

Early Childhood Intervention: Assessing the evidence

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All errors that remain are, of course, my own.



Executive Summary

Analysis of Australian longitudinal data, collected through the Longitudinal Study of Australian Children and the Australian Temperament Project, affirms that what happens early in a child's life can continue to exert an effect throughout childhood. This creates a theoretical window of opportunity to improve a child's development trajectory over the longer term.

Early childhood interventions are programs that aim to do this. They are intended to address the impacts of intractable social problems such as low educational achievement and attainment, crime, welfare dependence, family conflict and instability, unemployment and poverty, early in the life course.

In the context of increasing disadvantage in welfaredependent communities in Australia, governments spend considerable sums on these programs. The rationale is that investment, in theory, will reduce the cost of government services in the long run. But this rationale is borne out only if the programs are proven to be effective. Otherwise, money is simply wasted.

Broadly speaking, there are two main types of early childhood intervention practiced in Australia:

• Place-based interventions: 'one-stop shops' in disadvantaged communities offering openly-accessible services, including centre-based early learning,

playgroups, facilitated parent-child interaction sessions and parenting programs. Participation is driven by users.

• Targeted interventions: a more structured program involving specific steps and multiple modules, sometimes driven by referral from child protection services

This report brings together all the available evidence, and scrutinises state and federal government programs from the past two decades that focus on improving children's cognitive, behavioural and emotional outcomes and have a publicly-available evaluation report (see Appendix A).

Mirroring an observation from the Australian Institute of Family Studies over a decade ago, the chief finding of this report is that there is a lack of high-quality research to suggest that Australian programs have a significant impact on mitigating the developmental impacts of childhood disadvantage.

Programs run in Australia are plagued by the use of simplistic evaluation methodologies that use lowquality and subjective data such as surveys. Evaluations often do not measure the impact on the children. A lack of follow-up means the endurance of any effects are impossible to determine. This makes it difficult to definitively ascertain whether there is a model that works to effect long-lasting change, much less whether it represents value for money. A few conclusions can be drawn from the evidence. Place-based programs and the 'service coordination' model of improving outcomes has not been found to have particularly strong impacts. Where the place-based model has shown signs of effectiveness, it has involved a structured program and taken place in an existing site of community engagement such as a school.

There is also some evidence that openly-accessible services benefit the less disadvantaged people more than the most disadvantaged, in the communities in which they are located.

Some targeted interventions have been found to have stronger impacts, but others have no impacts — or even worse outcomes on some measures. This is partially driven by the fact that targeted interventions are often more intensive, given the characteristics of the participants.

Although early childhood interventions are promising in theory, Australian governments have yet to get it right. Overseas evidence on best practice in this area has not been substantially used to inform policy, and nor has there been a concerted effort to replicate a similar evidence base for Australia. In order to give early childhood intervention programs the best chance of success, the government should:

• Better evaluate government programs: programs run by government departments should require evaluation plans that utilise quality methodologies and data. Program details, including expenditure and reach of the program, should be publicly available;

• **Fund experimental research:** Governments should set aside a small portion of funds to fund randomised controlled trials of high-potential (informed by research and evidence) early childhood programs;

• Create avenues for government and philanthropic cooperation: The creation of a 'What Works' clearinghouse or Centre for Excellence can drive information-sharing and lead to a greater proliferation of effective intervention programs.

Effective, efficient and intelligent use of early childhood interventions could have substantial impacts. Public policy should be focused on whether those outcomes are being achieved by existing programs, and on trialling and evaluating new models in an effort to find the best way forward.



Introduction to early childhood intervention

A number of particularly pressing, and seemingly intractable, social problems — such as low educational achievement, crime, welfare dependence, family instability, unemployment and poverty — are caused by, and in turn inform, intergenerational disadvantage.¹ Evidence suggests gaps between advantaged and disadvantaged children emerge in early childhood and continue to widen throughout children's lives.²

Early childhood interventions address this issue through programs and activities that attempt to mitigate adverse development in early childhood, with an end to improving a child's development trajectory over the longer term.³ Programs aim to close gaps in school readiness and ensure disadvantaged children are able to better achieve in school, or else shift the entire life trajectory of disadvantaged children, and thereby rectify this disadvantage.

Early childhood interventions have existed for more than 50 years, with the first of note being the Perry Preschool Program.⁴ They have gained more currency as a policy tool due to the work of Nobel Prize-winning American economist James Heckman, whose work demonstrates how multifaceted, targeted intervention programs for disadvantaged children, from birth to age five, are more effective and efficient than those that take place later in the life course,⁵ and can deliver savings to governments and communities.

The notion of prevention through early intervention — and the linked premise of early intervention as a money-saving investment — infuse public policy throughout the world.

The phenomenon thus far has largely been given shape by the New Zealand approach to welfare reform: the 'investment' approach, which aims to identify people who have a high likelihood of remaining in the welfare system for a long period of time — and intervening early to prevent that from occurring.⁶ Prevention through early intervention has become prominent in recent years in the Australian policy landscape as well, with the notion underpinning the lengthy and detailed *A New System for Better Employment and Social Outcomes* report (colloquially known as the McClure Welfare Review). Minister for Social Services, Christian Porter, has reaffirmed the government's commitment to such an approach.⁷

Though a focus on early childhood intervention as part of prevention is popular within academic circles, and has been for some time, it has not featured prominently on the Australian public policy radar. This is despite the social problems that inspire such an approach being as present in Australia as elsewhere.

Nevertheless, there has been a mushrooming of early childhood intervention initiatives over the past decade and a half. This proliferation has not been concentrated in a single sector. While some services and programs are run by state or federal governments, others are run by charities and NGOs with private sector, philanthropic and taxpayer funding. Not only does this complicate painting a picture of what precisely is happening, it blurs the lines of accountability about who or what is responsible for program outcomes.

Given this context of multifarious initiatives run by different organisations funded through various means, this report canvasses what programs exist and whether there is high-quality research to suggest they have a significant impact.

The definition of early childhood intervention is broad because remedial or preventive programs aimed at early childhood (when children are aged 0-5) are incredibly diverse. Many are made up of several components or modules, whereas others have just one main component. They also differ in terms of the target audience: there are child-focused, parent-focused, and family-focused programs; some are delivered in early childhood settings, others in family homes or elsewhere in the community.

Table 1: Types of early childhood interventions⁸

Primary	Programs that are openly accessible where participation is driven by users. Programs such as Communities for Children, and many varieties of Triple P (the Positive Parenting Program) are primary-level interventions.
Secondary	Programs that are targeted towards families considered at risk or vulnerable. Programs such as HIPPY and Pathways to Prevention are secondary-level interventions.
Tertiary	Programs that are targeted towards families to prevent the further development of particular problems. Programs designed for families identified by child protection services are usually considered tertiary-level interventions.

Since the development of children is inextricably linked to their parents or caregivers,⁹ many programs will have a 'parenting program' component in addition to a childfocused component. However, others emphasise wraparound services that focus explicitly on the relationship between parent and child.

The outcomes measured by these programs include cognitive, behavioural, social and emotional skills, including school readiness. As the focus of this report is on programs that generate educational or social outcomes, it does not examine programs principally for Indigenous children (given the specific cultural components of those programs), for children with disabilities, or where health is the major outcome measured. Given that interventions are, by definition, remedial in their aims (one paper describes them as attempting to rectify "inequality in skill acquisition"¹⁰), and developmental disadvantage is strongly related to socioeconomic disadvantage, there is a *prima facie* case for limiting the scarce resources available to families who need help. At a minimum, early childhood interventions are not comparable to childcare and preschool (Box 1). Evidence derived from intervention programs should not be interpreted as being applicable to early childhood programs more generally, because they have a different purpose and target population.

This approach, however, can be controversial on the basis that such targeting can stigmatise participants and lead to less engagement. As a result, 'place-based interventions' in disadvantaged communities are seen as a way to efficiently allocate resources without the need to identify, and therefore stigmatise, participants. Several of the programs examined in this report stated stigma as a concern, and the desire to avoid it was incorporated into program design.¹¹

Mainstream, universal programs such as preschool or childcare may not be enough to satisfactorily address the problems that are the focus of targeted interventions. As Box 1 shows, there are substantial differences between the offerings of mainstream early childhood education and care, and interventions in early childhood that are about increasing children's and families' well-being across multiple measures.

Furthermore, there is research showing that the more a child is considered at-risk, the less likely they are to participate in mainstream services such as childcare and preschool.¹² This suggests a concentrated effort needs to be made to reach these children and their families. As we will see in later sections, this idea underpins many early childhood intervention programs in Australia.

Box 1: Early Childhood Interventions are different from childcare and preschool

Early childhood interventions can sometimes be overshadowed by big-spending, universal, childcare and preschool programs.

Childcare refers to any non-parental care of children. In the context of public policy, it usually refers to 'formal' childcare — care outside a home environment that does not involve a relative, babysitter or other in-home carer. The purpose of childcare is generally so that parents can undertake other activities (usually work) while having their children looked after. Formal childcare mostly consists of long day care, family day care, and — for school-age children — out of school hours care. Childcare is funded publicly by the federal government through fee subsidies, and privately through parents.

Preschool refers to a structured early education program for all children. It is usually part-time (two or three half-day sessions a week) and most often attended by children in the year or two before they are due to begin school. The purpose of preschool is to assist in the transition to school and to equip children with the skills they need to adjust to formal schooling. Provision differs state-by-state, but most often preschool is government-run (and attached to primary schools), community-run, or is part of a long day care centre. Long day care centres attract federal childcare subsidies, whereas standalone preschools are funded by state governments (in part through the federal government's 'Universal Access' program) and by parents.

Early childhood interventions largely service the same age group as childcare and preschool (often collectively referred to as 'early childhood education and care') but they are different in several ways. They are targeted, either through a 'place-based' model where programs are concentrated in particular disadvantaged communities, or through more explicit means (such as referral from child and family services). They aim to effect change through a range of means, of which centre-based early learning, home visiting, playgroups and parental counselling are just a few. Measured outcomes are similarly broad.



Why consider early childhood interventions?

The theory of early childhood interventions

Though early childhood interventions have existed for several decades, it is only in the past three that academic work on neuroscience has become developed enough to sit alongside a wealth of social scientific empirical data on early childhood.¹³ Insofar as early childhood intervention programs are driven by, and based on, this research, they can be considered 'research-based'.

Until the age of five, the home environment and immediate family and community factors exert the strongest influences on young children.¹⁴ If the quality of these is low, then by the time children start school, they are already behind in the development of key attributes that will help them to succeed; first at school, and then throughout later life.¹⁵

The relationship between the brain at a young age and more externally apparent characteristics is best explained as follows:

Prior to school age there is a rapid process of 'sculpting' of neuron-to-neuron connections, during which some connections are reinforced and others die away... The brain sculpts itself in response to two influences.

The first influence is the wide range of stimuli in the environment of the newborn: visual, verbal, emotional, physical, touch, smell and taste. The second influence is biological: pre-programmed 'critical periods' in brain development, during which specific areas of the brain 'turn on' and become ready to receive environmental stimuli. During critical periods, neuron-to-neuron connections are sculpted that, in turn, engender specific developmental competencies: cognitive (language and quantitative), sensory, muscular, emotional, behavioural and social.16

Environmental influences upon the lives of young children that are relevant to issues of child development can be roughly divided into two categories: risk factors and protective factors.¹⁷

Risk factors contribute to developmental disadvantage. What is identified as a risk factor can change depending on the context, but generally they include poverty, low parental education, poor quality home learning environment, an unsafe neighbourhood, poor parenting, presence of conflict, and abuse and maltreatment.¹⁸ Another potential risk factor, less well-reflected in the research, relates to family structure and stability. Tapper and Phillimore (2012) identify several studies that link sole and step-parenthood, and family transitions, to a host of outcomes; including antisocial behaviour and cannabis use in adolescence.¹⁹

Protective factors are the opposite of risk factors (highquality parent/child relationships, parental engagement with child's cognitive and emotional development), but the mere absence of risk does not constitute a protective factor.²⁰ Early childhood interventions usually focus on growing and strengthening protective factors. More intensive programs explicitly state²¹ that eliminating the presence of risk factors (largely those pertaining to abuse and neglect), or preventing risks from arising, is the key rationale for the programs; but some aim to build protective factors as well. These intensive programs include children who exhibit not one or two, but multiple risk factors. The presence of multiple risk factors is more often associated with deeper negative impacts on child development.²²

Australian indicators

There are several research projects — the Australian Early Development Census, the Australian Temperament Project and the Longitudinal Study of Australian Children — that track and measure factors related to early childhood development, and thus provide a picture of how Australian children are faring.

These measures and indicators are also used to justify further policy attention on early childhood,²³ and some (such as the LSAC dataset) are used as comparison groups in the evaluation of the impact of particular intervention programs. Other projects, such as the Mater-University Study of Pregnancy, primarily examine indicators relating to mental and physical health, but some studies undertaken using that dataset are also relevant to this report.

Australian Early Development Census (AEDC)

Called the Australian Early Development Index (AEDI) until 2014, AEDC began in 2009 after several years of development.²⁴ Designed to rigorously measure the state of developmental health and wellbeing among young children, it was first implemented nationwide alongside a range of other government policies dedicated to early childhood.

The Census consists of five domains:25

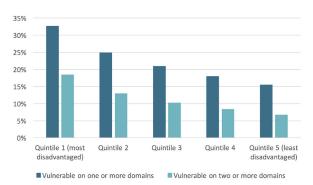
- Physical health and wellbeing measures "children's physical readiness for the school day, physical independence, and gross and fine motor skills".
- Social competence measures "children's overall social competence, responsibility and respect, approaches to learning, and readiness to explore new things."
- Emotional maturity measures "children's prosocial and helping behaviour, anxious and fearful behaviour, aggressive behaviour and hyperactivity, and inattention."
- Cognitive and skills (school-based) measures "children's basic literacy, interest in literacy, numeracy and memory, advanced literacy and basic numeracy."
- Communication skills and general knowledge measures "children's communication skills and general knowledge based on broad developmental competencies and skills measured in the school context."

These domains are supported by evidence that they predict children's later developmental health and wellbeing.²⁶ Data is collected when children are in their first year of full-time school, using teacher reports based on knowledge and observation of children, and demographic information drawn from school enrolment forms.²⁷

Scores, both within and across domains, are used to classify results whereby children falling below the 10th percentile of the dataset were classified as 'developmentally vulnerable', and children falling between the 10th and 25th percentile were categorised as 'developmentally at risk'. The remainder are considered 'developmentally on track'. The benchmark is the original dataset collected in 2009.²⁸ So the AEDC is a tool normed against the population rather than standardised, meaning it measures the change over time of relative, rather than absolute, preponderance of developmental disadvantage.

Given this important caution, the average scores from the AEDC should not be used to diagnose Australian children as requiring policy intervention. Rather than using averages, the tool is more useful for observing and tracking variation between average scores and scores for children from particular disadvantaged sub-

Figure 1: Proportion of children considered developmentally vulnerable, by socio-economic status



Source: Australian Early Development Census, 2015 collection³⁰

Figure 2: Proportion of children considered developmentally vulnerable, by remoteness



Source: Australian Early Development Census, 2015 collection³¹

populations. Across all five domains, there was a linear relationship between developmental vulnerability and a range of other factors, including socio-economic status and remoteness (Figures 1 and 2).²⁹

Australian Temperament Project (ATP)

The Australian Temperament Project began in 1983 and is run by the Australian Institute for Family Studies (AIFS).³² It is a longitudinal study that has followed a representative group of Victorian children from infancy into adulthood. Participants' parents were involved (as Generation 1), as are participants' children (Generation 3).

The research team set out to explore how children's temperament (e.g. shy/outgoing, reactivity, persistence) influenced their later development, with a view to creating a strong body of data to guide policymakers.³³ The 30-year report on the findings of ATP described the following:

- When researchers looked at infants with a 'difficult' (irritable, shy or uncooperative) temperament, this was found to be a weak predictor of problems at 3-4 years of age. But when multiple risk factors, including a low-quality mother-infant relationship and low family socio-economic status, were present, this was correlated with emotional and behavioural problems at preschool age.³⁴
- A reading test for 7-8 year old study participants showed that problems with literacy were linked to early temperament issues (such as ability to persist) as well as behavioural problems (particularly for boys).³⁵
- Of the 16% who had problems with literacy at that time, a follow-up of a subset of that group at age 13-14 found almost half still had difficulty with reading, and two-thirds also had spelling or maths problems.³⁶ The presence of literacy problems at age 7-8 had a longer-term impact for more than 80% of these teenagers.³⁷

The ATP research team drew some conclusions from these findings:

• Parenting in the early years can shape temperamental traits.³⁸

 Problems with cognitive skills often had roots in behavioural and temperamental problems that first arose prior to school, but it is also possible for children to recover from early setbacks.³⁹

As well as identifying factors associated with later problems, they examined experiences that promoted 'positive development':⁴⁰

- Strong family and peer relationships
- Better adjustment to the school environment
- Better control over their emotions and a less reactive temperament

Many initiatives and programs — particularly those that focus on early childhood and the transition to school — attempt to create or strengthen these experiences on the basis that it will promote healthy development into the future.

Growing Up in Australia: Longitudinal Study of Australian Children (LSAC)

LSAC is a nationally-representative study of Australian children and their development, intended to "provide data that enable a comprehensive understanding of development and life-course trajectories".⁴¹

LSAC utilises a number of tests and scales to assess the children in the study, which are also used in the evaluations of early childhood intervention programs. These include the School Readiness Score (Who Am I?), Short Temperament Scale for Children (STSC), Strengths and Difficulties Questionnaire (SDQ), Peabody Picture Vocabulary Test (PPVT), and the National Assessment Plan for Literacy and Numeracy (NAPLAN), as well as others.⁴² This means LSAC data, with its rich information on family background, can serve as a comparison group for evaluations of interventions.

Moreover, LSAC data can also provide a guide for policymakers with regards to early childhood and school readiness. One such analysis involves the impact of the home learning environment on Year 3 learning outcomes (Figure 3).

Generally, families living in disadvantaged neighbourhoods, families with low socio-economic status, and families where the mother spoke a language other than English at home, had a relatively low quality home learning environment for children.⁴⁴

Figure 3: Relationship between early home learning environment and later learning outcomes (LSAC)⁴³

Ages 2-3

Home Learning Environment:

- Home activities
- Reading to the child
- Number of books at home
- Out-of-home activities

Ages 4-5

Early cognitive development:

- PPVT (receptive vocabulary)
- Who Am I? (early literacy and numeracy)

Ages 8-9

Learning outcomes:

- NAPLAN; reading, writing, spelling, grammar, punctuation
- Matrix Reasoning Test to measure innate ability

Table 2: Summary of findings (controlling for socio-demographic characteristics)⁴⁵

Aspect of the home learning environment	Year 3 Reading	Year 3 Numeracy
Home activities	Children whose parents engaged less often in home activities were an equivalent of almost <i>12 weeks</i> of schooling behind children whose home activity levels were coded as 'high'.	Children whose parents engaged less often in home activities were an equivalent of almost <i>six weeks</i> of schooling behind children whose home activity levels were coded as 'high'.
Reading to the child	Children whose parents read to them every day were an equivalent of 20 weeks of schooling ahead of children whose parents read to them less frequently.	Children whose parents read to them every day were an equivalent of 12 weeks of schooling ahead of children whose parents read to them less frequently.
Number of children's books in the home	Children who had more than 30 books in the home were an equivalent of more than <i>four months</i> of schooling ahead of children with fewer books.	Children who had more than 30 books in the home were an equivalent of more than <i>14 weeks</i> of schooling ahead of children with fewer books.
Out-of-home activities	Children who engaged in more out-of- home activities were an equivalent of 11 weeks of schooling ahead of children who engaged in fewer out-of-home activities.	Children who engaged in more out-of- home activities were an equivalent of <i>six</i> <i>weeks</i> of schooling ahead of children who engaged in fewer out-of-home activities.

This analysis also included particular demographic subgroup differences across outcomes. The relationship between socio-economic position (SEP) and influence of particular positive aspects of the home learning environment was strong regardless of the level of disadvantage, with no statistically significant differences between low, middle and high SEP families.⁴⁶

The LSAC dataset has also been used to investigate other aspects of child wellbeing and their association with other family factors. Sanson et al. 2011 found a statistically significant, moderately negative correlation between socio-emotional adjustment for children aged 4-5 and the 'presence of two parents' and 'father not present';⁴⁷ a result the authors speculate could be reflective of the presence of a stepfather.⁴⁸

Qu and Weston 2012 examine the relationship between parental marital status and children's wellbeing. 'Wellbeing' is measured by child scores on the Peabody Picture Vocabulary test, indices relating to physical and socio-emotional development and learning, as well as sub-scales of the Strengths and Difficulties Questionnaire pertaining to prosocial behaviour, and peer, emotional, hyperactivity and conduct problems.⁴⁹ The PPVT is administered by professionals, whereas scores on the other metrics were determined by primary caregiver and teacher reports.

The authors find that both primary caregiver and teacher reports suggest that for each of the three survey waves, "children in sole-mother families were progressing less well in virtually all measures." Similar results were evident in PPVT scores, with children in sole-mother families doing less well than those living with married parents.⁵⁰

Children in cohabiting biological families were doing less well than their counterparts in married biological families, though the authors note this was largely driven by primary caregiver self-reporting and a statistically significant difference was not evident in PPVT scores or in teacher assessments.⁵¹ These children were outperforming their counterparts in sole-mother families.⁵²

The authors also took into account a range of other family and socio-economic factors to see what unique impact family structure has on these measures of child wellbeing. The results for the full model showed that the differences between children in cohabiting families and their counterparts in married families had largely become insignificant. Nevertheless, the gap remained for children of sole-mother parents, and widened over successive survey waves to encompass more measures.⁵³

The authors also point out that other factors such as parenting practices and quality of the parental relationship contribute significantly to the differences in family forms; and that their impact could be ameliorated, and children's wellbeing improved, with effective policies.⁵⁴

Mater-University Study of Pregnancy (MUSP)

Similar to the Australian Temperament Project, MUSP has followed a single cohort (n=8,556) of pregnant women through child-rearing and into their children's adulthood. The main aims and objectives of the project relate to mental and physical health of mothers and their children, but data on behavioural problems in childhood and their impact into adolescence is also gathered.⁵⁵

Najman et al. 1997 utilise the MUSP dataset to examine the relationship between family type (family structure, and level of conflict within the family) and child behaviour at age five. The authors find no statistically significant differences in child behaviour along the three measures used between children in an intact, married family and those in a single parent family where no partner changes took place.⁵⁶ Yet there was a statistically significant and large difference across all three measures for children who had been through parental relationship transitions — rates of child behaviour problems were 30%-60% higher for children in this category.⁵⁷

The authors also examine the relationship between the presence of conflict in the parental relationship (not necessarily both biological parents) and child behaviour. Across each wave of the survey, parents who had a 'poor' quality relationship reported higher rates of child behaviour problems — about twice the rate across all three measures.⁵⁸ Where conflict has been consistent, this is associated with three times the rate of externalising behaviour problems and well over twice the rate of SAT (social, attentional and thought) and internalising behaviour problems.⁵⁹

Overall, longitudinal studies which follow cohorts of children — such as the Australian Temperament Project, the Longitudinal Study of Australian Children and the Mater-University Study of Pregnancy — can be analysed to provide evidence on how aspects of very young children's lives can continue to exert an influence on their development as they age. The Australian Early Development Census provides a relative measure of how successive cohorts of children are faring at school age. Both types of data serve as useful guides for policymakers and for people examining the impact of policy.

The evidence base for early childhood interventions

Australia has produced research that shows how life trajectories are shaped by practices in the early years. What has been less examined by Australian research is what constitutes policy best practice and how this can inform early childhood intervention programs.

The United Kingdom government has established a 'What Works' network, which consists of institutions and organisations, each dedicated to covering one of seven public policy areas.⁶⁰ The Early Intervention Foundation is a member of this network and has published a thorough review of the evidence as it pertains to early childhood intervention, which the report's authors define as "activity which responds to signals of risks and prevents problems from becoming entrenched, endemic, harmful and costly."⁶¹

The report, *Foundations for Life*, assesses the effectiveness of 75 interventions that target parentchild relationships with the explicit goal of strengthening attachment security, behavioural self-regulation and cognitive development.⁶²

The authors of the report stress that a weak evidence base for certain approaches to intervention does not mean that they are ineffective; simply that the evidence base is not yet mature enough for the question to be addressed with any degree of certainty.⁶³ Furthermore, they establish at the outset that improvements in parenting outcomes (self-assessment of confidence in the parenting role, for example) are not sufficient for assuming that children will necessarily benefit, as the relationship between the two is not deterministic or linear.⁶⁴

The key points are:

- The evidence of effectiveness is strongest for 'targeted-indicated' programs, where targeting is based on early signals of risk in child development (i.e. issues have been pre-identified, but families are not considered to be concerns of child protection). The authors note that identifying such risk can be a problem for governments.⁶⁵
- Individual therapy and home visiting are the delivery mechanisms for targeted-indicated programs backed by the strongest evidence.⁶⁶
- Attachment-focused programs are relatively highimpact, but also costly.⁶⁷
- Behaviour-focused programs are, when targeted, effective at reducing the negative impact of existing problems but are not effective at preventing problems from arising.⁶⁸
- There are proportionally more evidence-based behaviour-focused programs than attachment- or learning-focused programs.⁶⁹
- Behaviour-focused programs tend to be shorter in duration and offered in a group setting, making them relatively low-cost as well as effective.⁷⁰
- The evidence base for interventions with a cognitive skills focus is thin overall, and those programs that are considered evidence-based are costly.⁷¹
- There is not enough evaluation within the UK to assess the effectiveness of programs and models that have been established elsewhere.⁷²

A thorough review of this type does not exist in Australia, and the extent to which the programs and models that operate here are informed by, and based on, evidence varies. Shlonsky and Mildon (2014) outline a process of 'evidence-based policy' (EBP) where a relevant question is first posed, investigated through use of scholarly works, the evidence appraised and relevance and applicability assessed.⁷³

Though some Australian policies can be said to be evidence-based in that they are an implementation of a program that has been found to work, others lack a program logic model entirely — much less one that can be said to be informed by evidence. The programs and policies that have been implemented in Australia with the general goal of shifting the life trajectories of vulnerable young people are discussed in the next chapter.



Early Childhood Intervention policy in practice

There is a plethora of initiatives run by various organisations and departments in Australia. Table 2 contains a summary of the three levels of government and their areas of responsibility and action in terms of early childhood interventions. This report largely focuses on government-run programs as there is minimal data on non-government organisation programs — though, as we will see, private philanthropy and universities are also heavily involved in some of these programs.

The Department of Social Services provides grants to community organisations[†] through the Families and Communities Programme,⁺⁺ which is in part "focussed on early intervention, prevention, and support, including assistance for relationship breakdown."⁷⁴ The initiatives that receive funding from grants are not examined in

this report, as the focus is primarily on larger programs and government programs with evaluations.

Aside from departmental grants, the federal government also runs and funds one program — Home Interaction Program for Parents and Youngsters (HIPPY) — and one service model, Communities for Children (CfC).

State and territory governments run a range of programs, through education departments and family and community services departments, that attempt to engage disadvantaged families with the goal of improving children's outcomes. Programs exist on a spectrum: on one end there are programs that have relatively small goals in enhancing existing parenting capability, and on the other there are programs that engage with families considered at risk of child abuse and neglect.

Table 3: Early childhood interventions in action

Body	Area/s of responsibility and action	
Federal government	Funds and administers a small number of programs; funds state governments to provide community services; funds diverse community groups through grant programs.	
State and territory governments	Administer and fund programs directly, though service delivery is by non- government organisations. State and territory government departments may also run their own community grants programs.	
Non-government organisations and community groups	Run small programs by themselves, funded through a combination of parent contributions (e.g. playgroup), government grants, and philanthropic activities.	

⁺ According to the Department of Social Services' Grants Directory, a total of 2,953 locations were covered by grants made to community groups under the Families and Communities Program's Children and Parents Support sub-function as of 14 July 2016.

⁺⁺ According to the Department of Social Services' 2016-17 Portfolio Budget Statement, the Families and Children component of the Families and Communities programme is budgeted \$255 million in the 2016-17 financial year.

Process and methodology

All programs deemed within scope that have taken place in the last two decades and that have a publicly-available evaluation are examined in this report. Programs were identified by thorough examination of federal, state and territory government departmental websites, followed by locating the relevant evaluation. Other programs, which are not run by government or are no longer running and therefore not visible through this method, were identified through research publications on a similar topic and through other means, such as news reports. A full list of programs is included in Appendix A. Where such information is available, details about the amount of money spent and the number of people participating in the program are also included.⁺⁺⁺

It is difficult to assess the strength of evidence on early childhood intervention programs without some reference to the quality of the evaluation undertaken. Each program discussed includes details about the evaluation methodology employed and its bearing on the reliability of the findings. Ordinarily, hierarchies of evidence place systematic reviews and meta-analyses at the top.⁷⁵

For the purposes of this report, given that it relies on single evaluations of individual programs, a randomised controlled trial is at the apex of the hierarchy ('the gold standard'), followed by quasi-experimental studies using techniques such as regression discontinuity design, propensity score matching and difference-in-differences to simulate a control group.⁷⁶ Pre/post testing examines changes in a group of participants prior to the program and after the program's completion, without the use of a control or comparison group, and is generally considered to be low-quality because there is no way to ascertain whether the observed changes are a result of the intervention.⁷⁷

The outcomes measured in evaluations, and the strength and quality of the tools used to measure them, are factors that are also relevant when assessing the reliability of findings overall.

Programs and service models

The important distinction in policies attempting to redress early childhood disadvantage is between service models — means of funding a collection of services with a broad unifying goal — and programs, which are structured, discrete, take place over a fixed time period and have a formal model for delivery.

Examples of service models are the federal government's Communities for Children (CfC), and the New South Wales government's Brighter Futures. The other policies discussed in this report are examples of programs.

1. Communities for Children⁷⁸

Expenditure: \$257.2 million 2014–19 *Coordinating bodies*: Department of Social Services; non-government service delivery organisations. *Target population*: Children 0–12 in 52 disadvantaged communities Australia-wide *Years active:* 2005–present. *Program components:* home visiting; early learning and literacy; parenting and family support; child nutrition; community events.

Outcomes measured: health (physical, mental, and behaviour problems); families and parents (harsh parenting, household conflict and household joblessness); early learning and care (children's vocabulary and verbal skills, and quality of the home learning environment) and child-friendly communities (sense of community cohesion and involvement, engagement with local services).

Evaluation: Edwards et al. $(2009)^{79}$ and Edwards et al. $(2014)^{80}$. Both only use the first phase of CfC which was targeted at children aged 0–5. Evaluation is quasi-experimental with CfC sites matched with 'like' comparison sites in which CfC did not run. Because the evaluation was on the communities as a whole rather than the individuals who got involved, there is no assessment of the impact on participants.

Discussion

Communities for Children⁸¹ is a place-based program aimed at improving service coordination and delivery in CfC locations and, through this, improving various child-, family- and community-related outcomes.

Two evaluations have been undertaken. The first concluded that the positive impacts of CfC included lower rates of family joblessness, parents reporting less hostile/harsh parenting practices and parents feeling more effective and confident as parents.⁸² Among specific sub-groups, children of mothers with a Year 10 or below education developed better verbal skills, and 'hard-to-reach' parents reported less hostile/harsh parenting.⁸³ The authors describe the results on verbal skills as being of practical import: a six-point difference between children of low-education mothers in CfC sites compared to non-CfC sites is about half a standard deviation, or a medium effect size.⁸⁴

The second evaluation examined whether there were statistically significant positive impacts for children and families in CfC sites as the children reached age 7–8. While researchers found a positive association between children being read to at age 3–5 and NAPLAN scores at age 7–8, as well as lower problem behaviour scores, this was true for both CfC and comparison sites.⁸⁵ The authors determined that there were no statistically significant positive outcomes specifically from CfC which lasted into primary school.⁸⁶

2. Brighter Futures⁸⁷

Expenditure: \$145.7 million in 2014–15 for nine programs, one of which is Brighter Futures⁸⁸ *Reach:* 2,943 families in 2014–15.⁸⁹

Coordinating bodies: Department of Family and Community Services; non-government organisations for delivery.

Target population: Families with pregnant women and children aged up to nine years at risk of entering child protection services.

Years active: 2003-present. Program components: case management; group-based parenting programs;

⁺⁺⁺ Expenditure and reach data for individual programs were generally not available through departmental budget statements, program guidelines, or upon request from the relevant departmental or ministerial office.

home visiting programs; placement of children within quality children's services.

Outcomes measured: risk of harm reports; placement in out-of-home care; outcome variables such as child socio-emotional competence, self-esteem and problem behaviours.

Evaluation: Hilferty et al. (2010)⁹⁰, using a pre/posttest of program participants with limited use of a comparison group. A comparison group was used for one program component and consisted of families who were eligible for BF but declined to participate. The authors note the characteristics of the participants differed greatly from the Brighter Futures group, making it a low-quality comparison group.

Discussion

Brighter Futures is an early childhood intervention that aims to minimise risk factors, in particular attempting to reduce escalation of risk factors that may lead to child abuse and neglect.⁹¹ This makes Brighter Futures more intensive in its targeting (entry to the program is by child protection referral) and in its design (the inclusion of case management).

This is not a very well-designed evaluation as a result of data limitations, and different outcomes were measured in different ways. The 'risk of harm' outcome was assessed relative to a comparison group, but the comparison group had a better result than the treatment group,⁹² suggesting the two groups are not entirely comparable. In terms of the impact on rates of children going into out-of-home care (OOHC), the authors found the intervention resulted in fewer children ending up in OOHC against a backdrop of overall increases in the OOHC rate. In other words, the rate of increase was smaller than it would have been without the intervention.⁹³

The evaluation also examined a range of in-home outcomes that research links to child abuse and neglect. While there were some positive results — parents being more satisfied with their life — there was no improvement in other areas such as family attachment or the quality of the relationship with the partner.⁹⁴ There were mixed results on positive parenting, most significantly an increase in the measurement of hostile parenting. Children's social and emotional development showed a small improvement.⁹⁵ Such a lacklustre outcome is concerning, given BF has been operating for over a decade and is the NSW Government's primary child abuse and neglect prevention program.

3. Home Interaction Program for Parents and Youngsters (HIPPY)⁹⁶

Expenditure: Over \$100 million 2008–2017.⁹⁷ *Reach:* 4,000 each year *Coordinating bodies:* Department of Social Services;

Brotherhood of St Laurence.

Target population: Disadvantaged children in the two years before school, in 100 locations across Australia — 50 of which are Indigenous-targeted.

Years active: 2009-present.

Program components: Family home visiting; centrebased; parent group meetings.

Outcomes measured: Parenting competencies;

children's early literacy and numeracy. *Evaluation:* Liddell et al. (2011)⁹⁸; a two-year quasiexperimental study where the control was a propensity score-matched group from LSAC. 14 sites were drawn from the first year of the program's operation.

Discussion

HIPPY aims to improve children's development by working with parents to improve the home learning environment and assist in the transition to school. Paraprofessional tutors are drawn from the local community to work with families on activities relating to parenting and children's development. These activities are "designed to be integrated into the daily life of the family."⁹⁹

The evaluation found a number of statistically significant impacts, most of them relating to parents. Parents felt more confident, supported and respected as parents than their non-HIPPY matched counterparts and were more likely to consider themselves a 'good' parent. In addition, the parenting style of HIPPY parents was less angry or hostile, they were more involved in their child's learning, and engaged in more activities with their children, both inside and outside the home. HIPPY parents were 3.5 times more likely than non-HIPPY parents to report their child liked being read to for a longer period. The authors theorise that HIPPY activities are translating to an ongoing positive parent-child relationship in this respect.¹⁰⁰

There were fewer impacts on children. The gap between the HIPPY child and Australian average in early literacy and numeracy skills had closed by the end of the program,¹⁰¹ though this finding was based in part on parent and teacher reports rather than standardised testing. By comparison, after controlling for age there was no statistically significant difference between HIPPY and non-HIPPY children on the standardised Peabody Picture Vocabulary Test.¹⁰² However, HIPPY children had fewer peer-related problems and higher levels of prosocial behaviour.¹⁰³

HIPPY now operates in 100 communities across Australia, which is significantly more than the number in operation when this evaluation was undertaken. This program should be re-evaluated in order to determine whether the expanded program, which includes 50 Indigenous communities, has had similar positive results. The evaluation's authors also suggest that a proper randomised controlled trial is necessary, as well as improvements and refinements in the propensity score-matching model.¹⁰⁴ Furthermore, whether these positive effects are enduring could be determined in a future study with a comparison to Year 3 NAPLAN scores.

4. Triple P NSW¹⁰⁵

Reach: An estimated 12,500 people attended a Triple P group or seminar by the end of $2010.^{106}$

Coordinating bodies: Families NSW (Department of Family and Community Services).

Target population: Parents with children aged 3-8 in disadvantaged communities.

Years active: 2010-11 to present.

Program components: Multiple levels: Seminar series for parents (level 2); short intervention with skills training for parents (level 3); intensive individual or group parent training (level 4); whole-of-family intervention for families with multiple difficulties (level 5). Families are allocated to these levels based on severity of circumstances.

Outcomes measured: Parenting practices, child behaviour.

Evaluation: Nexus Consulting (2011)¹⁰⁷; using a quasiexperimental study for Level 2 (seminar series) and pre/post scores for Level 4 (intensive parent training)

Discussion

Triple P is a multi-level program that involves "universal approaches to improving parental education with more targeted interventions for high risk children and their parents."¹⁰⁸ Level 1, the universal level involving information and promotional material, was not implemented by Families NSW, making this a targeted program. Levels 2–5 were implemented, but only Levels 2 and 4 were evaluated. Both use the Strengths and Difficulties Questionnaire (SDQ), a validated tool to measure problem behaviour. 'Validated' assessments have been used in multiple studies with multiple cohorts and have consistently been shown to reliably measure the constructs they are designed to assess.¹⁰⁹

The Seminar Series (Level 2) was evaluated using a quasi-experiment, and the significant differences between treatment and comparison groups were evident with the Triple P children rating more highly on scores of problem behaviour prior to the program. The short-term post-test assessment revealed no significant differences between the treatment and comparison groups, but the six-month follow-up revealed a statistically significant improvement for the treatment group (unlike the comparison group) in terms of reduced problem behaviour — a net reduction of 9.7% in the proportion of children in the clinical range of the SDQ.¹¹⁰

The intensive group training (Level 4) was evaluated using a comparison of pre- and post-scores for the treatment group. There were statistically significant improvements in parenting behaviour as well as improvements for children based on SDQ scores, and there was a reduction of 10.5% in the proportion of children in the clinical range of the SDQ.¹¹¹

This is a relatively positive result, but given the method of evaluation is not especially rigorous it should be taken with caution. In addition, this evaluation was of only the first phase of the program. Now it has been operating for several years, another evaluation should be undertaken and the findings made public.

5. Best Start¹¹²

Coordinating bodies: Department of Human Services; Department of Education and Training.

Target population: Various disadvantaged communities in Victoria with children aged 0–8.

Years active: 2001-02 to present.

Program components: Range of small-scale activities involving literacy.

Outcomes measured: Health and wellbeing; education and schooling; housing/child protection.

Evaluation: Raban et al. (2006)¹¹³. The treatment sites were compared to regional benchmarks.

Discussion

Best Start aims to improve the "health, development, learning and well-being of all young children across Victoria", with a particular focus on ensuring that

vulnerable young children in Best Start communities are properly engaged with relevant services.¹¹⁴

The 'education and schooling' outcome had a number of projects aimed at meeting goals relating to literacy and kindergarten enrolment and attendance, as Best Start children had low reading ability relative to the region.¹¹⁵ Activities aimed at developing early literacy included distributing free books, story-telling, and information sessions on early literacy for parents, among others.¹¹⁶ To increase kindergarten participation, activities involved establishing feeder playgroups and promotion and support of kindergarten, among others.¹¹⁷

The results showed no impact. Reading abilities of Best Start children showed no change when compared to the rest of the state.¹¹⁸ Nor was there a change in kindergarten enrolments and level of absenteeism.¹¹⁹

Nevertheless, the evaluation team concludes that "Best Start has been a considerable success" and that the evaluation "confirms the value of continuing Best Start in existing sites and extending it to other disadvantaged communities."¹²⁰ Since this evaluation was undertaken, the number of Best Start sites has expanded from 13 to 30. The website of the Victorian Department of Education says that the Department was leading a review of the program in 2015; but a report, if completed, is not available publicly.¹²¹

6. Early Years Centres¹²²

Expenditure: \$32 million over four years (2006–2010), with \$2 million in operational funding per year per centre.¹²³

Coordinating bodies: Queensland Government with non-government organisation delivery partners. *Target population:* Select sites in Queensland, for families expecting a baby or with children aged 0–8 years.

Years active: 2006-present.

Program components: A 'one stop shop' approach where a centre would be the site of a number of access to services including early childhood education, family support, employment and health services.

Outcomes measured: Improvements in outcomes for children; parenting skills and strengthened families; vulnerable families.

Evaluation: Department of Education, Training and Employment (2013), carried out by Urbis Pty Ltd.¹²⁴ The evaluation consisted of pre/post-testing of the cohort involved in the program.

Discussion

Child outcomes were assessed on the basis of parental survey, where parents reported improvements in children's socialisation, communication and behavioural development.¹²⁵ Similarly, outcomes for parents were assessed with a survey, and parents reported their parenting practices had improved and felt more confident.¹²⁶ This is a statistically significant increase over time.¹²⁷ However, given that this is an evaluation relying on low-quality data (an unrepresentative sample of 69 parents)¹²⁸ derived from a self-report survey, these findings should not be taken as evidence of success, nor as a justification for expanding the program.

7. Pathways to Prevention

Coordinating bodies: Mission Australia and Griffith University, with only a small percentage of funds coming from the Queensland Government. *Target population:* The Inala State School community in Queensland.

Years active: 1999–2013.

Program components: Child-focused component (Preschool Intervention Program) and services for families (Family Independence Program), each of which involved a number of activities.

Outcomes measured: Child behaviour and parental efficacy.

Evaluation: Homel et al. (2006),¹²⁹ using a quasi-experimental methodology.

Discussion

The Preschool Intervention Program (PIP) component of P2P was aimed at increasing the 'school readiness' of disadvantaged children, by focusing on strengthening the skills and knowledge required to adjust to the school environment and thus be taught effectively.¹³⁰ PIP activities took place during normal preschool hours, so outcomes were determined with a comparison group consisting of preschool children who did not receive PIP.¹³¹ Though this approach lends rigour, it is also true that since preschool is not compulsory, the cohort of preschool attendees may not be representative of PIP participants. Outcomes were assessed using validated measures. Along a range of hypotheses relating to reduction in problem behaviours and enhancements of positive behaviours, the authors found statistically significant effects, small to medium in size, of the PIP program.¹³² The program on average had larger impacts on boys.133

The Family Independence Program (FIP) component was designed to assist families in creating a positive home learning environment through provision of services and specialised training. The end goal, like that of PIP, is to improve the transition to school.¹³⁴ FIP was subject to a qualitative analysis using parental surveys, and the authors generally found positive outcomes for parents on measures such as attachment and connection within the family which, is expected to have a positive impact on children.¹³⁵

Pathways to Prevention is one of the few programs run largely through the non-government sector which also has an in-depth evaluation. The first few years of the Pathways program also went on to inform Communities for Children, discussed above.¹³⁶

8. Challis School-Community Project¹³⁷

Coordinating bodies: Challis Community Primary School in conjunction with Curtin University and the Minderoo Foundation.

Target population: Families with young children in the Challis Community Primary School area (Armadale, WA).

Years active: 2007-present.

Program components: Challis Early Education Centre (kindergarten to Year 2) and Challis Parenting and Early Learning Centre (from birth to pre-kindergarten). Outcomes measured: Child development using the AEDI, and school readiness/teacher effectiveness. Evaluation: Clark et al. (2014),¹³⁸ using a form of pre/ post-test methodology.

Discussion

Challis describes itself as a "lighter more effective and efficient touch"¹³⁹ program, informed by research on early childhood. It includes a number of programs and services: centre-based early learning and parenting workshops, but also more intensive support like psychology and speech therapy services.¹⁴⁰

Using the Australian Early Development Index (the same tool used in AEDC) to measure developmental disadvantage in the Challis community prior to the program, it was found that 40% of children were vulnerable on one or more domains, and 20% were vulnerable in terms of language and cognitive skills. After Challis's introduction, there was a 40% reduction in vulnerability by 2012 and only one in 10 children were scoring in the lowest percentile for language and cognition — down from one in four in $2009.^{141}$ The Performance Indicators in Primary School (PIPS) test, administered by the University of Western Australia, found that children who had gone through the full Challis program from birth and were in Pre-Primary (the first year of school) in 2013 were performing above the state average. So children began school ready to learn and then outperformed students at other WA schools.142

Challis has since informed a model of Child and Family Centres across WA,¹⁴³ and also the forthcoming Federal Government program Connected Beginnings, which is aimed at Indigenous communities.¹⁴⁴ Though the program is research-based and these findings are promising, it is important for it, and any similar programs, to also develop a rigorous evidence base of the program's efficacy and effectiveness.

9. Learning Together¹⁴⁵

Reach: 812 families and 1,075 children in the period 2010-2012.¹⁴⁶

Coordinating bodies: Department of Education and Children's Services.

Target population: Families with children aged 0–4 years in 7 locations across SA.

Years active: 2003-present.

Program components: An in-school program focusing on parenting capacity and children's early literacy. *Outcomes measured:* Parental capacity to support learning; empowerment of parents in their parenting role; connecting families with early childhood services and schools.

Evaluation: SA Department of Education and Child Development (2013),¹⁴⁷ using a pre/post-test methodology with a combination of observational data using a verified scale, and non-observational data gathered from an unverified survey.

Discussion

The goal of Learning Together is to increase children's early literacy, development and engagement with learning.¹⁴⁸ To this end, the program consists of activities that help parents become better facilitators of their child's

early learning, and works with parents and children to improve engagement with early childhood services.¹⁴⁹

Though impacts across a range of outcomes were analysed in this evaluation, most used unverified surveys to collect data. The authors used the South Australian government-established 'Respect, Reflect, Relate' (RRR) tool to observe parents interacting with their children both before and after going through at least three school terms of the Learning Together program.¹⁵⁰

The RRR considers a score of 2.5 (on a scale of 0-5) to be the minimum score determining a supportive environment. Prior to the program, 57% of families scored in the 0-2 range. After the program, this shrank to 4%. The opposite happened with high scores: while only 17% of families received a score of 4, after the program this increased to 59%.¹⁵¹ This included changes such as fewer children being distressed,¹⁵² more families sharing warmth and affection with their child,¹⁵³ more engagement with the child through comments and questions,¹⁵⁴ and more awareness among parents of key milestones in children's early development.¹⁵⁵

This program is promising, based on the findings of this evaluation, especially considering 10% of referrals came from child protection services.¹⁵⁶ However, it does not include a follow-up data collection to see how families fare after the program and establish whether the effects are enduring. Additionally, the lack of a control or comparison group means the policy significance of these results should be viewed accordingly.

10. Launching into Learning¹⁵⁷

Expenditure: \$12.6 million over four years (2006-2010), plus an indeterminate amount of recurrent funding.¹⁵⁸

Reach: 1,107 children in 2012.159

Coordinating bodies: Tasmanian Department of Education.

Target population: For children aged 0–5; offered in all government schools and Child and Family Centres. *Years active:* 2006–present.

Program components: Parent-child interaction with a focus on early literacy, numeracy, and social skills. *Outcomes measured:* Reading and numeracy performance of children.

Evaluation: Department of Education (2014),¹⁶⁰ a longitudinal study tracking long-run outcomes including Year 3 NAPLAN scores.

Launching into Learning is a universally-accessible program for children younger than school age, available through schools and through Child and Family Centres (located in disadvantaged areas).¹⁶¹ As participation is voluntary, the participation cohort skews towards children with more educated parents: between 2008 and 2011, student participation from families with a bachelor's degree or higher was 45–50%, falling to 30–38% for families with Year 10, 11, or equivalent, and only 18–24% where parental education is Year 9 or below.¹⁶² This is an important caveat for the findings that follow.

The Kindergarten Development Check (KDC), which is the first post-LiL assessment of Tasmanian students, found there are fewer children considered 'at risk' (failing to meet one out of 21 developmental markers) within the group that attended LiL regularly compared to non-LiL students in the same school.¹⁶³

This continued into Prep, where Performance Indicators in Primary School (PIPS) scores showed 90.3% of LiL students at or above expected standards in reading compared to 79.9% of non-LiL students. For maths it was similar, with 89.1% of LiL students at or above expected standards compared to 81.7% of non-LiL students.¹⁶⁴ LiL students were also more likely to perform at the highest levels, beyond simply meeting minimum standards.¹⁶⁵

The analysis of LiL and NAPLAN scores examines 1,058 students who participated in LiL in 2008 and who did NAPLAN in 2013. A smaller proportion of LiL students fell below the NAPLAN national minimum standard, and a greater proportion of LiL students achieved Band 6 results in NAPLAN. Across the six bands, there is a higher proportion of LiL students in Bands 4–6, for both reading and numeracy.¹⁶⁶ This pattern of impact held true for students from backgrounds with lower parental education. A smaller proportion of LiL students, compared to non-LiL students, failed to meet the NAPLAN national minimum standards.

The authors conclude that LiL benefits all who participate, irrespective of socio-economic or Aboriginal status, but that disadvantaged students benefit most.¹⁶⁷ Though the evaluation measured the direct impacts on children, more research is needed into the heterogeneous effects of the program before it can be said to be successful in bridging achievement gaps.

11. Let's Start: Exploring Together

Coordinating bodies: Northern Territory departments of Health and Education; the Federal Government; NT schools; Menzies School of Health Research (Charles Darwin University).

Target population: Children aged 4–7, referred to the program by teachers and child welfare workers. *Years active:* 2006–2010.

Program components: Parent-child interaction, facilitation and playgroups for children; parenting support.

Outcomes measured: Child behaviour.

Evaluation: Robinson et al. (2009),¹⁶⁸ using a pre/posttest methodology with a sample severely limited by high rates of attrition.

Discussion

Let's Start: Exploring Together refers to the implementation (Let's Start) of the Exploring Together Preschool Program in the Northern Territory. The results of this evaluation should be interpreted with caution, given the problems with the data.

The authors find a reduction in mean scores on child problem behaviour and parental distress between referral and program end; an effect that was found to be even stronger at the six-month follow-up.¹⁶⁹ Moreover, there was a positive relationship between higher levels of attendance (higher 'dosage'), and observed improvements.¹⁷⁰ In the absence of a control or comparison group, the authors use this as an indication of the unique impact of the program.¹⁷¹

Key Findings

This review of the literature contains key findings on how evaluations are used to assess these programs, as well as the impacts of the programs themselves.

Low-quality evaluation: Of the eleven programs reviewed in this study, three used a quasi-experimental methodology, six used pre/post testing, and one used both. Only one of these had a longitudinal component and it used pre/post testing. One more did not even compare outcomes to baseline data. When a comparison group was used, it was often poorly constructed.

Low-quality data: Many programs used a combination of data, meaning the quality of the data used differed. Data was gathered through various means, ranging from relatively high-quality validated tools assessing children directly (such as the Peabody test), validated tools used to observe parent-child interactions, validated surveys (such as the Strengths and Difficulties Questionnaire) to assess children, and lower-quality self-constructed surveys for parent self-assessment.

Lack of follow-up: Most programs did not involve a follow-up as part of the evaluation process. Only one long-running program has had more than one evaluation. Only one program includes a longitudinal study that was used to track participants and their NAPLAN scores in Year 3. One further program had a six-month follow-up component.

Choice of outcomes measured: Though many of the programs were explicitly family-focused, only a few gathered data on children in assessing the impact of the program. Others measured 'engagement with services' (such as whether parents knew where to find assistance or whether preschool enrolment improved) rather than any concrete impact such engagement may or may not have had on the family and child.

In addition, there is a range of programs otherwise considered within the scope of this report that do not have an evaluation available (Appendix A). That there are no evaluations, or that the existing evaluations are often of low quality, or that programs are expanded without compelling evidence of impact, is a finding in itself. Nevertheless, there are a few conclusions that can be drawn about the success of this type of policy in Australia.

Place-based versus targeted programs

Two main models of targeting early childhood interventions are used. One is the 'place-based' approach, described as having wrap-around services or being a 'one-stop shop'. They are open access within a certain place (disadvantaged communities are almost always favoured). The other is a more targeted method whereby children and their families are identified for participation through means such as referral from other community services, including from child protection services.

The place-based model is very popular (eight of the 11 programs examined), with one factor potentially driving this popularity being the relatively low cost.¹⁷² But there is not strong evidence that these programs deliver benefits to the most disadvantaged children in the catchment. For example, Communities for Children showed that the comparatively less disadvantaged families in CfC sites benefited more from the program.¹⁷³ Launching into Learning had fairly positive outcomes, but they were largely driven by the fact that more advantaged families were utilising the program at higher rates than families with low education.

Other place-based programs did not examine the different degrees of engagement and success between more disadvantaged and more advantaged members of the local community. Of those, some showed tentative indications of being more successful, such as the Challis program, Pathways to Prevention, and Learning Together.

The evidence on targeted programs is also mixed, in that more targeted programs show relatively strong positive outcomes than place-based programs, but some show no impact or occasionally negative impacts on some measures. Targeted programs were run as discrete programs, with a fixed structure for participants, rather than ongoing place-based service coordination where participation is wholly user-driven.

The volume of Australian evidence is not large enough to conclude definitely that this distinction makes a difference, though it was a finding in the *Foundations for Life* report from the UK.¹⁷⁴ Nevertheless, there are more examples of relatively positive outcomes from programs that are targeted, or place-based programs that utilise structured activities and which take place in a location which is already the site of community engagement, such as a school.



Paths forward for policy

Over a decade ago, the Department of Family and Community Services commissioned the Australian Institute of Family Studies to review the evidence on the efficacy of early childhood interventions. In concluding their study on a range of Australian and overseas programs, the authors wrote that "the dearth of evaluation data... makes it impossible to comment on the usefulness of early childhood interventions as a general strategy to sustain improvements for children in the long-term."¹⁷⁵

Despite the numerous programs implemented since then, this is still largely the case. Though the United Kingdom has made a concerted effort to build an evidence base for early intervention programs that can inform policymaking, such effort has thus been lacking in Australia. The design of Australian programs also suggests a lack of familiarity with the evidence of best practice overseas. As a result, of the programs that have been evaluated here in Australia, there is not enough reliable evidence to determine which programs work, why they work, and under which circumstances.

Australia has, however, been proactive in adopting other practices relating to prevention through early intervention. Box 2 details one such practice. In general, programs are not evaluated often enough, relative to the amount of time they have been in place. When they are evaluated, often poor-quality methodologies such as pre/post-testing are used, and impact measured using non-validated self-report surveys. It is not unusual for programs to continue for several years and undergo expansions regardless of lacklustre evaluations, or no evaluation.

Box 2: New Parent and Infant Network (Newpin)¹⁷⁶ and the Newpin Social Benefit Bond¹⁷⁷

Newpin originated in the UK and has been running in NSW since 1998, administered by UnitingCare Burnside. The program is targeted at families, particularly those headed by a single mother, with children under five years of age who have been abused or neglected, are at risk of abuse or neglect, or where the family experiences social disadvantage, family violence, and mental health issues.¹⁷⁸

Newpin is not unusual in its goal, or in its design and implementation by a non-government organisation and charity. What is distinct about the program is that it is linked to a Social Benefit Bond. The Newpin Social Benefit Bond works by investors investing money through Social Ventures Australia (which runs the Bond), which then directs it to UnitingCare Burnside to run the Newpin program. Investor returns are based on the success of the program — in this case, the proportion of participating children who are reunited with their families.¹⁷⁹ As of August 2015, the Family and Community Services Minister Brad Hazzard said the Newpin program was delivering a family restoration rate of 62%, well above the 'business-as-usual' level of 25%. Hazzard also reported the SBB was delivering an 8.9% return to investors.¹⁸⁰

SBBs are designed to raise funds for worthy social programs that otherwise may not be funded.¹⁸¹ Because SBBs rest on the idea that governments save money, not only are they theoretically a natural fit for early childhood interventions, but the investor-driven focus on outcomes can increase the quality — and therefore the impact — of the programs.¹⁸²

Box 3: Early Years Education Research Project¹⁸⁴

The Early Years Education Research Project (EYERP) is the name of the randomised controlled trial evaluation of the Early Years Education Program (EYEP) — a mostly centre-based program run by the Children's Protection Society, with philanthropic and some government funding. The program operates in outer suburban Melbourne.

EYEP is a targeted, intensive program for children who have been abused, or are at risk of abuse or neglect. It consists of five days a week of high-quality (low staff-child ratios and highly qualified staff) early education with a total of 25 hours a week. It also involves in-house specialists in infant mental health, family support, and early childhood curriculum. The duration of the program is either three years, or until the child goes to school.¹⁸⁵

Aside from the randomised treatment and control groups, the evaluation will also involve a comparison using LSAC. The evaluation is being run in conjunction with the University of Melbourne. It is the first RCT evaluation of this kind of program in Australia.¹⁸⁶ The first stage of results from the EYERP are forthcoming in 2017.

The outcome of the Early Years Education Research Project (Box 3) is important because it begins to fill a large gap in Australian evidence. The expansion of the Challis model into the government-run Connected Beginnings program¹⁸³ is also a potential source of valuable evidence, particularly as it involves the adaptation by a government department of a model administered and delivered by non-government organisations.

In order to give early childhood intervention programs the best chance of success, this report recommends the following:

Recommendation 1: Better evaluations for government programs

Early childhood intervention programs run by government departments should require evaluation plans that utilise quality methodologies and data. Program details, including expenditure and reach of the program, should be publicly available.

Recommendation 2: Fund experimental research

Governments should set aside a small portion of funds to fund randomised controlled trials of high-potential (informed by research and evidence) early childhood programs. The outcomes of this research should be available for public and philanthropic consumption.

Recommendation 3: Create avenues for government and philanthropic cooperation

Philanthropic and third-sector involvement and enthusiasm for early childhood interventions are strong, but often there are not the resources to devote to high-quality evaluation of the programs they run. The creation of a 'What Works' clearinghouse or Centre for Excellence can drive information-sharing and lead to a greater proliferation of effective intervention programs.



Conclusions

Longitudinal studies and decades of research on early childhood development show there is a theoretical window of opportunity for the right programs having a positive and lasting impact on the lives of children from disadvantaged backgrounds. Australian indicators show that the presence of multiple risk factors can cause early childhood developmental vulnerability that can accumulate across a child's life.

Though the research suggests early adverse experiences and early developmental vulnerability need not have an ongoing impact that effectively limits a young child's life prospects, this report has shown there is still no silver bullet program to achieve this.

As theoretically appealing as early childhood interventions are, their implementation in Australia has not been proved to live up to the promise. High-quality evaluations that examine the immediate or short-term impact of programs upon participants are rare, and those that examine impacts in the medium- or longerterm are rarer still.

There is not enough Australian evidence to determine which programs are effective, let alone generate benefits in excess of their costs. Consequently, it is difficult to say whether the programs being run constitute value for money. Findings from overseas — that targeted programs and programs which focus on behaviour are more effective, and that parental impacts do not necessarily translate to benefits to children — should also be better integrated into policymaking and program implementation, with efforts made to establish a similar evidence base for Australia.

Effective, efficient and clever use of early childhood interventions could have substantial impacts on savings for government as well as improving the lives of individual children — particularly those who are most disadvantaged. Turning this potential into reality requires policymakers and bureaucrats to honestly assess whether long-running programs are having the desired impacts.

An additional factor is that the evidence deficit can also impact the soundness and effectiveness of the programs being implemented in the non-government sector, which is a significant player (if not as significant as governments themselves) in this sector.

The success or failure of existing programs is an issue for the government. But longer-term thinking is also needed: future programs must be implemented with a clear evaluation plan established as part of the implementation process. Equipped with better-quality Australian evidence, and overseas research on best practice, public policy should be focused on trialling and evaluating new models in an effort to find the best way forward.

Appendix A

This appendix contains details of programs currently being run by various governments, including those that were assessed in the body of the report and those that were not.

Program Name	Program Details	Included in report?
Home Interaction Program for Parents and Youngsters (HIPPY)	Australian Government, 2009- present	Yes — evaluated by Liddell et al. 2011
Communities for Children	Australian Government, 2005- present	Yes — evaluated by Edwards et al. 2009 and Edwards et al. 2014
Brighter Futures	Department of Family and Community Services NSW, 2003-present	Yes — evaluated by Hilferty et al. 2010
Triple P	Department of Family and Community Services (Families NSW), 2010-present	Yes — evaluated by Nexus Consulting 2011
New Parent and Infant Network (Newpin)	UnitingCare Burnside and the Department of Premier and Cabinet	Yes — discussed only
Best Start	Department of Education Victoria, 2001-present	Yes — evaluated by Raban et al. 2006
Early Years Education Program (EYEP)	Children's Protection Society and the University of Melbourne, 2010-present	Yes — discussed only; evaluation forthcoming in 2017
Cradle to Kinder Program – focused on young pregnant mothers and their children until the age of four	Department of Health and Human Services Victoria, 2012– present	No — evaluation by the Australian Institute of Family Studies forthcoming in 2016
Early Parenting Centres	Department of Health and Human Services, Victoria	No — data is collected for internal government use
Child and Family Hubs	Queensland Government	No — no evaluation found
Early Years Centres	Department of Education, Training and Employment Queensland, 2006-present	Yes — evaluated by Department of Education, Training and Employment 2013
Pathways to Prevention	Mission Australia and Griffith University, 1999–2013	Yes — evaluated by Homel et al. 2006
Challis School-Community Project	Challis Community Primary School, Curtin University and the Minderoo Foundation. 2007–present	Yes — evaluated by Clark et al. (2014)
Children's Centres for Early Childhood Development and Parenting	South Australian Government, 2005-present	No — evaluation forthcoming
Learning Together	Department of Education and Children's Services, 2003- present	Yes — evaluated by Department of Education and Child Development 2013
Let's Start: Exploring Together	Department of Education and Training and Department of Health, NT, and Menzies School of Health Research	Yes — evaluated by Robinson et al. 2009 and Robinson et al. 2012
Child and Family Centres	Department of Education Tasmania, 2011-present	No — evaluation (Taylor et al. 2015) does not look at outcomes
Launching into Learning	Department of Education Tasmania with government schools and Child and Family Centres as delivery sites, 2006– present	Yes — evaluated by Department of Education 2014
Child and Family Centres	Department of Community Services ACT, 2004-present	No — no evaluation found
Early Childhood Schools	Department of Education ACT, 2009-present	No — no evaluation found

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