



The First Five Years: what makes a difference?

4. Conclusion

Summary

The First Five Years was developed as a flagship project under the Data Integration Partnership for Australia (DIPA) as a collaborative endeavour involving project partners from across government and the university sector. For the first time, administrative data on child care participation and quality was linked to a measure of childhood development, along with a broad range of family, social, economic and health data.

The project demonstrated the significant value of integrated data to contribute to the policy evidence base, focussing on two broad questions.

- What child and family characteristics contribute to children being developmentally vulnerable at age 4-6 years?
- How does child care attendance affect child developmental vulnerability, and do these effects differ based on child care usage patterns and quality of services?

The project used descriptive analysis, predictive modelling, and statistical inference techniques to explore associations between children's circumstances and child care use and their developmental outcomes in the first year of school.

Key results

The analysis found a range of child, family and social characteristics were associated with developmental vulnerability, recognising that developmental vulnerability is linked to the socio-economic conditions that families are experiencing rather than a direct result of factors such as a family's country of origin.

- Higher parent or carer educational attainment, higher neighbourhood socio-economic status and higher household income were associated with lower rates of developmental vulnerability.

- Children from language backgrounds other than English and those with a parent not born in an OECD country had higher rates of developmental vulnerability, as did children of mothers aged under 20 at the child's birth, children of single parents and children with parents experiencing mental ill-health.

Analysis of associations between child care and developmental vulnerability showed differences in rates of developmental vulnerability for different usage patterns and quality.

- Aboriginal and Torres Strait Islander children, children with language backgrounds other than English and children from low SES areas with 15 to 30 weekly hours of child care attendance had higher rates of being developmentally on track in all domains, when compared to lower or higher hours of attendance.
- Children who attended formal child care exhibited lower rates of overall developmental vulnerability (that is, they had lower rates of being developmentally vulnerable on at least one developmental domain), though some individual domains showed a different pattern.
- Children had lower rates of developmental vulnerability if they attended child care that was above standard quality (services with an overall rating of "Excellent" or "Exceeding NQS") compared to children at lower quality services.
- Children reported to have attended preschool had much lower rates of overall developmental vulnerability than those who did not.

Estimated effects of child care duration and quality on developmental vulnerability after controlling for differences in children's circumstances showed both positive and negative effects on different aspects of development.

- Regular use of low-medium weekly hours of child care consistently resulted in lower rates of developmental vulnerability.
- Most children attended child care at medium levels of average and total hours. This group had a lower rate of developmental vulnerability for the communication skills and general knowledge and language and cognitive skills (school based) domains.
- Higher average and total hours of child care were associated with elevated risks of developmental vulnerabilities for the emotional maturity and social competence domains.
- Higher quality child care improved overall outcomes for children compared to lower quality child care.

Limitations

The First Five Years project is a valuable addition to the policy evidence base, linking for the first time the developmental outcomes of an entire cohort of Australian children starting school to their child care use and family circumstances. At the same time, the results must be interpreted in line with the project's limitations.

More work is needed to infer causal relationships: while statistical techniques were used to adjust for differences in children's circumstances to better estimate the effect of child care on developmental vulnerability, the observational nature of the data and the inability to adjust for key factors (such as quality of home care) precludes drawing causal conclusions.



Some factors such as lower SES status, Aboriginal and Torres Strait Islander background, having mental ill-health, single parent household status and mothers under 20 are found to be predictors of children's developmental vulnerability. The association of family characteristics with developmental vulnerability may be due to the challenges and systemic barriers those families face, and this could be explored further.

The project has known data gaps, such as the lack of detailed information on government-run pre-school attendance. Other family and child characteristics known to affect a child's development, such as the quality of home care and exposure to family and domestic violence, are not available in the current study. Analysis results are also influenced by linkage quality: the group of children who were unable to be linked across datasets, and hence were excluded from the analysis, were more likely to be developmentally vulnerable in all domains. Thus, the analytical cohort is biased towards those who are less likely to be developmentally vulnerable.

Results were based on children's developmental outcomes as measured in the first year of school. The significance of these findings would be enhanced by further work looking at how these outcomes persist or not through the school years and beyond.

The project focussed on children's developmental outcomes assessed through the AEDC and did not consider broader benefits from child care use such as parental labour force participation and related social and economic gains.

This project reports only on child care services across three broad categories of quality, and does not engage with the dedicated service models that might better support development for different cohorts of children. The data and analytical findings did not report on factors such as the cultural safety or responsiveness of child care for Aboriginal and Torres Strait Islander children, especially the importance of Social and Emotional Wellbeing (SEWB) which describes the social, emotional, spiritual and cultural wellbeing of Aboriginal and Torres Strait Islander people. Aboriginal Community-Controlled Organisations (ACCOs) have a special role in supporting the SEWB of Aboriginal and Torres Strait Islander children; however, some of them might not be included in the CCMS data (as they can be supported under the former Budget Based Funded services which are not included in the CCMS).

The results focus on formal early childhood education and care and kinship care is absent from the data, noting these arrangements can be important for Aboriginal and Torres Strait Islander children and people from certain other cultural backgrounds.

The results alone are not suitable for determining "optimal" amounts of child care for particular families: while the analysis can provide useful information on general benefits and risks, families will still need to consider these alongside their specific circumstances and preferences.

Next steps

The First Five Years project aimed to create an enduring data asset linking a measure of childhood development with family, social, economic and health data and data about child care centre attendance and quality.



The existing results do not exhaust the possibilities of the integrated data. Work on related questions remains active, including efforts to address some of the limitations described above. Another key priority is incorporating more recent data to provide more current results: administrative data covering the Child Care Subsidy system (which was introduced in 2018) is now available, along with later waves of the Australian Early Development Census.

Further analysis will build on the valuable contribution the First Five Years project has already made to the evidence base in this critical policy area.

