

Designing neighbourhoods to support early childhood development

Built environment features

associated with early childhood development

Positive and stimulating environments in the first eight years help children develop well physically, socially, emotionally, and cognitively. Analysing data from 47,000 five-year-olds, we examined neighbourhood features that were associated with early childhood development in different areas, including established suburbs and rapidly growing neighbourhoods on Melbourne's urban fringe.

What measures did we use?

- Developmentally vulnerable on one or more domains of the Australian Early Development Census (AEDC) (www.aedc.gov.au).
- Child and family characteristics from the AEDC.
- Urbanicity: Classified by Local Government Area—inner city, middle ring, outer ring, growth areas.
- Neighbourhood Disadvantage: most to least disadvantaged using ABS Census data.
- Neighbourhood 'Double Disadvantage': Combines urbanicity and neighbourhood disadvantage into 20 categories (e.g., high disadvantage growth area).
- 8 built environment domains: traffic, walkability, public transport, housing, public open space, early childhood education and care, family-friendly destinations, and food outlets.

What did we find?

- Outer ring and growth area suburbs have fewer amenities and infrastructure compared with inner city suburbs.
- Housing, public open space, and early childhood education and care were consistently related to developmental vulnerability. Small effects were seen.

What did we find? Examples...

- An increase of 10% in the percentage of individuals experiencing housing affordability stress within an SA1* was associated with a 5% increased odds of developmental vulnerability.
- One extra public open space within 800m of a child's home was associated with a 1% lower odds of developmental vulnerability.
- An increased variety of public open spaces, of different sizes, located within 800m of a child's home was associated with a 2% lower odds of developmental vulnerability.
- An extra high-quality childcare centre within 3km of a child's home was associated with a 1% lower odds of developmental vulnerability.
- An extra high-quality preschool within 3km of a child's home was associated with a 2% lower odds of developmental vulnerability.

Where you live can make a difference: Associations vary by level of neighbourhood double disadvantage. This can even occur in areas that are geographically close, like within the same local government area.



What do these findings mean?

- Housing, public open space, and early childhood education and care services should be priority areas of focus for federal and state government, local community planning, and urban planning policies.
- Built environment and child development relationships can differ based on level of neighbourhood double disadvantage (e.g., low disadvantage inner city area). Planning for better child development outcomes requires tailored place-based approaches.
- Continued investment in policy interventions and place-based initiatives are needed in the most disadvantaged areas across cities, regardless of whether you live in the inner city or outer growth areas.

Where can I find out more?

Full report:

Villanueva, K., Turrell, G., Alderton, A., Davern, M., Brinkman, S., Gauvin, L., Goldfeld, S., Badland, H., (2025) The built environment and children's development in different urban contexts of Melbourne: VicHealth Early Data to Decisions project report. RMIT University: Melbourne, Australia. Read it [here](#).

Contact:

Dr Karen Villanueva
karen.villanueva@rmit.edu.au

*Statistical Area Level 1: an ABS administrative unit for a geographic area of approximately 400 persons on average.



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