murdoch children's research institute

Centre for Community Child Health

Research Snapshot

Reducing inequities in children's reading skills

The development of children's reading skills begins from birth and is shaped by early learning environments at home and preschool. Some children will face challenges achieving their reading potential.

Equity means fairness and justice. It often involves allocating more or different resources to children, families and communities who face unfair differences in health, development and wellbeing. Inequities in children's reading skills are unfair and unjust differences caused by preventable social, economic or geographic conditions. These inequities are causing a gap - an inequities gap - in children's reading skills.

Children experiencing socioeconomic disadvantage (hereafter disadvantage) are more likely to experience poor reading skills compared to children not experiencing disadvantage. Reducing this inequity gap in reading skills would have substantial and lifelong benefits for children, families and society.

Key messages

- Reading is a fundamental skill that enables children to understand and communicate with the world around them.
- Reading skills are essential for life and learning.
- Children who experience disadvantage are more than twice as likely to have poor reading skills compared to children not experiencing disadvantage.
- Supporting families to read at home with their children and participate in preschool are two promising intervention opportunities.
- Improving rates of both home reading and preschool attendance reduces the impact of disadvantage on children's reading skills.

Changing Children's Chances

The Centre for Community Child Health is a department of The Royal Children's Hospital and a research group of the Murdoch Children's Research Institute.

The Royal Children's Hospital Melbourne

Why is this important?

Children experiencing disadvantage have poorer reading skills than children not experiencing disadvantage.[1] Understanding how early childhood interventions, including those not specifically targeting reading skills, can be combined to achieve maximum impact will enable better policy decision making.

What was our aim?

The *Reducing Inequities in Children's Reading Skills* study aimed to determine the potential benefits of promoting home reading and children's attendance at preschool programs on reading skills among children experiencing disadvantage.

What did we do?

This study used data from the birth cohort of *Growing Up in Australia: The Longitudinal Study of Australian Children* (LSAC). LSAC has been following the development of 5107 infants since May 2004.[2] The data used in this study were collected when children were aged 0-1 year, 2-3 years, and 4-5 years. Data from the National Assessment Program – Literacy and Numeracy (NAPLAN) were linked with LSAC for an assessment of reading skills when children were aged 8-9 years[3] (Figure 1). Innovative analytic approaches[4] (such as modern epidemiological causal approaches) allowed us to test what happens to children's risk of poor reading skills if we provided all children with the same rates of home reading and preschool attendance as children not experiencing disadvantage.

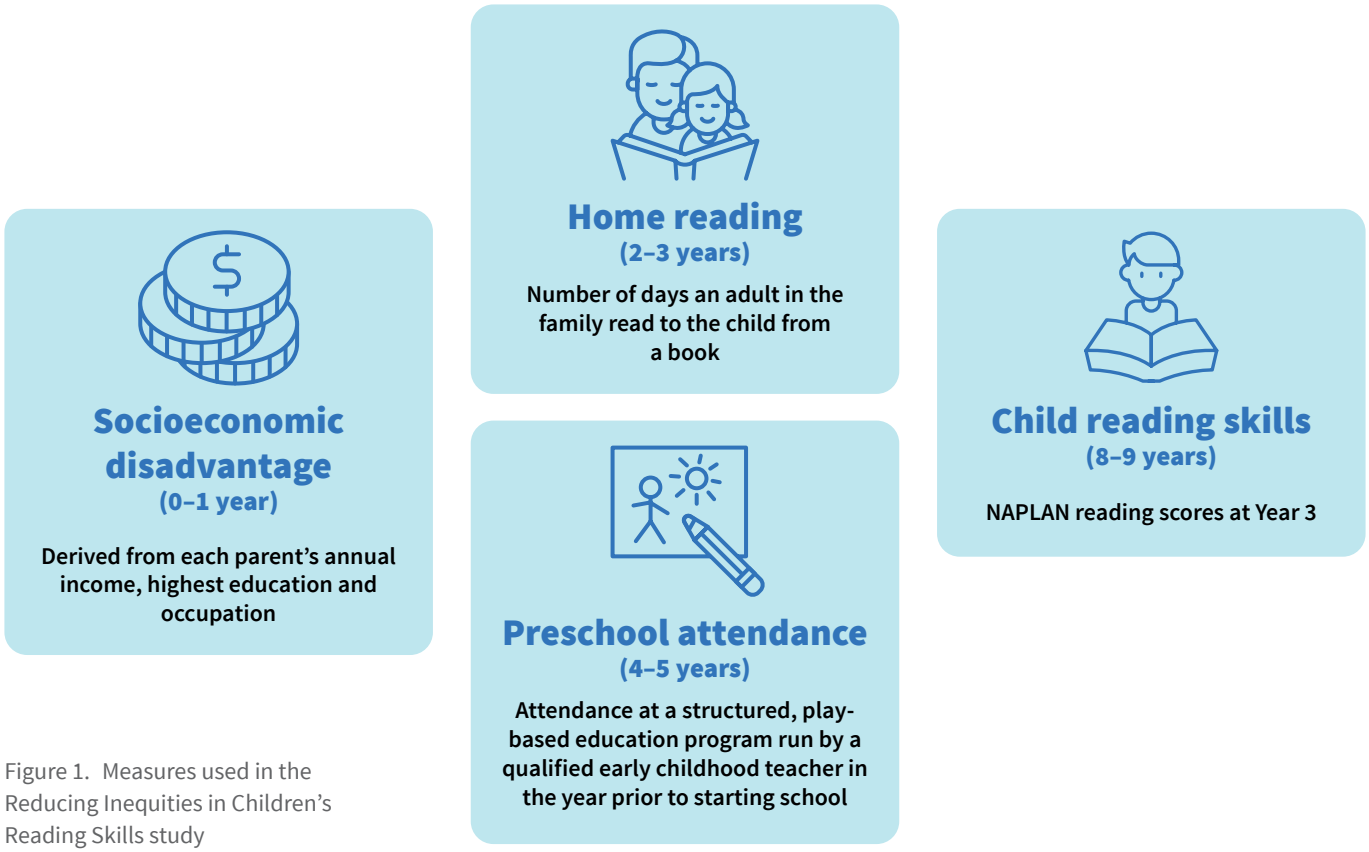

Figure 1. Measures used in the Reducing Inequities in Children's Reading Skills study

What did we find?

Overall, children experiencing disadvantage were more than twice as likely to have poor reading skills (Figure 2). They also had lower rates of home reading and preschool attendance (Figures 3 and 4).

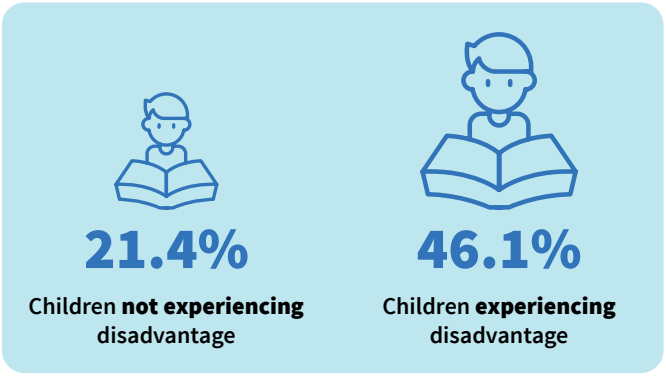

Figure 2. The inequities gap in children's poor reading skills

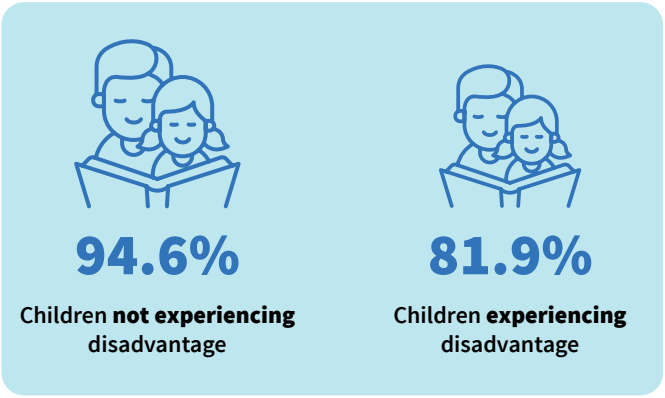

Figure 3. Percentage of children with more frequent home reading

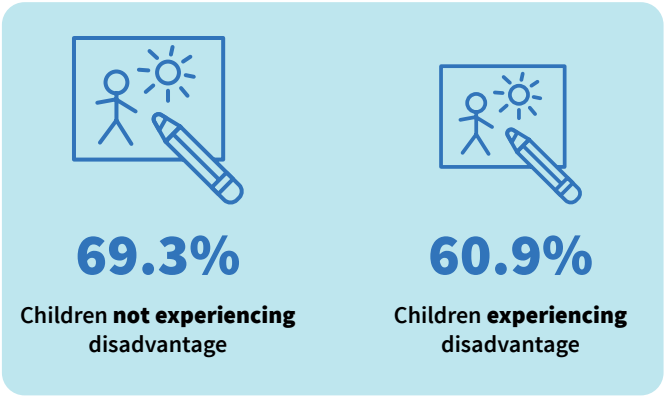

Figure 4. Percentage of children who attended preschool

Improving rates of home reading and preschool attendance to the same level as children not experiencing disadvantage could reduce the risk of poor reading skills for children experiencing disadvantage (Figure 5). We found:

- children experiencing disadvantage at 0-1 year had a 20.1% inequities gap in poor reading skills at 8-9 years
- supporting improvements in home reading for children experiencing disadvantage could potentially reduce the difference in poor reading skills by 1.3%: equivalent to an overall 6.5% reduction in inequity
- intervening to support greater preschool attendance could potentially reduce the difference of poor reading skills by 0.4%: equivalent to a further 2.1% reduction in inequity
- despite combining improved home reading and greater preschool attendance together, an 18.3% inequities gap would remain for children experiencing disadvantage.

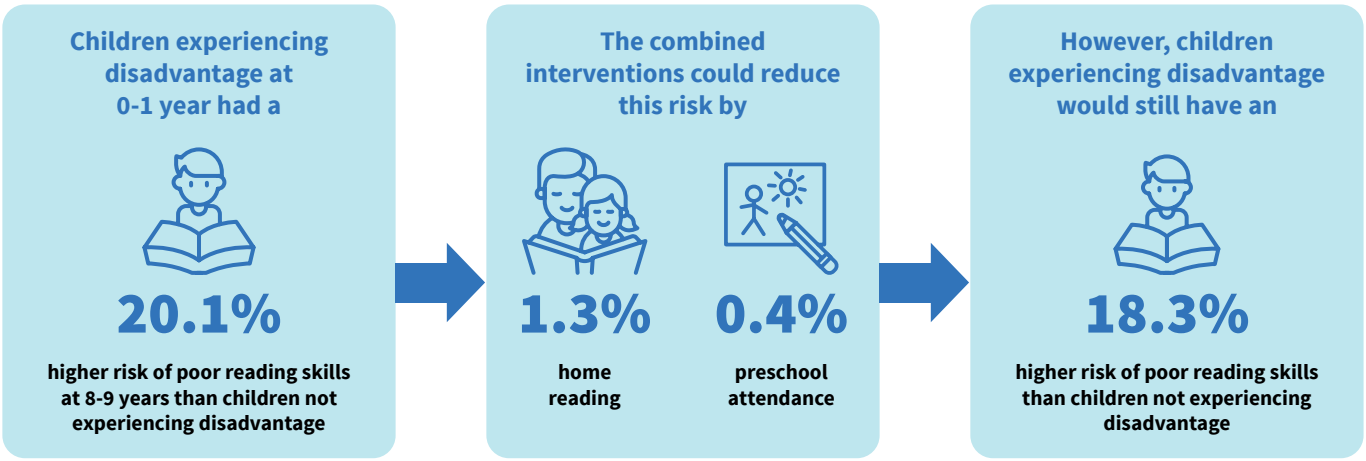

Figure 5. The impact of improving rates of home reading and preschool attendance

What does this mean?

Promoting home reading and preschool attendance for children experiencing disadvantage is beneficial, but these interventions alone are insufficient for closing the gap in reading inequities.

Implications for policy and practice

There is the potential to reduce some of the impacts of disadvantage on children's poor reading skills through non-reading interventions targeting home reading and children's preschool attendance. Efforts could be targeted at better understanding how to assist families experiencing disadvantage to overcome barriers to participating in such interventions.

While the equity reduction is relatively small, it is likely to have broader benefits for children at a population level, as well as families and society. Single intervention approaches are insufficient for reducing inequities. Stacking or combining complementary interventions in the early years is required for substantive reductions in reading inequities.

Implications for research

Using innovative methods to test hypothetical intervention scenarios using existing data can help researchers to quickly and cost-effectively create new evidence to inform policy decision making. These should be supplemented with findings from 'real-world' interventions.

Further research is needed to identify which intervention combinations are most effective for reducing inequities in children's reading skills. This should consider strategies that reduce disadvantage itself (e.g. providing families with income support).[5]

Where can I find out more?

Research paper

Goldfeld, S., Moreno-Betancur, M., Guo, S., Mensah, F., O'Connor, E., Gray, S., Chong, S., Woolfenden, S., Williams, K., Kvalsvig, A., Badland, H., Azpitarte, F. & O'Connor, M. (2021). Inequities in children's reading skills: the role of home reading and preschool attendance. *Academic Pediatrics*, 21(6), 1046-1054. https://doi.org/10.1016/j.acap.2021.04.019

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2 Soloff, C., Lawrence, D. & Johnstone, R. (2005). *Sample design*: LSAC technical paper number 1. Australian Institute of Family Studies.

3 Daraganova, G., Edwards, B. & Sipthorp, M. (2013). *Using National Assessment Program - Literacy and Numeracy (NAPLAN) data in the Longitudinal Study of Australian Children (LSAC)*: LSAC technical paper number 8. Australian Institute of Family Studies.

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5 Goldfeld, S., Gray, S., Pham, C, Badland, H., Woolfenden, S., Schor, E., & O'Connor, M. (2022). Leveraging research to drive more equitable reading outcomes: an update. *Academic Pediatrics*. https://doi.org/10.1016/j.acap.2022.04.001

Changing Children's Chances

The Changing Children's Chances project unites leading national and international child equity researchers and child health clinicians from the University of Melbourne, Murdoch Children's Research Institute, Monash University, the University of New South Wales, Royal Melbourne Institute of Technology, the Australian National University, Loughborough University (UK), Beyond Blue and the Brotherhood of St. Laurence.

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The Centre for Community Child Health acknowledges the Traditional Owners of the land on which we work and pay our respect to Elders past, present and emerging.