

RESEARCH REPORT SNAPSHOT



Early Childhood Intervention: Assessing the evidence

Trisha Jha

Rationale for early childhood interventions

A number of particularly pressing, and seemingly intractable, social problems — such as low educational achievement and attainment, crime, welfare dependence, family instability, unemployment and poverty — stem at least in part from intergenerational disadvantage.

Evidence suggests gaps between advantaged and disadvantaged children emerge in early childhood and continue to widen throughout children's lives.

Early childhood interventions address this issue through a range of programs and activities that attempt to mitigate adverse development in early childhood, with a goal of improving a child's development trajectory over the longer term.

Programs aim to close gaps in school readiness and ensure disadvantaged children are able to better achieve; first in school, and then throughout the course of their lives.

These programs are a form of prevention through early intervention. Australian governments have already

Figure 1: Components of early childhood interventions

Early childhood interventions are programs designed to shift disadvantaged children's life trajectories by providing targeted support to children and their families. This report reviews the evidence from Australian programs and finds they are poorly evaluated, lack strong evidence to demonstrate their impact and are often not informed by best practice research.

In order to give early childhood intervention programs the best chance for success, federal, state and territory governments should:

- Better evaluate the programs they run, and make the results publicly available
- **Fund high-quality experimental research**, and make the outcomes publicly available
- Create avenues for policy cooperation between governments and non-government organisations.



Table 1: Early childhood interventions in action

Body	/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.			

committed to one form of such prevention by pursuing the New Zealand 'investment approach' to welfare reform.

Australian evidence affirms a theoretical window of opportunity

Though a great deal of research on early childhood development has been done overseas, as well as research projects and studies aimed at finding out what works for early childhood intervention programs, similar work is not being replicated thoroughly in Australia. However, there are ongoing research projects that can be used to better inform Australian early childhood intervention policy.

Analysis of data from the long-running Australian Temperament Project found parenting in the early years can shape temperamental traits, and that problems with cognitive skills often had roots in behavioural and temperamental problems arising prior to school.

However, it is also possible for children to recover from early setbacks. Childhood experiences that promoted positive development include strong family and peer relationships, better adjustment to the school environment, better control over emotions and a less reactive temperament.

Similarly, analysis of data from the Longitudinal Study of Australian Children highlights this trajectory with respect to NAPLAN scores in early primary.

Features of the home learning environment in early childhood were linked to performance on standardised testing tools in the period prior to school, which in turn went on to inform learning outcomes in NAPLAN (see Figure 2).

Figure 2: The relationship between early home learning environment and later learning outcomes using LSAC43

Ages 2-3: Home Learning Environment	

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

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Ages 4-5: Early cognitive development

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

Ages 8-9: Learning outcomes

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

Other research using the LSAC dataset also highlights the importance of a stable and secure family environment.

Researchers found that on standardised measures relating to cognitive, behaviour and socio-emotional development and wellbeing, children in sole-mother families were significantly behind their peers in two-parent (married or cohabiting) biological families.

This association remained significant even after accounting for socio-economic status.

Key findings from the Australian evidence

Australian data prove there are social problems that could be solved with a proper implementation of early childhood intervention policies.

There has been a mushrooming of early childhood intervention initiatives over the past decade and a half, and this has included several levels of government as well as a number of non-profit and non-government organisations (see Table 1).

The chief finding of this report is that despite the strong theoretical appeal of early childhood interventions, their implementation in Australia has not yet been proved to live up to the promise.

While some Australian policies can be said to be evidencebased 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.

Programs run in Australia are plagued by the use of simplistic evaluation methodologies that use low-quality 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 is 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.

There is not enough high-quality and reliable evidence to determine which programs work, why they work, and under which circumstances.

Table 2: Studies examined in this report

Program Name/Locatiom	Program Components	Outcomes measured	Evaluation
Communities for Children; Australia-wide	home visiting; early learning and literacy; parenting and family support; child nutrition; community events	Health, families and parents, early learning and care, child-friendly communities	Quasi-experimental comparing whole CfC sites matched with 'like' comparison sites — does not examine impact on participants
Brighter Futures; sites across NSW	Case management; group- based parenting programs; home visiting programs; placement of children within children's services	Risk of harm reports; placement in out-of- home care; outcome variables such as child socio-emotional competence, self- esteem and problem behaviours	A pre/post-test of program participants with limited use of a low-quality comparison group
Home Interaction Program for Parents and Youngsters (HIPPY); 100 sites Australia- wide	Family home visiting; centre- based; parent group meetings	Parenting competencies; children's early literacy and numeracy	A two-year quasi- experimental study using a propensity score-matched comparison group
Triple P; sites across NSW	Seminars, short intervention with skills training, intensive individual/group training, whole-of-family intervention	Parenting practices, child behaviour	A quasi-experimental study for one program component and pre/post scores comparison for another component
Best Start; sites across Victoria	Range of small-scale activities involving literacy	Health and wellbeing; education and schooling; housing/child protection	A simple comparison of outcomes in Best Start sites to regional benchmarks
Early Years Centres; sites across Queensland	A 'one stop shop' providing access to services including early childhood education, family support, employment and health services	Improvements in outcomes for children; parenting skills and strengthened families; vulnerable families	Comparison of pre/post scores of the cohort which participated in the program
Pathways to Prevention; Inala, Queensland	Child-focused component (Preschool Intervention Program) and services for families (Family Independence Program)	Child behaviour and parental efficacy	Quasi-experiment
Challis School-Community Project; Armadale, WA	Challis Early Education Centre (kindergarten to Year 2) and Challis Parenting and Early Learning Centre (from birth to pre-kindergarten)	Child development using the AEDI, and school readiness/ teacher effectiveness	Comparison of pre/post scores using Australian Early Development Census data
Learning Together; 7 sites across SA	An in-school program focusing on parenting capacity and children's early literacy	Parental capacity to support learning; empowerment of parents in their parenting role; connecting families with early childhood services and schools	Pre/post testing, with a combination of observational data using a verified scale, and self- reporting data from an unverified survey
Launching into Learning; schools and Child & Family Centres across Tasmania	Parent-child interaction with a focus on early literacy and numeracy, and early social skills	Reading and numeracy performance of children	A longitudinal study tracking long-run outcomes of participating children including Year 3 NAPLAN scores
Let's Start: Exploring Together; NT	Parent-child interaction, play- based and facilitated groups for children; parenting support	Child behaviour	A pre/post-test score comparison, with a sample severely limited by high rates of attrition

Conclusions

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.
- Some targeted interventions have been found to have stronger impacts, but others have no impacts.
- Overseas evidence on best practice in this policy 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.

Recommendations

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 trialling and evaluating new models in an effort to find the best way forward for early childhood intervention.

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.

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.

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 informationsharing and lead to a greater proliferation of effective intervention programs.

Author

Trisha Jha Policy Analyst at The Centre for Independent Studies working on school education, early childhood education and care, and family policy.