

4.3 Children developmentally vulnerable on entering school

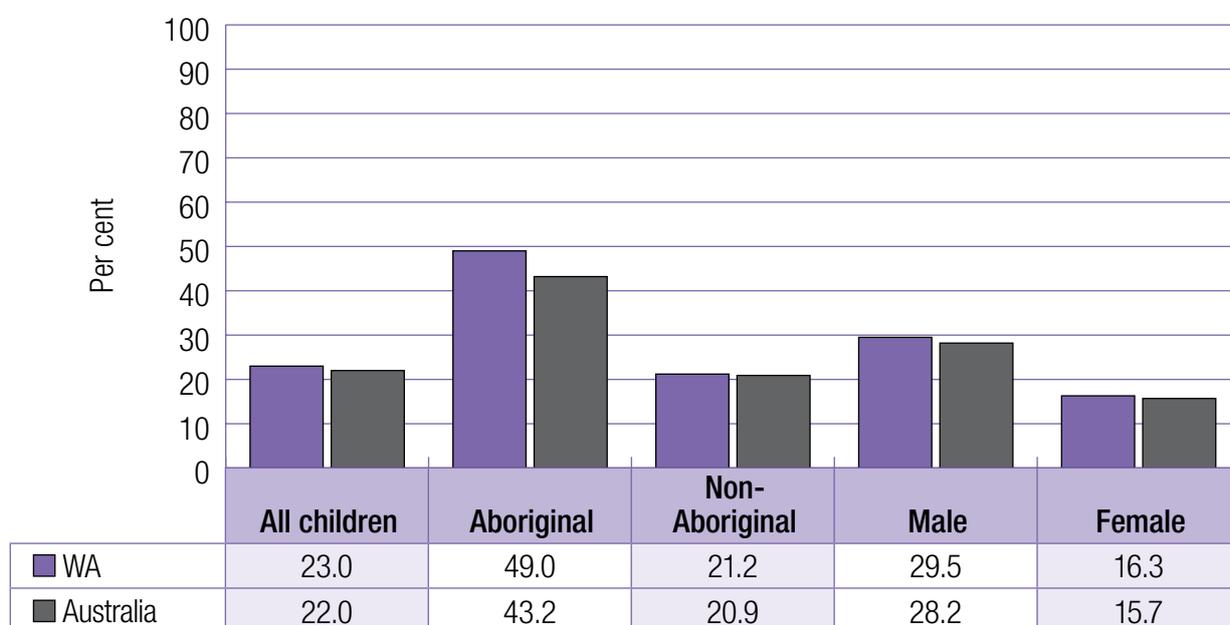
Why this measure is included

Successful engagement with early childhood education is a key contributor to attaining positive life outcomes.²⁸⁸ Early childhood is the most critical time for brain development. These early years set the foundations for future learning and optimal childhood development.

This measure has been developed around the Australian Early Development Index (AEDI), a national progress measure on early childhood development. The AEDI can help measure how young children are developing across Australia, and will assist communities and governments to target services, resources and support needed by young children and their families to ensure those children get the best possible start in life.²⁸⁹

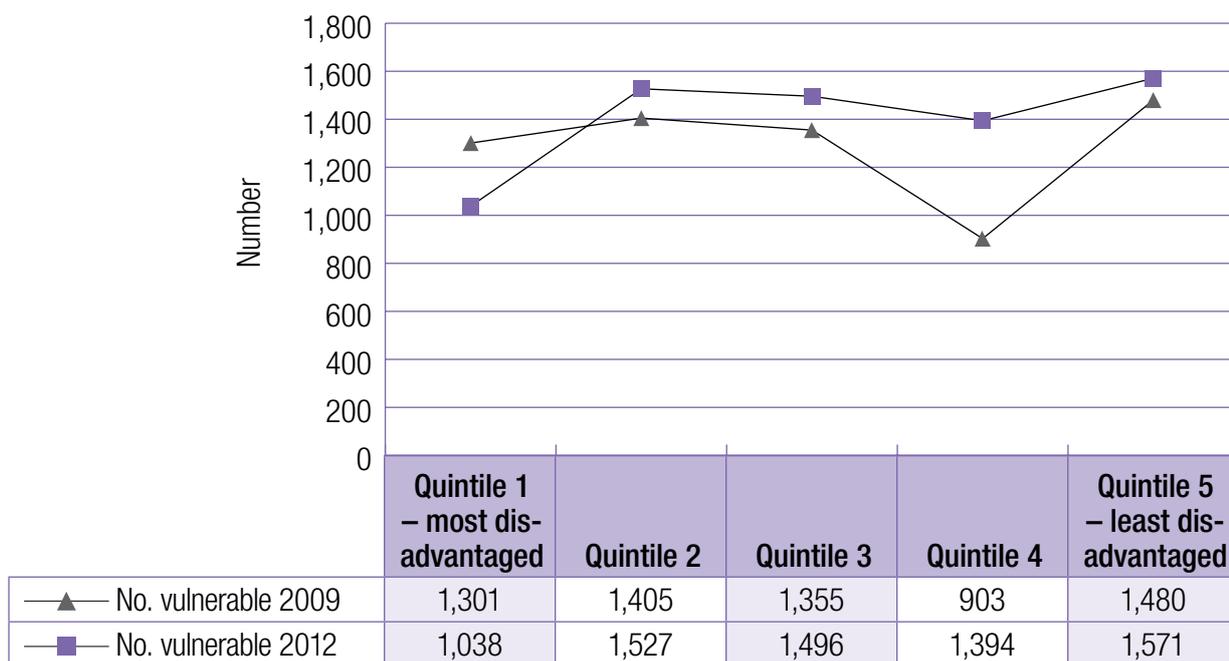
The AEDI also has the capacity to predict children’s trajectories through school.²⁹⁰

Figure 4.1: Children entering full-time school who are ‘developmentally vulnerable’ on one or more domains: in per cent, by gender and Aboriginal status, Western Australia and Australia, 2012



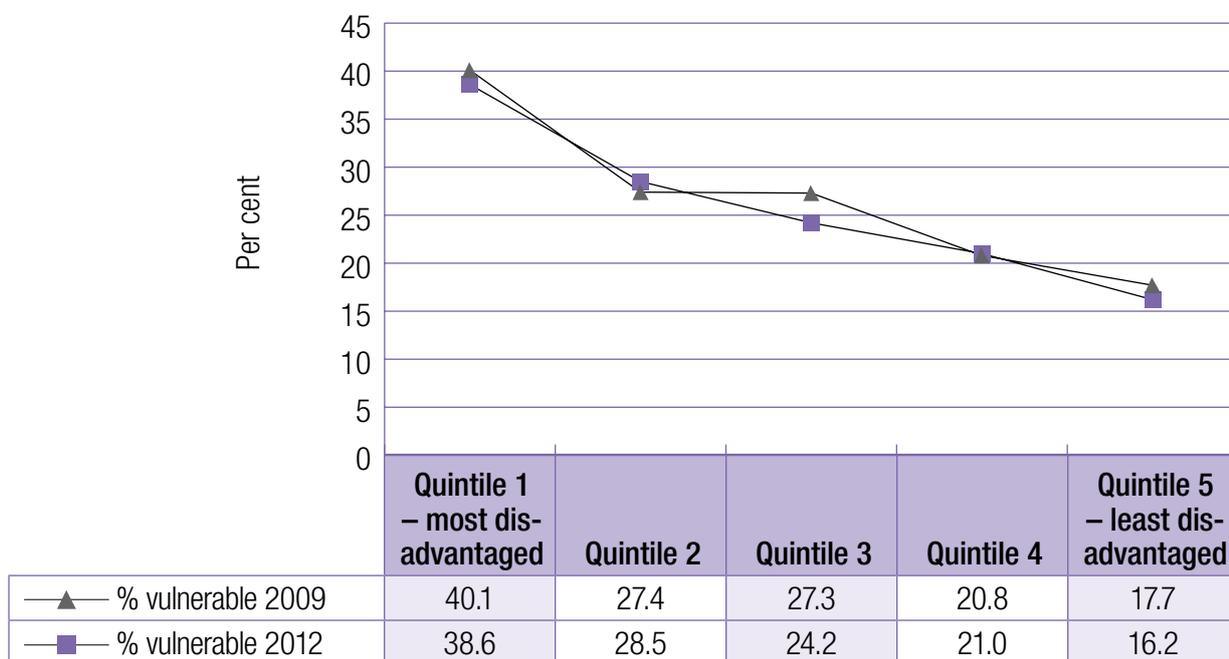
Source: Data provided by The Social Research Centre, custom report

Figure 4.2: Children entering full-time school who are ‘developmentally vulnerable’ on one or more domains: number, by SEIFA²⁹¹ category, 2009 and 2012, Western Australia



Source: Data provided by The Social Research Centre, custom report

Figure 4.3: Children entering full-time school who are ‘developmentally vulnerable’ on one or more domains: in per cent, by SEIFA²⁹² category, 2009 and 2012, Western Australia



Source: Data provided by The Social Research Centre, custom report

Table 4.8: Children entering full-time school who are ‘developmentally vulnerable’ on one or more domains: in number and per cent; critical differences²⁹³ between 2009 and 2012 by Aboriginal and non-Aboriginal, Western Australia and Australia

	2009		2012		2009 to 2012		
	Number	Per cent	Number	Per cent	Change	Critical Diff.	Significant
Western Australia							
Aboriginal	834	52.3	997	49.0	-3.3	1.7	Y
Non-Aboriginal	5,611	22.9	6,051	21.2	-1.8	0.4	Y
Total	6,445	24.7	7,048	23.0	-1.7	0.4	Y
Australia							
Aboriginal	5,309	47.4	6,057	43.2	-4.2	0.6	Y
Non-Aboriginal	52,727	22.4	53,876	20.9	-1.6	0.1	Y
Total	58,036	23.6	59,933	22.0	-1.5	0.1	Y

Source: Data provided by The Social Research Centre, custom report

Table 4.9: Children entering full-time school who are ‘developmentally vulnerable’ on one or more domains: in number and per cent, critical differences²⁹⁴ between 2009 and 2012 by remoteness area, Western Australia

	2009		2012		2009 to 2012		
	Number	Per cent	Number	Per cent	Change	Critical Diff.	Significant
Metropolitan area	4,053	23.5	5,045	22.1	-1.4	0.5	Y
Inner regional WA	1,015	24.7	675	23.1	-1.6	1.2	Y
Outer regional	610	29.1	663	25.5	-3.6	1.5	Y
Remote	438	25.7	361	23.4	-2.4	1.7	Y
Very remote	329	35.6	304	39.2	3.7	2.4	Y
Total	6,445	24.7	7,048	23.0	-1.7	0.4	Y

Source: Data provided by The Social Research Centre, custom report

What is this measure?

This measure reports on results from the Australian Early Development Index (AEDI) for Western Australia (WA) and Australia. The AEDI is a population measure of children’s development as they enter their first year of formal full-time school (Pre-primary in WA).

The AEDI has been administered nationally in 2009 and 2012 and will be administered every three years. The 2012 survey assessed 96.5 per cent of all Australian children enrolled in their first year of formal full-time school, including 99.0 per cent of children (32,160) enrolled in WA.²⁹⁵

Information for the AEDI is collected through a teacher-completed checklist. Based on this information the AEDI calculates the percentage of children who are considered ‘developmentally vulnerable’ on one or more of the five domains. Although information for the AEDI is collected by teachers, results are reported for the community where children live, not where they go to school.²⁹⁶

The five areas of focus that comprise the AEDI domains – physical health and wellbeing, social competence, emotional maturity, language and cognitive skills (school-based), and communication skills and general knowledge – are closely linked to predictors of good adult health, education and social outcomes.²⁹⁷

Children who score above the 25th percentile (in the top 75 per cent) of the national AEDI population are classified as ‘on track’. Children who score between the 10th and 25th percentile of the AEDI population are classified as ‘developmentally at risk’. Children who score below the 10th percentile (in the lowest 10 per cent) of the national AEDI population are classified as ‘developmentally vulnerable’. These children demonstrate a much lower than average ability in the developmental competencies measured in that domain.²⁹⁸

The commentary and reporting in this measure is consistent with the AEDI report, which differentiates children who are ‘on track’ from those who are ‘developmentally vulnerable’ and ‘developmentally at risk’. It is also consistent with the way in which other states and territories report on the data.²⁹⁹

Commentary

Results from the 2012 AEDI data collection show that the majority of WA children at Pre-primary are considered on-track on each of the five developmental domains of the AEDI. The percentage of children developmentally vulnerable on one or more domains in 2012 was 23.0 per cent. This is an improvement on the percentage reported in 2009 of 24.7 per cent. However, the percentage of children developmentally vulnerable on one or more domains remains higher in WA than the Australian average (Figure 4.1).

The AEDI found that demographic factors have a significant impact on the development of children.³⁰⁰ Therefore, rather than consider WA as a single entity it is more useful to examine the most significant demographic factors – socio-economic status, gender, Aboriginality and location.

The percentage of children developmentally vulnerable on one or more domains increases with the level of socio-economic disadvantage of a community.³⁰¹ In WA, 38.6 per cent of children who live in communities classified in the lowest Socio-Economic Indexes for Areas (SEIFA)³⁰² category (Quintile 1 – most disadvantaged) are considered developmentally vulnerable when they enter school. In absolute numbers this means that 1,038 WA children living in the most disadvantaged communities were considered developmentally vulnerable in 2012 (Figures 4.2 and 4.3).³⁰³

In comparison, 16.2 per cent of WA children who reside in the least disadvantaged areas (Quintile 5) are considered developmentally vulnerable on one or more domains (Figure 4.3). In absolute numbers, this means that 1,571 children living in the least disadvantaged areas were considered developmentally vulnerable (Figure 4.2).³⁰⁴

Boys are significantly more likely than girls to be developmentally vulnerable on one or more domains. In 2012 in WA, 29.5 per cent of boys were developmentally vulnerable compared to 16.3 per cent of girls. This was consistent with the differences between boys and girls in Australia generally (28.2% for boys and 15.7% for girls). The findings of the Longitudinal Study of Australian Children also suggested that girls were generally more advanced in their development than boys of a similar age.³⁰⁵

Aboriginal children are significantly more likely to be developmentally vulnerable on one or more domains than non-Aboriginal children. The 2012 data collection found that nearly half of Aboriginal children (49.0%) were developmentally vulnerable on one or more domains. This had decreased since the 2009 study, where 52.3 per cent of Aboriginal children were found to be developmentally vulnerable, but is still more than double the incidence for non-Aboriginal children (Table 4.8).

Geographic location also is an important factor. In WA, 39.2 per cent of children living in very remote areas are developmentally vulnerable on one or more domains compared to 22.1 per cent of children who live in the metropolitan area. The percentage of children developmentally vulnerable on one or more domains has decreased from 2009 to 2012 across all geographic location categories with the exception of 'very remote' where the percentage of developmentally vulnerable children increased by almost four percentage points (Table 4.9).

Strategies

National Partnership Agreement on Universal Access to Early Childhood Education

The National Partnership Agreement on Universal Access to Early Childhood Education replaced an earlier partnership agreement which expired in June 2013. This current agreement has committed to maintaining universal access to early education through the provision of 600 hours per year of kindergarten, ongoing professional development for staff and enhancing transition to school. This agreement has a focus on vulnerable and disadvantaged children. Further information is available at www.federalfinancialrelations.gov.au/content/npa/education.aspx

Aboriginal and Torres Strait Islander Education Action Plan 2010–2014, Council of Australian Governments

This plan will be undertaken at the national, state and local levels to close the gap between the educational outcomes of Aboriginal and non-Aboriginal students. These actions are linked to six priority domain areas that evidence shows will have the most impact on closing the gap, including readiness for school. The plan is available at http://scseec.edu.au/site/DefaultSite/filesystem/documents/ATSI%20documents/ATSIEAP_web_version_final.pdf

Aboriginal Education Plan for WA Public Schools 2011–2014, Government of Western Australia

Readiness for school is one of the key focus areas of this plan. Strategies include better access to pre-school facilities, general support for parents, screening of young children prior to Year 1 and case management for children assessed as not ready for school. The plan is available at www.det.wa.edu.au/policies/detcms/policy-planning-and-accountability/policies-framework/strategic-documents/aboriginal-education-plan-2011-2014

Want to know more?

Research, reports and articles

Centre for Community Child Health and Telethon Institute for Child Health Research 2009, *A Snapshot of Early Childhood Development in Australia – AEDI National Report 2009*, Australian Government, Canberra. The report is available at www.rch.org.au/aedi/Resources/National_Report/

Australian Government 2013, *A Snapshot of Early Childhood Development in Australia 2012 – AEDI National Report*, Australian Government, Canberra. The report is available at www.rch.org.au/aedi/Resources/National_Report/

The paper 'Associations Between the Early Development Instrument at Age 5, and Reading and Numeracy Skills at Ages 8, 10 and 12: a Prospective Linked Data Study' discusses how the AEDI predicts a child's later literacy and numeracy outcomes. A summary of the paper is available at www.rch.org.au/aedi/Researchers/Research_snapshots/



The full paper is available at <http://telethonkids.org.au/our-research/published-research/2013/child-development-and-wellbeing/associations-between-the-early-development-instrument-at-age-5,-and-reading-and-numeracy-skills-at-ages-8,-10-and-12-a-prospective-linked-data-study/>

Other information

AEDI results for Western Australian communities are available in the form of community profiles and on-line community maps, available at www.aedi.org.au

The AEDI website shows information about the AEDI studies, the AEDI results and the Indigenous Adaptation Study www.aedi.org.au

Further information on the Department of Education is available on its website www.det.wa.gov.au

The State government has committed to the establishment of 16 Child and Parent Centres on selected public school sites in vulnerable communities. A range of children and family services, such as early learning programs for three year-olds, playgroups, child and maternal health services and parent programs are provided by procured non-government organisations. Further information is available from <http://det.wa.edu.au/curriculum-support/earlychildhood/detcms/navigation/category.jsp?categoryID=14350457>

Under the Closing the Gap: Indigenous Early Childhood Development National Partnership, WA has received funding to construct and operate five Children and Family Centres in WA. These centres are predominantly for Aboriginal children from birth to eight years of age and their families, and will offer a range of early learning and child and material health programs. Further information is available from <http://det.wa.edu.au/curriculum-support/earlychildhood/detcms/navigation/initiatives/children-and-family-centres/>

Additional tables

Table 4.10: Children entering full-time school who are 'developmentally vulnerable' on one or more domains: in number and per cent; critical differences³⁰⁶ between 2009 and 2012 by region within Western Australia

	2009		2012		2009 to 2012		
	Number	Per cent	Number	Per cent	Change	Critical Diff.	Significant
Central	257	31.4	272	30.7	-0.8	2.3	N
Kimberley*	225	40.8	241	39.6	-1.2	2.9	N
Lower Great South	194	26.6	196	24.4	-2.2	2.5	N
Midlands	195	28.5	166	23.1	-5.3	2.6	Y
Perth	4,389	23.5	4,849	22.0	-1.5	0.5	Y
Pilbara	158	22.5	175	21.4	-1.2	2.5	N
South Eastern	241	31.4	238	26.3	-5.1	2.4	Y
South West	718	25.2	835	23.7	-1.4	1.3	Y
Upper Great South	68	28.8	76	26.1	-2.7	4.4	N
Total	6,445	24.7	7,048	23.0	-1.7	0.4	Y

Source: Data provided by The Social Research Centre, custom report

* Includes Christmas and Cocos (Keeling) Islands

Table 4.11: Children entering full-time school who are ‘developmentally vulnerable’ on one or more domains: in number and per cent; critical differences³⁰⁷ between 2009 and 2012 by gender, Western Australia and Australia

	2009		2012		2009 to 2012		
	Number	Per cent	Number	Per cent	Change	Critical Diff.	Significant
Western Australia							
Male	4,223	31.8	4,572	29.5	-2.3	0.6	Y
Female	2,222	17.4	2,476	16.3	-1.0	0.6	Y
Total	6,445	24.7	7,048	23.0	-1.7	0.4	Y
Australia							
Male	37,518	30.2	38,661	28.2	-2.0	0.2	Y
Female	20,518	16.8	21,272	15.7	-1.1	0.2	Y
Total	58,036	23.6	59,933	22.0	-1.5	0.1	Y

Source: Data provided by The Social Research Centre, custom report

Table 4.12: Children entering full-time school who are ‘developmentally vulnerable’ on one or more domains: in number and per cent; critical differences³⁰⁸ between 2009 and 2012 by SEIFA³⁰⁹ category, Western Australia

	2009		2012		2009 to 2012		
	Number	Per cent	Number	Per cent	Change	Critical Diff.	Significant
Quintile 1	1,301	40.1	1,038	38.6	-1.5	1.3	Y
Quintile 2	1,405	27.4	1,527	28.5	1.1	0.9	Y
Quintile 3	1,355	27.3	1,496	24.2	-3.1	0.9	Y
Quintile 4	903	20.8	1,394	21.0	0.2	1.0	N
Quintile 5	1,480	17.7	1,571	16.2	-1.5	0.7	Y
Not available	1	33.3	22	31.9	-1.4	39.1	N
Total	6,445	24.7	7,048	23.0	-1.7	0.4	Y

Source: Data provided by The Social Research Centre, custom report