none"> <li>- St. Clair &amp; Jackson (2006)</li> <li>- Ryan (2007)</li> </ul>		<p>for school (Educational skills and attainment)</p> <p>Early childhood: Positive relationship with positive parent(s) (Positive relationships)</p>	
<b>Programme</b>	<b>Type</b>	<b>Target group</b>	<b>Brief description</b>	<b>Study design</b>	<b>Quality rating</b>	<b>Outcomes targeted</b>	<b>Cost benefit</b>
Healthy Families America (inc. Healthy Start, HFNY)	Selective prevention (3)	Families with children aged 0-5 at-risk for child abuse, neglect and other adverse childhood experiences	Intensive home-visiting programme offered over the long-term (3 to 5 years after the birth of the baby) at least once a week. Aims to systematically link families with services and support, improve parent-child relationships and promote healthy childhood growth and development.	<p><b>6 RCTs:</b></p> <ul style="list-style-type: none"> <li>- Caldera et al (2007), Duggan et al (2005, 2007)</li> <li>- Bair-Merritt et al (2010), CCAPR (1996), Duggan et al (1999)</li> <li>- DuMont et al (2006, 2008, 2010), Lee et al (2009), Mitchell-Herzfeld et al (2005)</li> <li>- Anisfeld et al (2004)</li> <li>- Landsverk et al (2002)</li> </ul>	Not approved	Infancy and Early childhood: Positive relationships with positive parents (Positive relationships)	-

				<ul style="list-style-type: none"> <li>- Davenport (2001)</li> </ul> <p><b>3 QEDs:</b></p> <ul style="list-style-type: none"> <li>- Salihu et al (2009)</li> <li>- Smith et al (2011)</li> <li>- Galano &amp; Huntingdon (1999)</li> </ul>			
High/Scope Perry Pre-School	Selective prevention (3)	3-4 year-olds living in poverty	One- to two-year early education programme with a home-visiting component, designed to promote social and cognitive development.	<p><b>2 RCTs:</b></p> <ul style="list-style-type: none"> <li>- Berruta-Clement et al (1984)</li> <li>- Schweinhart &amp; Weikart (1997)</li> </ul> <p><b>2 QEDs:</b></p> <ul style="list-style-type: none"> <li>- Epstein (1993)</li> <li>- Barnett et al (1988)</li> </ul>	Good enough	Early childhood: Ready for school (Educational skills and attainment)	See footnote 4
<b>Programme</b>	<b>Type</b>	<b>Target group</b>	<b>Brief description</b>	<b>Study design</b>	<b>Quality rating</b>	<b>Outcomes targeted</b>	<b>Cost benefit</b>
Incredible Years BASIC	Indicated prevention (4)	Parents of 2-9 year-olds with conduct problems	12-18 week group parent training programme that covers topics such as praise, play, limit-setting and dealing with misbehaviour.	<p><b>8 RCTs:</b></p> <ul style="list-style-type: none"> <li>- Gross et al (2003)</li> <li>- Hutchings et al (2007), Jones et al (2007)</li> <li>- Larsson et al</li> </ul>	Good enough	<p>Early childhood: Absence of enduring negative behaviour (Positive behaviour)</p> <p>Early childhood: Positive relationships with</p>	<p><b>Parent training</b></p> <p>Total benefits \$8,488; Total costs \$2,022. Benefits</p>

				(2009), Drugli & Larsson (2006) - Webster-Stratton et al (1988), (1989) and (1990) - Gardner et al (2006) - Lavigne et al (2008) - Scott et al (2001) - Webster-Stratton & Herman (2008)		positive parents (dyadic adjustment) (Positive relationships)	minus costs = \$6,466. Benefit to cost ratio = \$4.20
Interactive Book Reading	Selective prevention (3)	High poverty 3-4 year-olds	Teacher-guided reading sessions used in a whole class setting and aimed at improving children's language and literacy skills.	<b>3 RCTs:</b> - Wasik & Bond (2001) - Wasik et al (2006) - Wasik & Hindman (2011)	Good enough	Early childhood: Ready for school (Educational skills and attainment)  Early childhood: At least adequate academic performance (Educational skills and attainment)	Not available
<b>Programme</b>	<b>Type</b>	<b>Target group</b>	<b>Brief description</b>	<b>Study design</b>	<b>Quality rating</b>	<b>Outcomes targeted</b>	<b>Cost benefit</b>
Let's Begin with the Letter People	Promotion and Universal prevention (1, 2)	4-5 year-olds in early childhood settings	Supplemental language and literacy programme that includes classroom teaching and a home/parent component.	<b>3 RCTs:</b> - Preschool Curriculum Evaluation Research Consortium	Not approved	Early childhood: Ready for school (Educational skills and attainment)	-

				<p>(2008) - Assel et al (2007) - Fischel et al (2007)</p> <p><b>1 QED:</b> - LAUSD (2002)</p>			
Multidimensional Treatment Foster Care	Treatment (5)	Children who cannot be maintained at home (originally designed for adolescents but adapted for pre-school children)	Combines foster parent recruitment, training, and support; individual skills training and therapeutic playgroups for children; and family therapy for birth parents.	<p><b>6 RCTs:</b> - Chamberlain &amp; Reid (1991) - Chamberlain &amp; Reid (1998), Eddy &amp; Chamberlain (2000), Eddy et al (2004), Smith et al (2010) - Westermarck et al 2011) - Leve et al (2005), Kerr et al (2009), Leve and Chamberlain (2005), Leve and Chamberlain (2007), Chamberlain et al (2007)</p>	Best [However, note that there are six RCTs and one QED on the programme overall but only one RCT on the MTFC-P for preschool-aged children (3-6 years) – Fisher and Kim, 2007]	Early childhood: Positive relationships with positive adults (Positive relationships)	Total benefits \$40,787; Total costs \$7,739. Benefits minus costs = \$33,047. Benefit to cost ratio = \$5.28 <sup>16</sup>

<sup>16</sup> For the programme as applied to adolescents who have problems with chronic antisocial behavior, emotional disturbance and delinquency. The evaluation of the pre-school version of the programme was not included in the cost-benefit analysis.

				<ul style="list-style-type: none"> <li>- Chamberlain et al (2008) [this is Project KEEP, which is not exactly the same as MTFC]</li> <li>- Fisher &amp; Kim (2007)</li> </ul> <p><b>1 QED:</b></p> <ul style="list-style-type: none"> <li>- Chamberlain (1990)</li> </ul>			
Nurse Family Partnership	Selective prevention (3)	First-time pregnant mothers with one of the following risk factors: unmarried; low socio-economic status; under age 19; less than 12 years of education; or unemployed. Lasts until children are 2 years old.	Intensive home-visiting programme. Nurses visit families regularly (weekly initially and later monthly). The 60-90 minute home visits promote (a) maternal health-related behaviours during pregnancy and the early years of the child's life, (b) better parental care for children, and (c) parents' family planning, educational achievement and participation in the workforce.	<p><b>3 long-term RCTs:</b></p> <ul style="list-style-type: none"> <li>- Eckenrode et al (2010), Eckenrode et al (2000), Izzo et al (2005), Olds et al (1986a), Old et al (1986b), Olds et al (1988), Olds et al (1994a), Olds et al (1994b), Olds et al (1995), Olds et al (1998), Zielinski et al (2009)</li> <li>- Kitzman et al (2000), Kitzman et al (2010), Olds</li> </ul>	Best	<p>Early childhood: Ready for school (Educational skills and attainment)</p> <p>Early childhood: Positive relationship with positive parent(s) (Positive relationships)</p>	<p>Total benefits \$30,325; Total costs \$9,421. Benefits minus costs = \$20,905. Benefit to cost ratio = \$3.23</p>

				<p>et al (2004), Olds et al (2007)</p> <p>- Olds et al (2002, Olds et al (2004)</p> <p><b>1 short-term RCT:</b></p> <p>- Nguyen et al (2003)</p>			
<b>Programme</b>	<b>Type</b>	<b>Target group</b>	<b>Brief description</b>	<b>Study Design</b>	<b>Quality rating</b>	<b>Outcomes targeted</b>	<b>Cost benefit</b>
Parent Child Home Programme	Selective prevention (3)	Families of low-income and at-risk 1-3 year-olds	Two-year home-visiting programme. Encourages parents to play and read to their children between visits with the books and toys they receive each week. Visits are half an hour, twice a week (46 visits a year).	<p><b>2 RCTs:</b></p> <p>- Scarr &amp; McCartney (1988)</p> <p>- Levenstein et al (1998)</p> <p><b>4 QEDs:</b></p> <p>- Ginandes &amp; Roth (1973)</p> <p>- Madden et al (1976)</p> <p>- Levenstein et al (2002)</p> <p>- Allen et al (2007)</p>	Not approved	<p>Early childhood: Ready for school (Educational skills and attainment)</p> <p>Early childhood: Positive relationship with positive parent(s) (Positive relationships)</p>	-
Parents as Teachers	Promotion (1)	Families of young children (prenatal to kindergarten entry i.e. 0-5 year-olds)	Early childhood parent education programme that focuses on positive child development by providing monthly home visits and group	<p><b>3 RCTs:</b></p> <p>- Wagner &amp; Clayton (1999) [RCT 1 and RCT 2]</p> <p>- Wagner et al (2002)</p>	Not approved	<p>Early childhood: Ready for school (Educational skills and attainment)</p> <p>Early childhood: Absence of enduring negative</p>	-

			meetings.	<b>2 QEDs:</b> - Albritton et al (2004) - Pfannenstiel & Seltzer (1989)		behaviour (Positive behaviour)  Early childhood: Positive relationships with positive parents (Positive relationships)	
<b>Programme</b>	<b>Type</b>	<b>Target group</b>	<b>Brief description</b>	<b>Study design</b>	<b>Quality rating</b>	<b>Outcomes targeted</b>	<b>Cost benefit</b>
Parent Child Interaction Therapy (PCIT)	Treatment (5)	Parents of 2-12 year-olds with prior abuse reports who are at risk for engaging in future physical child abuse	Therapy sessions for parents and children together, focusing on enhancing parent-child relationships by dealing with negative behaviours appropriately and reinforcing positive parent-child interaction.	<b>11 RCTs:</b> - Bagner & Eyberg (2007) - Bagner et al (2010) - Berkovits et al (2010) - Chaffin et al (2004) - Chaffin et al (2011) - Matos et al (2009) - McCabe & Yeh (2009) - Nixon et al (2003) - Nixon et al (2004) - Schuhmann et al (1998) - Thomas &	Best	Early childhood: Positive relationship with positive parents (Positive relationships)  Early childhood: Absence of enduring negative behaviour (Positive behaviour)	<b>(1) For children with disruptive behaviour problems</b> Total benefits \$9,584; Total costs \$1,302. Benefits minus costs = \$8,282. Benefit to cost ratio = \$7.37  <b>(2) For children in the child welfare system</b>

				<p>Zimmer-Gembeck (2011)</p> <p><b>9 QEDs:</b></p> <ul style="list-style-type: none"> <li>- Boggs et al (2004)</li> <li>- Capage et al (2001)</li> <li>- Chase &amp; Eyberg (2008)</li> <li>- Funderbunk et al (1999)</li> <li>- Lanier et al (2011)</li> <li>- Leung et al (2009)</li> <li>- McNeil et al (1999)</li> <li>- Timmer et al (2006)</li> <li>- Timmer et al (2010)</li> </ul>			<p>Total benefits \$9,498; Total costs \$1,516. Benefits minus costs = \$7,982. Benefit to cost ratio = \$6.27<sup>17</sup></p>
PATHS (pre-school) <sup>18</sup>	Promotion and Universal prevention (1/2)	3-5 year olds	A social and emotional learning curriculum delivered by teachers in pre-school settings. Lessons are sequenced	<p><b>1 RCT</b></p> <ul style="list-style-type: none"> <li>- Domitrovich et al (2007)</li> </ul>	Not approved	Early childhood: Free from depression and anxiety (Emotional well-being)	-

<sup>17</sup> PCIT is considered twice in the WSIPP (2011) report. Both versions are cited in this table because two of the three studies that meet the *Evidence2Success* evaluation quality criteria are included in the child welfare analysis, while the other is included in the disruptive behaviour analysis.

<sup>18</sup> It should be noted that the PATHS programme for children aged 6-11 has also been reviewed as part of *Evidence2Success* and was deemed to reach the 'Best' standard.

			according to increasing developmental difficulty, delivered in 20-30 minute sessions three times per week. Units cover self-control, emotions, and problem solving.			Early childhood: Self-regulation (Emotional well-being)  Early childhood: Prosocial behaviour (Positive behaviour)  Early childhood: Absence of enduring negative behaviour (Positive behaviour)	
<b>Programme</b>	<b>Type</b>	<b>Target group</b>	<b>Brief description</b>	<b>Study design</b>	<b>Quality rating</b>	<b>Outcomes targeted</b>	<b>Cost benefit</b>
Ready Set Leap!	Promotion (1)	4-5 year-olds in early childhood settings	Pre-school curriculum, which combines literacy-focused instructional approaches with multisensory technology. Includes detailed lesson plans for large- and small-group instruction, and ongoing assessment tools.	<b>3 RCTs:</b> - PCERC (2008) - Abt Associates Inc (2007) - RMC Research Corporation (2003)	Not approved	Early childhood: Ready for school (Educational skills and attainment)	-
Trauma-focused CBT	Treatment (5)	Children and adolescents who have been diagnosed	Individualised therapy sessions in which children receive emotional skills training to cope with the	<b>7 RCTs:</b> - Cohen & Mannarino (1996), Cohen & Mannarino	Not approved	Early childhood: Absence of enduring negative behaviour (Positive behaviour)	-

		with post-traumatic stress disorder (PTSD) (in young children this is often the result of physical or sexual abuse)	difficulties and later, with the help of trained therapists, begin to confront and deal with the experience that initialised the PTSD symptoms.	(1997). - Cohen et al (2004), Deblinger et al (2006) - Cohen et al (2011) - Cohen et al (2005) - Deblinger et al (2001) - Deblinger et al (1999) - Jaycox et al (2010)		Early childhood: Free from depression and anxiety (Emotional well-being)	
Triple P Level 4 Self-directed	Selective and Indicated prevention (3, 4)	Families with 0-16 year-olds	Part of a multi-level programme of parenting and family support strategies. Aims to prevent behavioural, emotional and developmental problems in children by enhancing the knowledge, skills and confidence of parents. Level 4 self-directed consists of intensive broad focus parenting skills training.	<b>7 RCTs:</b> - Markie-Dadds & Sanders (2006a) - Markie-Dadds & Sanders (2006b) - Morawska & Sanders (2006) - Morawska & Sanders (2007) - Nicholson & Sanders (1999) - Sanders et al (2000), Sanders et al (2007) - Stallman & Ralph (2007)	Not approved	Early childhood: Absence of enduring negative behaviour (Positive behaviour)	-

Programme	Type	Target group	Brief description	Study design	Quality rating	Outcomes targeted	Cost benefit
Triple P Level 4 Group	Selective and Indicated prevention (3, 4)	Families with 0-16 year-olds	Part of a multilevel programme of parenting and family support strategies. Aims to prevent behavioural, emotional and developmental problems in children by enhancing the knowledge, skills and confidence of parents. Level 4 group consists of intensive broad focus parenting skills training.	<b>7 RCTs:</b> - Bodenmann et al (2008) - Gallart & Matthey (2005) - Hahlweg et al (2010) - Leung et al (2003) - Martin & Sanders (2003) - Matsumoto et al (2007) - Matsumoto et al (2010)  <b>1 QED:</b> - Zubrick et al (2005)	Not approved	Early childhood: Absence of enduring negative behaviour (Positive behaviour)  Early childhood: Self-regulation (Emotional well-being)	-



## References for programme evaluations

### 1. AI's Pals

#### RCT 1:

Lynch, K. B., Geller, S. R., & Schmidt, M. G. (2004). Multi-year evaluation of the effectiveness of a resilience-based prevention program for young children. *Journal of Primary Prevention*, 24 (3), 335-353.

#### RCT 2:

Lynch, K. B. (1998). *Results of Henrico County after-school prevention program replication study, 1996-1997, AI's Pals: Kids Making Healthy Choices*. Richmond: Virginia Institute for Developmental Disabilities, Virginia Commonwealth University.

#### QED 1:

Lynch, K. B., & McCracken, K. (2001a). *Highlights of findings of the AI's Pals: Kids Making Healthy Choices intervention implemented in Greater Des Moines, Iowa, 1999-2000*. Richmond: Virginia Institute for Developmental Disabilities, Virginia Commonwealth University.

#### QED 2:

Lynch, K. B., & McCracken, K. (2001b). *Highlights of findings of the AI's Pals intervention: Hampton City Public Schools, 1999-2000*. Richmond: Virginia Institute for Developmental Disabilities, Virginia Commonwealth University.

### 2. Breakthrough to Literacy

#### RCT 1:

Abt Associates, Inc. (2007, March). *Findings from project upgrade in Miami-Dade County*. Cambridge, MA: Abt Associates.

#### QED 1:

Flanagan, E. G. O. (2006). *Computer-based reading program with at-risk pre-kindergarten students*. Nova South Eastern University.

### 3. Bright Beginnings

#### RCT 1:

Preschool Curriculum Evaluation Research Consortium (2008). *Effects of preschool curriculum programs on school readiness* (NCER 2008-2009). Washington, DC: National Center for Education Research, Institute of Education Sciences, U.S. Department of Education. Washington, DC: U.S. Government Printing Office.

### 4. Carolina Abecedarian

#### RCTs 1 and 2:

Burchinal, M. R., Campbell, F. A., Bryant, D. M., Wasik, B. M., & Ramey, C. T. (1997). Early intervention and mediating processes in intellectual development among low-income African American children. *Child Development*, 68, 935-954.

Campbell, F. A., Pungello, E. P., Miller-Johnson, S., Burchinal, M., & Ramey, C. T. (2001). The development of cognitive and academic abilities: Growth curves from an early childhood educational experiment. *Developmental Psychology, 37* (2), 231-242.

Campbell, F. A., & Ramey, C. T. (1994). Effects of early intervention on intellectual and academic achievement: A follow-up study of children from low-income families. *Child Development, 65* (2), 684-698.

Campbell, F. A., & Ramey, C. T. (1995). Cognitive and school outcomes for high-risk African American students at middle adolescence: Positive effects of early intervention. *American Education Research Journal, 32* (4), 743-772.

Campbell, F. A., Ramey, C. T., Pungello, E. P., Sparling, J., & Miller-Johnson, S. (2002). Early childhood education: Young adult outcomes from the Abecedarian project. *Applied Developmental Science, 6* (1), 42-57.

Campbell, F. A., Wasik, B. H., Pungello, E. P., Burchinal, M. R., Kainz, K., Barbarin, O., Sparling, J. J., & Ramey, C. T. (2008). Young adult outcomes from the Abecedarian and CARE early childhood educational interventions. *Early Childhood Research Quarterly, 23*, 452-466.

Clarke, S. H., & Campbell, F. A. (1998). Can intervention early prevent crime later? The Abecedarian project compared with other programs. *Early Childhood Research Quarterly, 13*, (2), 31-343.

Horacek, H. J., Ramey, C. T., Campbell, F. A., Hoffman, K. P., & Fletcher, R. H. (1987). Predicting school failure and assessing early intervention with high-risk children. *American Academy of Child and Adolescent Psychiatry, 26* (5), 758-763.

McLaughlin, A., Campbell, F. A., Pungello, E. P., & Skinner, M. (2007). Depressive symptoms in young adults: The influences of the early home environment and early educational child care. *Child Development, 78*, (3) 746-756.

Muennig, P., Robertson, D., Johnson, G., Campbell, F., Pungello, E. P., & Neidell, M. (2011). The effect of an early education program on adult health: The Carolina Abecedarian project randomized controlled trial. *American Journal of Public Health, 101* (3), 512-516.

Ramey, C. T., Campbell, F. A., Burchinal, M., Skinner, M. L., Gardner, D. M., & Ramey, S. L. (2000). Persistent effects of early intervention on high-risk children and their mothers. *Applied Developmental Science, 4* (1), 2-14.

Ramey, C. T., Yeates, K. O., & Short, E. J. (1984). The plasticity of intellectual development: Insights from preventive intervention. *Child Development, 55* (5), 1913-1925.

## **5. Curiosity Corner**

### **RCT 1:**

PCERC (Preschool Curriculum Evaluation Research Consortium) (2008). *Effects of preschool curriculum programs on school readiness* (NCER 2008-2009). Washington, DC: National Center for Education Research, Institute of Education

Sciences, U.S. Department of Education. Washington, DC: U.S. Government Printing Office.

**QED 1:**

Chambers, B., Chamberlain, A., Hurley, E., & Slavin, R. (2001). *Curiosity Corner: Enhancing preschoolers' language through comprehensive reform*. Paper presented at the annual meeting of the American Educational Research Association, Seattle, WA.

**6. Dare To Be You**

**RCT 1:**

Miller-Heyl, J., MacPhee, D., & Fritz, J. J. (1998). DARE to be You: A family-support, early prevention program. *Journal of Primary Prevention*, 18 (3), 257-285.

**RCT 2: (Bridges programme):**

NOTE: Evaluation on a recent adaptation of Dare To Be You called "Bridges" which is for families with children ages 5-8 and their classroom teachers.

Rattenborg, K., MacPhee, D., & Miller-Heyl, J. (n.d.) *Correlates of, and intervention effects on parent- school relationships*. Unpublished Manuscript.

Miller-Heyl, J., MacPhee, D., & Podunovich, R. (n.d.) *The effects of a community-based, Family- School Bridge Program on children, families, and teachers*. Unpublished Manuscript.

**QED 1 (replication of RCT 1 on two of the four sites: pre-school programme):**

MacPhee, D., & Fritz, J. (1999). Dare to be You replication project, Colorado Sites: Final evaluation report.

**QED 2 (pre-school programme):**

MacPhee, D., & Miller-Heyl, J. (2000). Head Start-University Partnership Grant DTBY Final Evaluation Report.

**QED 3 (combination of Elementary/Middle school programmes):**

MacPhee, D., Miller-Heyl, J., & Carroll, J. (no date) *Impact of the DARE to be You Family Support Program: Collaborative Replication in Rural Counties*. Manuscript submitted to American Journal of Community Psychology.

**7. Direct Instruction (Pre-school)**

**RCT 1:**

Miller, L. B., & Dyer, J. L. (1975). Four preschool programs: Their dimensions and effects. *Monographs of the Society for Research in Child Development*, 40 (5-6 Serial No. 162).

**RCT 2:**

Salaway, J. L. (2008). *Efficacy of a direct instruction approach to promote early learning* (Unpublished Ph.D. dissertation). Duquesne University.

**QED 1:**

Bereiter, C., & Englemann, S. (1966). *Teaching disadvantaged children in the preschool*. Englewood Cliffs, NJ: Prentice Hall.

**QED 2:**

Schweinhart, L. J., & Weikart, D. P. (1997). *Lasting differences: The High/Scope Preschool curriculum comparison study through age 23* (Monographs of the High/Scope Educational Research Foundation No. 12). Ypsilanti, MI: High/Scope Press.

**QED 3:**

Weisberg, P. (1988). Direct Instruction in the preschool. *Education and Treatment of Children*, 11 (4), 349-363.

## **8. Early Literacy and Learning Model**

**RCT 1:**

Preschool Curriculum Evaluation Research Consortium (2008). *Effects of preschool curriculum programs on school readiness* (NCER 2008-2009). Washington, DC: National Center for Education Research, Institute of Education Sciences, U.S. Department of Education. Washington, DC: U.S. Government Printing Office.

## **9. Even Start**

**RCT 1:**

St. Pierre, R. G., Swartz, J. P., Murray, D. M., Deck, D., & Nickel, P. (1993). *National evaluation of the Even Start family literacy program*. Cambridge, MA: Abt Associates, Inc.

**RCT 2:**

St. Pierre, R. G., Ricciuti, A., Tao, F., Creps, C., Swartz, J. P., Lee, W., Parsad, A., & Rimdzius, T. (2003). *Third national Even Start evaluation: Program impacts and implications for improvement*. Washington, DC: Department of Education.

St. Pierre, R. G., Ricciuti, A. E., Rimdzius, T. A. (2005). Effects of a family literacy program on low-literate children and their parents: Findings from an evaluation of the even start family literacy program. *Developmental Psychology*, 41 (6), 953-970.

**QED 1:**

St. Clair, L., & Jackson, B. (2006). Effect of family involvement training on the language skills of young elementary children from migrant families. *The School Community Journal*, 16, (1) 31-41.

**QED 2:**

Ryan, A. M. (2007). The effectiveness of the Manchester Even Start program in improving literacy outcomes for preschool Latino students. *Journal of Research in Childhood Education*, 20, (1) 15-26.

## **10. Healthy Families America**

**RCT 1:**

Caldera, D., Burrell, L., Rodriguez, K., Crowne, S. S., Rohde, C., & Duggan, A. (2007). Impact of a statewide home visiting program on parenting and on child health and development. *Child Abuse & Neglect*, 31 (8), 829-852.

Duggan, A., Rodriguez, K., Burrell, L., Shea, S., Rohde, C. & Caldera, D. (2005). *Evaluation of the Healthy Families Alaska Program. Final Report*. Johns Hopkins University: Author.

Duggan, A., Caldera, D., Rodriguez, K., Burrell, L., Rohde, C., & Crowne, S. S. (2007). Impact of a statewide home visiting program to prevent child abuse. *Child Abuse & Neglect*, 31 (8), 801-827.

**RCT 2:**

Bair-Merritt, M. H., Jennings, J. M., Chen, R., Burrell, L., McFarlane, E., Fuddy, L., et al. (2010). Reducing maternal intimate partner violence after the birth of a child: A randomized controlled trial of the Hawaii Healthy Start home visitation program. *Archives of Pediatrics and Adolescent Medicine*, 164 (1), 16-23.

CCAPR (Center on Child Abuse Prevention Research) (1996). *Intensive home visitation: A randomized trial, follow-up and risk assessment study of Hawaii's Healthy Start program* (Final Report). Chicago: Prevent Child Abuse America.

Duggan, A. K., McFarlane, E. C., Windham, A. M., Rohde, C. A., Salkever, D. S., Fuddy, L., et al. (1999). Evaluation of Hawaii's Healthy Start program. *Future of Children*, 9 (1), 66-90.

**RCT 3:**

DuMont, K., Mitchell-Herzfeld, S., Greene, R., Lee, E., Lowenfels, A., & Rodriguez, M. (2006). Healthy Families New York (HFNY) randomized trial: Impacts on parenting after the first two years. *Working Paper Series: Evaluating Healthy Families, OCFS Working Paper #1*.

DuMont, K., Mitchell-Herzfeld, S., Greene, R., Lee, E., Lowenfels, A., Rodriguez, M., et al. (2008). Healthy Families New York (HFNY) randomized trial: Effects on early child abuse and neglect. *Child Abuse & Neglect*, 32 (3), 295-315.

DuMont, K., Kirkland, K., Mitchell-Herzfeld, S., Ehrhard-Dietzel, S., Rodriguez, M.L., Lee, E., Layne, C. & Greene, R. (2010) *Final report: A randomized trial of Healthy Families New York (HFNY): Does home visiting prevent child maltreatment?* Rensselaer, NY: New York State Office of Children and Family Services.

Lee, E., Mitchell-Herzfeld, S., Lowenfels, A. A., Greene, R., Dorabawila, V., & DuMont, K. A. (2009). Reducing low birth weight through home visitation: A randomized controlled trial. *American Journal of Preventive Medicine*, 36 (2), 154-160.

Mitchell-Herzfeld, S., Izzo, C., Greene, R., Lee, E., & Lowenfels, A. (2005). *Evaluation of Healthy Families New York (HFNY): First year program impacts*. Albany, NY: University at Albany, Center for Human Services Research.

**RCT 4:**

Anisfeld, E., Sandy, J., Guterman, N. B., & Rauh, V. (2004). *Best Beginnings: A randomized controlled trial of a paraprofessional home visiting program* (Technical Report). Final Report submitted to the Smith Richardson Foundation and

New York State Office of Children and Family Services. New York: Columbia University College of Physicians and Surgeons, Department of Pediatrics, Alianza Dominicana, Inc., and Columbia University School of Social Work.

**RCT 5:**

Landsverk, J., Carrilio, T., Connelly, C. D., Ganger, W. C., Slymen, D. J., Newton, R. R., & Jones, C. (2002). *Healthy Families San Diego clinical trial: Technical report*. San Diego, CA: The Stuart Foundation.

**RCT 6:**

Davenport, D. (2001). *State of Arizona Office of the Auditor General, Performance Audit: Healthy Families Report to the Arizona legislature*. (No. 01-02). Phoenix, AZ: Author.

**QED 1:**

Salihu, H. M., Mbah, A. K., Jeffers, D., Alio, A. P., & Berry, L. (2009). Healthy Start program and fetto-infant morbidity outcomes: evaluation of program effectiveness. *Maternal and Child Health Journal*, 13 (1), 56-65.

**QED 2:**

Smith, M. V., Shao, L., Howell, H., Lin, H., & Yonkers, K. A. (2011). Perinatal depression and birth outcomes in a Healthy Start Project. *Maternal and Child Health Journal*, 15 (3), 401-409.

**QED 3:**

Galano, J., & Huntington, L. (1999). *Year VI evaluation of the Hampton, Virginia Healthy Families Partnership: 1992-1998*. Hampton, VA: Virginia Healthy Families Partnership.

**11. High/Scope Perry Pre-school**

**RCT 1: (Perry Preschool Program)**

Berrueta-Clement, J. R., Schweinhart, L. J., Barnett, W. S., Epstein A. S., & Weikart, D. P. (1984). *Changed lives: The effects of the Perry Preschool program on youths through age 19*. High Scope Educational Research Foundation, Ypsilanti, MI: High/Scope Press.

Heckman, J., Moon, S. H., Pinto, R., Savelyev, P., & Yavitz, A. (2010). Analyzing social experiments as implemented: A re-examination of the evidence from the HighScope Perry Preschool program. *Quantitative Economics*, 1 (1), 1-46.

Muennig, P., Schweinhart, L. J., Montie, J., & Neidell, M. (2009). Effects of a prekindergarten educational intervention on adult health: 37-year follow-up results of a randomized controlled trial. *American Journal of Public Health: Research and Practice*, 99 (8), 1431-1437.

Schweinhart, L. J. (2004). *The High/Scope Perry Preschool study through age 40: Summary, conclusions, and frequently asked questions*. Ypsilanti, MI: High/Scope Press.

**RCT 2: (Preschool Curriculum Comparison)**

Schweinhart, L. J., & Weikart, D. P. (1997). The High/Scope Preschool curriculum comparison study through age 23. *Early Childhood Research Quarterly*, 12 (2), 117-143.

Schweinhart, L. J., Weikart, D. P., & Lerner, M. B. (1986). Consequences of three preschool curriculum models through age 15. *Early Childhood Research Quarterly*, 1 (1), 15-45.

**QED 1:** (Michigan, post-test only)

Epstein, A. S. (1993). *Training for quality: Improving early childhood programs through systematic inservice training*. Ypsilanti, MI: The High/Scope Press.

**QED 2:** (South Carolina, public preschool study)

Barnett, W. S., Frede, E. C., Mobasher, H., & Moher, P. (1988). The efficacy of public preschool programs and the relationships of program quality to efficacy. *Educational Evaluation and Policy Analysis*, 10 (1), 37-49.

Frede, E., & Barnett, W. S. (1992). Developmentally appropriate public school preschool: A study of implementation of the high/scope curriculum and its effects on disadvantaged children's skills at first grade. *Early Childhood Research Quarterly*, 7, (4), 483-499.

## **12. Incredible Years BASIC**

**RCT 1:**

Gross, D., Fogg, L., Webster-Stratton, C., Garvey, C., Julian, W., & Grady, J. (2003). Parent training with families of toddlers in day care in low-income urban communities. *Journal of Consulting and Clinical Psychology*, 71 (2), 261-278.

**RCT 2:**

Hutchings, J., Gardner, F., Bywater, T., Daley, D., Whitaker, C., Jones, K., et al. (2007). Parenting intervention in Sure Start services for children at risk of developing conduct disorder: Pragmatic randomized controlled trial. *British Medical Journal*, 334 (7595), 1-7.

Jones, K., Daley, D., Hutchings, J., Bywater, T., & Eames, C. (2007). Efficacy of the Incredible Years basic parent training programme as an early intervention for children with conduct problems and ADHD. *Child: Care, Health And Development*, 33 (6), 749-756.

**RCT 3:**

Larsson, B., Fossum, B., Clifford, G., Drugli, M. Handegard, B. Morch, W. (2009). Treatment of oppositional defiant and conduct problems in young Norwegian children: Results of a randomized controlled trial. *European Child Adolescent Psychiatry*, 18(1),42-52.

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

**RCT 4:**

Webster-Stratton, C., Kolpacoff, M., & Hollinsworth, T. (1988). Self-administered videotape therapy for families with conduct-problem children: Comparison with two cost-effective treatments and a control group. *Journal of Consulting and Clinical Psychology, 56*, 558-566.

Webster-Stratton, C., Hollinsworth, T., & Kolpacoff, M. (1989). The long-term effectiveness and clinical significance of three cost-effective training programs for families with conduct-problem children. *Journal of Consulting and Clinical Psychology, 57* (4), 550-553.

Webster-Stratton, C. (1990). Long-term follow-up of families with young conduct-problem children: From Preschool to grade school. *Journal of Clinical Child Psychology, 19*, 144-149.

**RCT 5:**

Gardner, F., Burton, J., & Klimes, I. (2006). Randomized controlled trial of a parenting intervention in the voluntary sector for reducing conduct problems in children: Outcomes and mechanisms of change. *Journal of Child Psychology and Psychiatry, 47*, 1123-1132.

**RCT 6:**

Lavigne J. V., LeBailly, S. A., Gouze, K. R., Cicchetti, C., Pochyly, J., Arend, R., et al. (2008). Treating oppositional defiant disorder in primary care: A comparison of three models. *Journal of Pediatric Psychology, 33* (5), 449-461.

**RCT 7:**

Scott, S., Spender, Q., Doolan, M., Jacobs, B., & Aspland, H. (2001). Multicentre controlled trial of parenting group's for child antisocial behaviour in clinical practice. *British Medical Journal, 323* (28), 1-5.

**RCT 8:**

Webster-Stratton, C., & Herman, K. C. (2008). The impact of parent behavior-management training on child depressive symptoms. *Journal of Counseling Psychology, 55* (4), 473-484.

### **13. Interactive Book Reading**

**RCT 1:**

Wasik, B. A., & Bond, M. A. (2001). Beyond the pages of a book: Interactive book reading and language development in preschool classrooms. *Journal of Educational Psychology, 93* (2), 243-250.

**RCT 2:**

Wasik, B. A., Bond, M. A., & Hindman, A. (2006). The effects of a language and literacy intervention on Head Start children and teachers. *Journal of Educational Psychology, 98* (1), 63-74.

**RCT 3:**

Wasik, B. A., & Hindman, A. H. (2011). Improving vocabulary and pre-literacy skills of at-risk preschoolers through teacher professional development. *Journal of Educational Psychology, 103* (2), 455-469.

#### **14. Let's Begin With the Letter People**

##### **RCT 1:**

Preschool Curriculum Evaluation Research Consortium (2008). *Effects of preschool curriculum programs on school readiness* (NCER 2008-2009). Washington, DC: National Center for Education Research, Institute of Education Sciences, U.S. Department of Education. Washington, DC: U.S. Government Printing Office.

##### **RCT 2:**

Assel, M., Landry, S., Swank, P., & Gunnewig, S. (2007). An evaluation of curriculum, setting, and mentoring on the performance of children enrolled in prekindergarten. *Reading and Writing, 20* (5), 463-494.

##### **RCT 3:**

Fischel, J. E., Bracken, S. S., Fuchs-Eisenberg, A., Spira, E. G., Katz, S., & Shaller, G. (2007). Evaluation of curricular approaches to enhance preschool early literacy skills. *Journal of Literacy Research, 39* (4), 471-501.

##### **QED 1:**

LAUSD (Los Angeles Unified School District) (2002). *Building Language for Literacy Pre-Kindergarten Study*. Scholastic.

#### **15. Multidimensional Treatment Foster Care**

##### **RCT 1:**

Chamberlain, P., & Reid, J. B. (1991). Using a specialized foster care community treatment model for children and adolescents leaving the state mental hospital. *Journal of Community Psychology, 19*, 266-276.

##### **RCT 2:**

Chamberlain, P., & Reid, J. (1998). Comparison of two community alternatives to incarceration for chronic juvenile offenders. *Journal of Consulting and Clinical Psychology, 6* (4), 624-633.

Eddy, J. M., & Chamberlain, P. (2000). Family management and deviant peer association as mediators of the impact of treatment condition on youth antisocial behavior. *Journal of Consulting and Clinical Psychology, 68*, 857-863.

Eddy, J. M., Whaley, R. B., & Chamberlain, P. (2004). The prevention of violent behavior by chronic and serious male juvenile offenders: A 2-year follow-up of a randomized clinical trial. *Journal of Emotional and Behavioral Disorders, 12*, 2-8.

Smith, D. K., Chamberlain, P., & Eddy, J. M. (2010). Preliminary support for Multidimensional Treatment Foster Care in reducing substance use in delinquent boys. *Journal of Child and Adolescent Substance Abuse, 19*, 343-358.

##### **RCT 3:**

Westermark, P. K., Hansson, K., Olsson, M. (2011). Multidimensional treatment

foster care (MTFC): Results from an independent replication. *Journal of Family Therapy*, 33 (1), 20-41.

**RCT 4:**

Leve, L. D., Chamberlain, P., & Reid, J. B. (2005). Intervention outcomes for girls referred from juvenile justice: Effects on delinquency. *Journal of Consulting and Clinical Psychology*, 73, 1181-1185.

Kerr, D., Leve, L. D., & Chamberlain, P. (2009). Pregnancy rates among juvenile justice girls in two RCTs of Multidimensional Treatment Foster Care. *Journal of Consulting and Clinical Psychology*, 77, 588-593.

Leve, L. D., & Chamberlain, P. (2005). Association with delinquent peers: Intervention effects for youth in the juvenile justice system. *Journal of Abnormal Child Psychology*, 33, 339-347.

Leve, L. D., & Chamberlain, P. (2007). A randomized evaluation of Multidimensional Treatment Foster Care: Effects on school attendance and homework completion in juvenile justice girls. *Research on Social Work Practice*, 17 (6), 657-663.

Chamberlain, P., Leve, L. D., & DeGarmo, D. S. (2007). Multidimensional treatment foster care for girls in the juvenile justice system: 2-year follow-up of a randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 75 (1), 187-193.

**RCT 5:** (Project KEEP, similar but not identical to MTFC)

Chamberlain, P., Price, J., Leve, L. D., Laurent, H., Landsverk, J. A., & Reid, J. B. (2008). Prevention of behavior problems for children in foster care: Outcomes and mediation effects. *Prevention Science*, 9, 17-27.

**RCT 6:**

Fisher, P. A., & Kim, H. K. (2007). Intervention effects on foster preschoolers? Attachment-related behaviors from a randomized trial. *Prevention Science*, 8, 161-170.

**QED 1:**

Chamberlain, P. (1990). Comparative evaluation of Specialized Foster Care for seriously delinquent youths: A first step. *Community Alternatives: International Journal of Family Care*, 2 (2), 21-36.

## **16. Nurse Family Partnership**

**RCT 1:**

Eckenrode, J., Campa, M., Luckey, D. W., Henderson, C. R., Cole, R., Kitzman, H., Anson, E., Sidora-Arcoleo, K., Powers, J., & Olds, D. (2010). Long-term effects of prenatal and infancy nurse home visitation on the life course of youths: 19-year follow-up of a randomized trial. *Archives of Pediatric & Adolescent Medicine*, 164, 9-15.

Eckenrode, J., Ganzel, B., Henderson Jr, C. R., Smith, E., Olds, D. L., Powers, J., Cole, R., Kitzman, H., & Sidora, K. (2000). Preventing child abuse and neglect through a program of nurse home visitation: the limiting effects of domestic violence. *Journal of the American Medical Association*, 284 (11), 1385-1391.

Izzo, C. V., Eckenrode, J., Smith, E. G., Henderson, C. R., Cole, R., Kitzman, H., & Olds, D. L. (2005). Reducing the impact of uncontrollable stressful life events through a program of nurse home visitation for new parents. *Prevention Science, 6* (4), 269-274

Olds, D. L., Henderson, C. R., Tatelbaum, R., & Chamberlin, R. (1986). Improving the delivery of prenatal care and outcomes of pregnancy: A randomized trial of nurse home visitation. *Pediatrics, 77*, 16-28.

Olds, D. L., Henderson Jr, C. R., Chamberlin, R., Tatelbaum, R. (1986). Preventing child abuse and neglect: A randomized trial of nurse home visitation. *Pediatrics, 78* (1), 65-78.

Olds, D. L., Henderson Jr, C. R., Tatelbaum, R., & Chamberlin, R. (1988). Improving the life- course development of socially disadvantaged mothers: A randomized trial of nurse home visitation. *American Journal of Public Health 78*, 1436-1445.

Olds, D. L., Henderson, C. R., & Kitzman, H. (1994). Does prenatal and infancy nurse home visitation have enduring effects on qualities of parental caregiving and child health at 25 to 50 months. *Pediatrics, 93*, 89-98.

Olds, D. L., Henderson Jr, C. R., & Tatelbaum, R. (1994). Prevention of intellectual impairment in children of women who smoke cigarettes during pregnancy. *Pediatrics 93*, 228-233.

Olds, D. L., Henderson, C. R., Kitzman, H., & Cole, R. (1995). Effects of prenatal and infancy nurse home visitation on surveillance of child maltreatment. *Pediatrics, 95* (3), 365-372.

Olds, D., Henderson Jr, C. R., Cole, R., Eckenrode, J., Kitzman, H., Luckey, D., et al. (1998). Long- term effects of nurse home visitation on children's criminal and antisocial behavior: 15-year follow-up of a randomized trial. *Journal of The American Medical Association, 278*, 644-652.

Zielinski, D. S., Eckenrode, J., & Olds, D. L. (2009). Nurse home visitation and the prevention of child maltreatment: Impact on the timing of official reports. *Development and psychopathology, 21* (2), 441-453.

## **RCT 2:**

Kitzman, H., Olds, D. L., Sidora, K., Henderson Jr, C. R., Hanks, C., Cole, R., Luckey, D. W., Bondy, J., Cole, K., & Glazner, J. (2000). Enduring effects of nurse home visitation on maternal life course: A 3-year follow-up of a randomized trial. *Journal of the American Medical Association 283*, 1983-1989.

Kitzman, H., Olds, D. L., Cole, R. E., Hanks, C. A., et al. (2010). Enduring effects of prenatal and infancy home visiting by nurses on children: Follow-up of a randomized trial among children at age 12 years. *Archives of Pediatric & Adolescent Medicine, 164* (5), 412-418.

Olds, D. L., Kitzman, H., Cole, R., Robinson, J., Sidora, K., Luckey, D. W., Henderson, Jr, C. R., Hanks, C., Bondy, J., & Holmberg, J. (2004). Effects of nurse home visiting on maternal life course and child development: Age 6 follow-up results of a randomized trial. *Pediatrics, 114*, 1550-1559.

Olds, D. L., Kitzman, H., Hanks, C., Cole, R., Anson, E., Sidora-Arcoleo, K., Luckey, D. W., Henderson, C. R., Holmberg, J., Tutt, R. A., Stevenson, A. J., & Bondy, J. (2007). Effects of nurse home visiting on maternal and child functioning: Age 9 follow-up of a randomized trial. *Pediatrics*, *120*, 832-845.

**RCT 3:**

Olds, D. L., Robinson, J., O'Brien, R., Luckey, D. W., Pettitt, L. M., Henderson, C. R., Ng, R. K., Sheff, K. L., Korfmacher, J., Hiatt, S., & Talmi, A. (2002). Home visiting by paraprofessionals and by nurses: A randomized, controlled trial. *Pediatrics*, *110*, 486-496.

Olds, D. L., Robinson, J., Pettitt, L., Luckey, D. W., Holmberg, J., Ng, R. K., Isacks, K., Sheff, K., & Henderson Jr., C. R. (2004). Effects of home visits by paraprofessionals and by nurses: Age 4 follow-up results of a randomized trial. *Pediatrics*, *114*, 1560-1568.

**RCT 4:**

Nguyen, J. D., Carson, M. L., Parris, K. M., & Place, P. (2003). A comparison pilot study of public health field nursing home visitation program interventions for pregnant Hispanic adolescents. *Public Health Nursing*, *20* (5), 412-418.

## **17. Parent Child Home Programme**

**RCT 1:**

Scarr, S., & McCartney, K. (1988). Far from home: An experimental evaluation of the Mother-Child Home Program in Bermuda. *Child Development*, *59*, 531-543.

**RCT 2:**

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.

**QED 1:**

Ginandes, J., & Roth, H. A. (1973). Replication of the Mother-Child Home Program by a foster care agency. *Child Welfare*, *12* (2), 75-81.

**QED 2:**

Madden, J., Levenstein, P., & Levenstein, S. (1976). Longitudinal IQ outcomes of the Mother-Child Home Program. *Child Development*, *47*, 1015-1025.

**QED 3:**

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.

**QED 4:** Allen, L., Sethi, A., & Astuto, J. (2007). An evaluation of a toddlerhood home visiting program at kindergarten age. *NHSA Dialog*, *10* (1), 36-57.

## **18. Parents as Teachers**

**RCT 1 and 2:**

Wagner, M. M., & Clayton, S. L. (1999). Parents as Teachers Program: Results from two demonstrations. *The Future of Children*, 9 (1), 91-115.

**RCT 3:**

Wagner, M., Spiker, D., & Linn, M. I. (2002). The effectiveness of the Parents as Teachers program with low-income parents and children. *Topics in Early Childhood Special Education*, 22 (2), 67-81.

**QED 1:**

Albritton, S., Klotz, J., & Roberson, T. (2004). The effects of participating in a Parents as Teachers program on parental involvement in the learning process at school and home. *E-Journal of Teaching and Learning in Diverse Settings*, 1 (2), 188-208.

**QED 2:**

Pfannenstiel, J., & Seltzer, D. (1989). New Parents as Teachers: Evaluation of an early parent education program. *Early Childhood Research Quarterly*, 4, 1-18.

## **19. Parent Child Interaction Therapy (PCIT)**

**RCT 1:**

Bagner, D. M., & Eyberg, S. M. (2007). Parent-Child Interaction Therapy for disruptive behavior in children with mental retardation: A randomized controlled trial. *Journal of Clinical Child and Adolescent Psychology*, 36 (3), 418-429.

**RCT 2:**

Bagner, D. M., Sheinkopf, S. J., Vohr, B. R., & Lester, B. M. (2010). Parenting intervention for externalizing behavior problems in children born premature: an initial examination. *Journal of Developmental & Behavioral Pediatrics*, 31 (3), 209-216

**RCT 3:**

Berkovits, M. D., O'Brien, K. A., Carter, C. G., & Eyberg, S. M. (2010). Early identification and intervention for behavior problems in primary care: A comparison of two abbreviated versions of Parent-Child Interaction Therapy. *Behavior Therapy*, 41 (3), 375-387.

**RCT 4:**

Chaffin, M., Funderburk, B., Bard, D., Valle, L. A., & Gurwitch, R. (2011). A combined motivation and Parent-Child Interaction Therapy package reduces child welfare recidivism in a randomized dismantling field trial. *Journal of Consulting and Clinical Psychology*, 79 (1), 84-95.

**RCT 5:**

Chaffin, M., Silovsky, J. F., Funderburk, B., Valle, L. A., Brestan, E. V., Balachova, T., et al. (2004). Parent-Child Interaction Therapy with physically abusive parents: Efficacy for reducing future abuse reports. *Journal of Consulting and Clinical Psychology*, 72 (3), 500-510.

**RCT 6:**

Matos, M., Bauermeister, J. J., & Bernal, G. (2009). Parent-Child Interaction Therapy for Puerto Rican preschool children with ADHD and behavior problems: A pilot efficacy study. *Family Process*, 48, 232-252.

**RCT 7:**

McCabe, K., & Yeh, M. (2009). Parent-Child Interaction Therapy for Mexican Americans: A randomized clinical trial. *Journal of Clinical Child & Adolescent Psychology, 38* (5), 753-759.

**RCT 8:**

Nixon, R. D. V., Sweeney, L., Erickson, D. B., & Touyz, S. W. (2003). Parent-Child Interaction Therapy: A comparison of standard and abbreviated treatments for oppositional defiant preschoolers. *Journal of Consulting and Clinical Psychology, 71*, 251-260.

**RCT 9:**

Nixon, R. D. V., Sweeney, L., Erickson, D. B., & Touyz, S. W. (2004). Parent-Child Interaction Therapy: One- and two-year follow-up of standard and abbreviated treatments for oppositional preschoolers. *Journal of Abnormal Child Psychology, 32* (3), 263-271.

**RCT 10:**

Schuhmann, E. M., Foote, R. C., Eyberg, S. M., Boggs, S. R., & Algina, J. (1998). Efficacy of Parent-Child Interaction Therapy: Interim report of a randomized trial with short-term maintenance. *Journal of Clinical Child Psychology, 27* (1), 34-45.

**RCT 11:**

Thomas, R., & Zimmer-Gembeck, M. J. (2011). Accumulating evidence for Parent-Child Interaction Therapy in the prevention of child maltreatment. *Child Development, 82* (1), 177-192.

**QED 1:**

Boggs, S. R., Eyberg, S. M., Edwards, D., Rayfield, A., Jacobs, J., Bagner, D., & Hood, K. (2004). Outcomes of Parent-Child Interaction Therapy: A comparison of dropouts and treatment completers one to three years after treatment. *Child & Family Behavior Therapy, 26* (4), 1-22.

**QED 2:**

Capage, L. C., Bennett, G. M., McNeil, C. B. (2001). A comparison between African American and Caucasian children referred for treatment of disruptive behavior disorders. *Child & Family Behavior Therapy, 23*, 1-14.

**QED 3:**

Chase, R. M., & Eyberg, S. M. (2008). Clinical presentation and treatment outcome for children with comorbid externalizing and internalizing symptoms. *Journal of Anxiety Disorders, 22*, 273-282.

**QED 4:**

Funderburk, B. W., Eyberg, S., Newcomb, K., McNeil, C. B., Hembree-Kigin, T., & Capage, L. (1999). Parent-Child Interaction Therapy with behavior problem children maintenance of treatment effects in the school setting. *Child & Family Behavior Therapy, 20* (2), 17-38.

**QED 5:**

Lanier, P., Kohl, P. L., Benz, J., Swinger, D., Moussette, P., & Drake, B. (2011). Parent-Child Interaction Therapy in a community setting: Examining outcomes, attrition, and treatment setting. *Research on Social Work Practice, 21*, 689-698.

**QED 6:**

Leung, C., Tsang, S., Heung, K., & Yiu, I. (2009). Effectiveness of Parent-Child Interaction Therapy (PCIT) among Chinese families. *Research on Social Work Practice, 19* (3), 304-313.

**QED 7:**

McNeil, C. B., Capage, L. C., Bahl, A., & Blanc, H. (1999). Importance of early intervention for disruptive behavior problems: Comparison of treatment and waitlist-control groups. *Early Education & Development, 10*, 445-454.

**QED 8:**

Timmer, G., Urquiza, A. J., Zebell, N. M. (2006). Challenging foster caregiver–maltreated child relationships: The effectiveness of Parent–Child Interaction Therapy. *Children and Youth Services Review, 28* (1), 1-19.

**QED 9:**

Timmer, S. G., Ware, L. M., Urquiza, A. J. & Zebell, N. M. (2010). The effectiveness of Parent-Child Interaction Therapy for victims of interparental violence. *Violence and Victims, 25* (4), 486-503.

## **20. PATHS (Pre-school)**

**QED 1:**

Domitrovich, C. E., Cortes, R., & Greenberg, M. T. (2007). Improving young children's social and emotional competence: A randomized trial of the Preschool PATHS Program. *Journal of Primary Prevention, 28* (2), 67-91.

## **21. Ready Set Leap**

**RCT 1:**

PCERC (Preschool Curriculum Evaluation Research Consortium) (2008). *Effects of preschool curriculum programs on school readiness* (NCER 2008-2009). Washington, DC: National Center for Education Research, Institute of Education Sciences, U.S. Department of Education. Washington, DC: U.S. Government Printing Office.

**RCT 2:**

Abt Associates, Inc. (2007, March). *Findings from Project Upgrade in Miami-Dade County*. Cambridge, MA: Abt Associates.

**RCT 3:**

RMC Research Corporation. (2003). *Ready, Set, Leap! program: Newark prekindergarten study 2002-2003 final report*. Retrieved from LeapFrog SchoolHouse website: [http://www.leapfrogschoolhouse.com/content/research/RMC\\_RSLreport.pdf](http://www.leapfrogschoolhouse.com/content/research/RMC_RSLreport.pdf).

## **22. Trauma-Focused CBT**

**RCT 1:**

Cohen, J. A., & Mannarino, A. P. (1996). A treatment outcome study for sexually abused preschool children: Initial findings. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35 (1), 42-50.

Cohen, J. A., & Mannarino, A. P. (1997). A treatment study for sexually abused preschool children: Outcome during a one-year follow-up. *Journal of the American Academy of Child & Adolescent Psychiatry*, 36 (9), 1228-1235.

**RCT 2:**

Cohen, J., Deblinger, E., Mannarino, A., & Steer, R. (2004). A multisite, randomized controlled trial for children with sexual abuse-related PTSD symptoms. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43 (4), 393-402.

Deblinger, E., Mannarino, A. P., Cohen, J. A., & Steer, R. A. (2006). Follow-up study of a multisite, randomized, controlled trial for children with sexual abuse-related PTSD symptoms: Examining predictors of treatment response. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43 (4), 393-402.

**RCT 3:**

Cohen, J. A., Mannarino, A. P., & Iyengar, S. (2011) Community treatment of posttraumatic stress disorder for children exposed to intimate partner violence: a randomized controlled trial. *Archives of Pediatric & Adolescent Medicine*, 165, 16-21.

**RCT 4:**

Cohen, J. A., Mannarino, A. P., & Knudsen, K. (2005). Treating sexually abused children: 1 year follow-up of a randomized controlled trial. *Child Abuse and Neglect*, 29 (2), 135-145.

**RCT 5:**

Deblinger, E., Stauffer, L., & Steer, R. (2001). Comparative efficacies of supportive and cognitive behavioral group therapies for children who were sexually abused and their nonoffending mothers. *Child Maltreatment*, 6 (4), 332-343.

**RCT 6:**

Deblinger, E., Steer, R. A., & Lippmann, J. (1999). Two-year follow-up study of cognitive behavioral therapy for sexually abused children suffering post-traumatic stress symptoms. *Child Abuse & Neglect*, 23 (12), 1371-1378.

**RCT 7:**

Jaycox, L. H., Cohen, J. A., Mannarino, A. P., Walker, D. W., Langley, A. K., Gegenheimer, K. L. et al. (2010) Children's mental health care following Hurricane Katrina: A field trial of trauma-focused psychotherapies. *Journal of Traumatic Stress*, 23, 223-231.

**23. Triple P Level 4 (Self-directed)****RCT 1:**

Markie-Dadds, C., & Sanders, M. R. (2006a). A controlled evaluation of an enhanced self-directed behavioural family intervention for parents of children with conduct problems in rural and remote areas. *Behaviour Change*, 23 (1), 55-72.

**RCT 2:**

Markie-Dadds, C., & Sanders, M. R. (2006b). Self-directed Triple P (Positive Parenting Program) for mothers with children at-risk of developing conduct problems. *Behavioural and Cognitive Psychotherapy*, 34 (3), 259-276.

**RCT 3:**

Morawska, A., & Sanders, M. R. (2006). Self-administered behavioural family intervention for parents of toddlers: Part I—Efficacy. *Journal of Clinical and Consulting Psychology*, 74, 10-19.

**RCT 4:**

Morawska, A., & Sanders, M. R. (2007). Are parent-reported outcomes for self directed or telephone-assisted behavioral family intervention enhanced if parents are observed? *Behavior Modification*, 31 (3), 279-297.

**RCT 5:**

Nicholson, J. M., & Sanders, M. R. (1999). Randomized controlled trial of behavioral family intervention for the treatment of child behavior problems in stepfamilies. *Journal of Divorce and Remarriage*, 30 (3/4), 1-23.

**RCT 6:**

Sanders, M. R., Markie-Dadds, C., Tully, L. A., & Bor, W. (2000). The Triple P-Positive Parenting Program: A comparison of enhanced, standard, and self-directed behavioral family intervention for parents of children with early onset conduct problems. *Journal of Consulting and Clinical Psychology*, 68 (4), 624-640.

Sanders, M. R., Bor, W., & Morawska, A. (2007). Maintenance of treatment gains: A comparison of enhanced, standard, and self-directed Triple P-Positive Parenting Program. *Journal of Abnormal Child Psychology*, 35 (6), 983-998.

**RCT 7:**

Stallman, H. M., & Ralph, A. (2007). Reducing risk factors for adolescent behavioural and emotional problems: A pilot randomised controlled trial of a self-administered parenting intervention. *Australian e-Journal for the Advancement of Mental Health*, 6 (2), 125-137.

**24. Triple P Level Four (Group)**

**RCT 1:**

Bodenman, G., Cina, A., Ledenmann, T., & Sanders, M. R. (2008). The efficacy of Positive Parenting Program (Triple P) in improving parenting and child behavior: A comparison with two other treatment conditions. *Behaviour Research and Therapy*, 46 (4), 411-442.

**RCT 2:**

Gallart, S. C., & Matthey, S. (2005). The effectiveness of Group Triple P and the impact of the four telephone contacts. *Behaviour Change*, 22 (2), 71-80.

**RCT 3:**

Hahlweg, K., Heinrichs, N., Kuschel, A., Bertram, H., & Naumann, S. (2010). Long-term outcome of a randomized controlled universal prevention trial through a positive parenting program: Is it worth the effort? *Child and Adolescent Psychiatry and Mental Health*, 4, 14-27.

**RCT 4:**

Leung, C., Sanders, M. R., Leung, S., Mak, R., & Lau, J. (2003). An outcome evaluation of the implementation of the Triple P-Positive Parenting Program in Hong Kong. *Family Process*, 42 (4), 531-544.

**RCT 5:**

Martin, A. J., & Sanders, M. R. (2003). Balancing work and family: A controlled evaluation of the Triple P-Positive Parenting Program as a work-site intervention. *Child and Adolescent Mental Health*, 8 (4), 161-169.

**RCT 6:**

Matsumoto, Y., Sofronoff, K., & Sanders, M. R. (2007). The efficacy and acceptability of the Triple P-Positive Parenting Program with Japanese parents. *Behaviour Change*, 24 (4), 205-218.

**RCT 7:**

Matsumoto, Y., Sofronoff, K., & Sanders, M. R. (2010). Investigation of the effectiveness and social validity of the Triple P Positive Parenting Program in Japanese society. *Journal of Family Psychology*, 24 (1), 87-91.

**QED 1:**

Zubrick, S. R., Ward, K. A., Silburn, S. R., Lawrence, D., Williams, A. A., Blair, E., et al. (2005). Prevention of child behavior problems through universal implementation of a group behavioral family intervention. *Prevention Science*, 6 (4), 287-304.