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## Data Resource Profile

# Data Resource Profile: The Australian Early Development Index (AEDI)

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### Abstract

Every 3 years, the Australian Government conducts a developmental census across the entire population of children in their first year of full-time schooling (median age 5 years). The first developmental census was conducted in 2009, including 261 147 children, and in 2012 data were collected on 289 973 children—representing 97.5% and 96.5% of the estimated eligible population, respectively. The questionnaire is completed by teachers on the basis of at least 1 month's knowledge of the child, including aspects of physical, social, emotional, language and cognitive development, as well as data on special needs. Teachers are also asked to include details of the child's care arrangements and attendance in early education programmes in the years preceding school. Demographic and geographical data are recorded at the individual and area levels. Aggregate data are publicly available and microdata (including data for linkage studies) can be applied for via ([www.aedidata.com.au](http://www.aedidata.com.au)).

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### Key Messages

- In addition to basic health statistics such as infant mortality and immunization, epidemiologists should also be examining the prevalence and determinants of the broader aspects of healthy child development.
- The Australian Government is committed to the AEDI as a National Progress Measure of Child Development, collecting the developmental census once every 3 years in an ongoing monitoring system.
- The overall Australian prevalence of developmental vulnerability was 23.6% in 2009; in 2012 this had reduced to 22.0%.
- For Australian Aboriginal and Torres Strait Islander children, the prevalence of developmental vulnerability was 47.4% in 2009 which reduced to 43.2% in 2012.

## Data resource basics

It is understood that life success, health and emotional well-being have their roots in early childhood.<sup>1,2</sup> Consequently early childhood development outcomes have become important indicators of not only the welfare of children but also predictors of future health and human capability. It is important to not only determine whether children are surviving, but also how well populations of children are developing.

Every 3 years the Australian Government undertakes a developmental census of children in the first year of full-time schooling. This national initiative takes its place among other Australian Government early childhood reforms and efforts, including universal access to pre-school. The primary aim of the initiative is to provide data to inform policy and strategy so that communities and governments can develop and reorientate services and systems to improve the health, well-being and early learning of young children. The data are collected using the Australian Early Development Index (AEDI). The index is completed by the child's teacher, based on a minimum of 1 month's knowledge of the child, and covers five developmental domains: physical health and well-being, social competence, emotional maturity, language and cognitive skills, and communication skills and general knowledge. The first national data collection occurred between May and August 2009, and a second national census was completed during the same time of year in 2012, with future data collections planned every 3 years thereafter (2015, 2018, 2021 etc). The cost to the Australian Government is approximately \$28 million for each collection cycle.

## Data resource area and population coverage

The first national census in 2009 collected developmental data on 261 147 children representing 97.5% of the estimated 5-year-old population in Australia.<sup>3,4</sup> The population coverage varied across the eight states and territories of Australia. For instance, in the Northern Territory, data were collected on 92.2% of the estimated five-year-old population whereas in New South Wales data were collected on 99.9%.<sup>3</sup>

In Australia, children can attend government, Catholic or independent schools, with most children (66%) attending government schools in 2009.<sup>5</sup> The national AEDI response rates in 2012 for government and Catholic schools were similar (97.9% and 96.2%, respectively), whereas the response rate for independent schools was lower (81.5%). Although the triennial AEDI census is an Australian Government initiative (i.e. federal government), the education system is predominately managed by state and

territory governments and thus the responsibility of recruiting the schools across the three education sectors lies with each jurisdiction. Each school is provided with teacher relief payments directly from the Australian Government (independent of the school sector or state/territory governments). This funding to the school then enables the teachers to undertake a training module, read the associated AEDI Teacher Guidelines and complete the AEDI for each child in their class. The training and the Teacher Guidelines aim to reduce subjectivity. Where possible, teachers completing questionnaires for Aboriginal children are assisted by a school-based cultural consultant. Teachers complete the AEDI online through a secure web-based data entry system, and on average a teacher takes between 12 and 14 min per child to complete the AEDI. The online system reduces costs and increases data accuracy. The entire data collection occurs within 4 months, from May to mid-August (the second term of the school year).

The data collection occurs under passive consent. Parents are sent a letter informing them about the AEDI data collection and the data collection may also be announced through school newsletters and bulletins. Parents can contact the school verbally or in writing if they do not want their child included in the data collection.

## Frequency of data collection

The AEDI was first collected in 2009, with future data collections planned every 3 years (2012, 2015, 2018, 2021 etc). The 2009 and 2012 AEDI census data have been released to the public in the form of maps and various reports ([www.aedi.org.au](http://www.aedi.org.au)). In 2009, 261 147 children completed the AEDI, representing 97.5% of the estimated 5-year-old population in Australia. The AEDI was completed by 15 522 teachers from 7422 schools with a school participation rate of 95.6%. In 2012, 289 973 children completed the AEDI, including 96.5% of all children enrolled to begin school in 2012. The AEDI was completed by 16 425 teachers from 7417 schools with a school participation rate of 95.6%.

## Measures

The Australian Early Development Index is an adaption of the Canadian Early Development Instrument.<sup>6,7</sup> It has been the subject of numerous reliability and validity studies.<sup>8-13</sup> Studies have also shown teacher ratings on the questionnaire to be more reliable and consistent than parent ratings,<sup>11,14</sup> and that these ratings predict later educational outcomes.<sup>8,15</sup> In addition to the developmental data, the AEDI census also provides information on any special needs the child might have, the child's care and educational

arrangements prior to enrolling at school as well as demographic data, attendance and geographical information about where the child lives. Table 1 presents details about the information collected on the AEDI assessment.

The AEDI has 96 items that contribute to the five developmental domains. These are presented in Table 1, and the full list of questions can be accessed via ([www.aedidata.com.au](http://www.aedidata.com.au)). For each domain the child receives a score between zero and 10, with higher scores indicating better developmental status. Performance on each of the domains is also expressed categorically, with children falling within the bottom 10% of the Australian population classified as developmentally 'vulnerable'. Children who scored between the 10th and 25th percentile are classified as developmentally 'at risk', and all other children are classified as 'on track'. The classification of 'vulnerable' for each domain is associated with a specific cut-point between zero and 10. For example, the bottom 10% of scores on the Physical Health and Well-being domain corresponds to a cut-point of 7.27 out of 10, so children with scores lower than 7.27 are classified as 'vulnerable'. The 2009 AEDI provides the baseline for future waves of data collection so that changes in vulnerability on each of the five developmental domains can be monitored over time. Information available via the AEDI data collection is provided in Table 2.

Demographic information for each child is sourced from the administrative records held by the school or the various state government Departments of Education. This includes age, sex, Aboriginal and/or Torres Strait Islander status, language background and country of birth. To supplement this, the teacher answers a series of questions about whether the child has any developmental problems and whether the teacher feels the child needs further assessment for developmental issues. The teacher also answers items about whether the child attended day care and/or preschool prior to starting school.

The child's home address is used to determine their state, region, remoteness,<sup>16</sup> community and local community. In addition, socioeconomic position as measured by the Socioeconomic Index for Areas (SEIFA) index<sup>17</sup> (calculated by the Australian Bureau of Statistics) is allocated to each child on the basis of the geographical area where the child lives, e.g. suburb.

## Data resource use

The AEDI data are used by researchers, Australian governments (federal, state/territory and local government), communities and schools to monitor child development. Results for the AEDI are available to the general public via

a designated website ([www.aedi.org.au](http://www.aedi.org.au)), where various reports can be downloaded and an interactive mapping platform allows users to explore the AEDI results for their region and community. The display of the data geographically allows communities to compare their results with those of neighbouring communities. The maps prompt advocacy and also provide an evidence base for local governments and other service providers to allocate resources. An evaluation of community use of AEDI data in pilot communities found that the results helped to facilitate collaboration between early childhood groups and schools, raised awareness of the importance of early childhood, assisted communities in understanding their assets, identified priorities for action and provided data to support local grant applications.<sup>18</sup> The AEDI results have also been used by state and territory governments to inform policy decisions and to identify areas of specific needs for targeted programmes.

Although the AEDI data were first collected at a national level in 2009, various adaption and validity studies have been conducted on AEDI data collected between 2002 and 2008.<sup>7,11-13,15,19</sup> Using the AEDI census data collected in 2009, Goldfeld *et al.* estimated the prevalence of special healthcare needs in Australian children and explored the level of developmental vulnerability within this group of children.<sup>20</sup> Results suggested that 4.4% of children had diagnosed special needs at school entry. However, teachers identified an additional 18% considered to be 'of concern' and suggested that about one-third of these children were in need of additional assessment. The authors concluded that the prevalence of special healthcare needs is much higher than has been reported previously and a considerable proportion of children are not receiving the additional assistance that they need.

Also on the basis of the 2009 AEDI census data, Brinkman *et al.* explored the jurisdictional differences between the states and territories of Australia and the extent to which these differences can be explained by demographic and socioeconomic factors.<sup>21</sup> After controlling for demographic and socioeconomic differences, substantial differences in developmental vulnerability between jurisdictions remained. Compared with New South Wales, boys in Queensland were 1.80 times more likely to be developmentally vulnerable on one or more domains on the AEDI and girls were 1.52 times more likely to be vulnerable. As suggested by Harper *et al.*,<sup>22</sup> the paper also explored absolute levels and socioeconomic inequalities in child development both between and within jurisdictions. Several states/territories (New South Wales, Tasmania and Australian Capital Territory) had both low levels of developmental vulnerability and absolute inequality, whereas

**Table 1.** Individual items from the Australian Early Development Index (AEDI)

AEDI domains	Individual items
Physical Health and Well-being	<ul style="list-style-type: none"> <li>• Is this child independent in toileting habits?</li> <li>• Does the child ever arrive at school hungry?</li> <li>• Is the child well coordinated?</li> <li>• Over- or under-dressed for school-related activities?</li> <li>• Too tired/sick to do school work?</li> <li>• Shows an established hand preference?</li> <li>• Proficiency at holding a pen, crayon, brush?</li> <li>• Ability to manipulate objects?</li> <li>• Ability to climb stairs?</li> <li>• Level of energy throughout the school day?</li> <li>• Daily personal hygiene?</li> <li>• Overall physical development?</li> </ul>
Social Competence	<ul style="list-style-type: none"> <li>• Overall social/emotional development?</li> <li>• Ability to get along with peers?</li> <li>• Plays and works cooperatively with other children at the level appropriate for his/her age?</li> <li>• Able to play with various children?</li> <li>• Follows rules and instructions?</li> <li>• Respects the property of others?</li> <li>• Demonstrates self-control?</li> <li>• Demonstrates respect for adults?</li> <li>• Demonstrates respect for other children?</li> <li>• Accepts responsibility for actions?</li> <li>• Listens attentively?</li> <li>• Completes work on time?</li> <li>• Works independently?</li> <li>• Takes care of school materials?</li> <li>• Works neatly and carefully?</li> <li>• Curious about the world?</li> <li>• Eager to play with a new toy?</li> <li>• Eager to play a new game?</li> <li>• Eager to play with/read a new book?</li> <li>• Able to solve day-to-day problems by him/herself?</li> <li>• Able to follow one-step instructions?</li> <li>• Able to follow class routines without reminders?</li> <li>• Able to adjust to changes in routines?</li> <li>• Shows tolerance to someone who made a mistake</li> </ul>
Emotional Maturity	<ul style="list-style-type: none"> <li>• Child will try to help someone who has been hurt?</li> <li>• Child volunteers to help clear up a mess someone else has made?</li> <li>• If there is a quarrel or dispute, will try to stop it?</li> <li>• Offers to help other children who have difficulty with a task?</li> <li>• Comforts a child who is crying or upset?</li> <li>• Spontaneously helps to pick up objects which another child has dropped?</li> <li>• Will invite others to join in a game?</li> <li>• Helps others who are feeling sick?</li> <li>• Gets into physical fights?</li> <li>• Bullies or is mean to others?</li> <li>• Kicks, bites, hits other children or adults?</li> <li>• Takes things that do not belong to him/her?</li> <li>• Laughs at other children's discomfort?</li> <li>• Can't sit still, is restless?</li> <li>• Distractible, has trouble sticking to any activity?</li> <li>• Disobedient?</li> <li>• Has temper tantrums?</li> </ul>

(Continued)

**Table 1.** Continued

AEDI domains	Individual items
	<ul style="list-style-type: none"> <li>• Impulsive, acts without thinking?</li> <li>• Has difficulty awaiting turn in games or groups?</li> <li>• Cannot settle to anything for more than a few moments?</li> <li>• Inattentive?</li> <li>• Seems to be unhappy, sad or depressed?</li> <li>• Appears worried?</li> <li>• Cries a lot?</li> <li>• Nervous, highly strung or tense?</li> <li>• Incapable of making decisions?</li> </ul>
Language and cognitive skills	<ul style="list-style-type: none"> <li>• Knows how to handle a book (e.g. turn a page)?</li> <li>• Generally interested in books (pictures and print)?</li> <li>• Interested in reading (inquisitive/curious about the meaning of printed material)?</li> <li>• Able to identify some letters of the alphabet?</li> <li>• Able to attach sounds to letters?</li> <li>• Showing awareness of rhyming words?</li> <li>• Able to participate in group reading activities?</li> <li>• Able to read simple words?</li> <li>• Able to read complex words?</li> <li>• Able to read simple sentences?</li> <li>• Experimenting with writing tools?</li> <li>• Aware of writing directions in English (left to right, top to bottom)?</li> <li>• Interested in writing voluntarily (and not only under the teacher's direction)?</li> <li>• Able to write his/her own name in English?</li> <li>• Able to write simple words?</li> <li>• Able to write simple sentences?</li> <li>• Able to remember things easily?</li> <li>• Interested in mathematics?</li> <li>• Interested in games involving numbers?</li> <li>• Able to sort and classify objects by common characteristics (e.g. shape, colour, size)?</li> <li>• Able to use one-to-one correspondence?</li> <li>• Able to count to twenty?</li> <li>• Able to recognise numbers one to ten?</li> <li>• Able to say which number is bigger of the two?</li> <li>• Able to recognise geometric shapes (e.g. triangle, circle, square)?</li> <li>• Understands simple time concepts (e.g. today, summer, bedtime)?</li> </ul>
Communication skills and general knowledge	<ul style="list-style-type: none"> <li>• Ability to tell a story?</li> <li>• Ability to use language effectively in English?</li> <li>• Ability to listen in English?</li> <li>• Ability to take part in imaginative play?</li> <li>• Ability to communicate their own needs in a way understandable to adults and peers?</li> <li>• Ability to understand on first try what is being said to him/her?</li> <li>• Ability to articulate clearly without sound substitutions?</li> <li>• Answers questions showing knowledge about the world (e.g. leaves fall in autumn, apple is fruit, dogs bark etc.)?</li> </ul>

other states such as Western Australia and Queensland had higher levels of vulnerability and higher inequality.

A recent data linkage study showed that children who were developmentally vulnerable on one of the five AEDI domains had 2.30 times higher odds of having poor literacy skills in the final year of primary school compared with children who were not vulnerable on any AEDI

domains.<sup>15</sup> This study utilized data from the first use of the EDI in Australia with a resultant linked sample of 1823 children. The paper provides an example of the work that can be undertaken with the full population data set linked to administrative records. A large national data linkage study is currently being undertaken aiming to link the 2009 AEDI census collection back to the children's

**Table 2.** Overview of measures collected in the AEDI data collection

Type of data	Variable
Demographic	Age
	Sex
	Australian or Torres Strait Islander status
	English as a second language
	Language background other than English
	Country of birth
Developmental problems	Residential area-based socioeconomic position
	Child repeated year
	Developmental difficulties (including physical, visual, hearing, speech, learning, emotional and behavioural problems)
Experience prior to school	Further assessment needed
	Non-parental early childhood education and care experiences before school (including preschool, day care, nanny or grandparents)
Geographical	State
	Community (local government area)
	Local community (suburb)
	Remoteness

perinatal records and then forward to the population national literacy and numeracy assessments. This linked data set is currently being analysed for the first two jurisdictions that have been able to provide the data (Northern Territory and South Australia) by authors Lynch, Brinkman and Gregory.

### Strengths and weaknesses

The main strength of the AEDI is that it is collected across the entire population of 5-year-olds in Australia. The data are collected during a very specific developmental period (i.e. during their first year of formal schooling) and repeated once every 3 years, allowing for the monitoring of child development even for small geographical areas. The commitment by the Australian Government to collect the AEDI data every 3 years provides a unique opportunity to design research studies that take advantage of upcoming AEDI data collection phases. For instance, researchers could recruit a birth cohort in 2015–16, measure key exposure variables between birth and school entry and then utilize the 2021 AEDI data collection to provide the children's developmental outcomes at age 5 years. Additionally, the size of the data sets allows for examination of small subpopulations such as children of Aboriginal and Torres Strait Islander background, children with special needs or children in remote areas of Australia.

As a nationwide census, the AEDI provides a significant resource for data linkage projects.<sup>23</sup> Linking various administrative data sets to the AEDI provides an opportunity to explore not only the impact of early health, social and

demographic factors on child development outcomes, but also the impact of childhood development at school entry on adult health and well-being.<sup>24</sup> The 2009 AEDI data have already been included in data linkage systems in several Australian states.<sup>25</sup>

The main weakness of the AEDI is that it does not contain a family level indicator of socioeconomic position. The socioeconomic measure applied to the AEDI provides information about the average socioeconomic position of people and households in the area where the child lives. This is measured by the Index of Relative Socioeconomic Disadvantage (IRSD), which is one of four Socioeconomic Indices for Areas (SEIFA) released by the Australian Bureau of Statistics (ABS) on the basis of census data.<sup>17</sup> In the 2009 data collection, the child's suburb of residence was generally used to assign a SEIFA score, and in the more rural and remote areas of Australia the child's town or region was used. Nonetheless, it was not possible to assign a SEIFA score for some children living in some of the most remote areas of Australia. SEIFA data are missing for 4.9% of children in the AEDI data set and 100.0% of children in the Northern Territory in the 2009 AEDI data set. For the 2012 AEDI data collection, the full address of the child was collected, which has enabled better geographical matching to the ABS data sets.

### Data resource access

Publicly available data: the AEDI website ([www.aedi.org.au](http://www.aedi.org.au)) provides summary results from the 2009 and 2012 data collections aggregated at various levels of geography.



In both the National Report and the Summary Report, AEDI results are presented for the whole of Australia, and for each state and territory. Results are also summarized for specific subpopulations including children living at different levels of socioeconomic disadvantage, boys and girls, and children with English as a second language. For each community (i.e. neighbourhood) in Australia, aggregated AEDI results are presented using community profiles, community summary results tables and interactive maps (<http://maps.aedi.org.au/>).

Microdata availability: access to unit record data (either as a simple stand-alone AEDI dataset, or for a data linkage study) requires application to the AEDI data managers contracted by the Australian Government. Researchers need to complete the AEDI Microdata Application Form, which can be accessed on the AEDI data management website ([www.aedidata.com.au](http://www.aedidata.com.au)). Various documents and policies developed by the Australian Government provide details of the conditions of use of the AEDI data. For instance, the AEDI Microdata Policy details the procedures and requirements for accessing and using the AEDI unit record files (including reporting and publishing requirements), and the AEDI Data Linkage Policy provides information on the governance arrangements and required protocols for accessing the AEDI data for data linkage projects. The AEDI Data Dictionary provides detailed information on each of the data elements to assist researchers when preparing their application. Once the application has been approved, researchers are provided access to a secure file exchange portal, where they can access their AEDI microdata file.

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## References

- Lynch JW, Davey Smith G. A life course approach to chronic disease epidemiology. *Ann Rev Public Health* 2005;26:1–35.
- Heckman J. Skill formation and the economics of investing in disadvantaged children. *Science* 2006;312:1900–02.
- Centre for Community Child Health and Telethon Institute for Child Health Research. *A Snapshot of Early Childhood Development in Australia. Australian Early Development Index (AEDI) National Report 2009*. Canberra: Australian Government, 2009.
- Australian Bureau of Statistics. *Australian Demographic Statistics, Estimated Resident Population By Single Year of Age*. Canberra: Australian Bureau of Statistics, 2009.
- Australian Bureau of Statistics. *Schools, Australia, 2009*. Canberra: Australian Bureau of Statistics, 2009.
- Janus M, Offord D. Development and psychometric properties of the Early Development Instrument (EDI): A measure of children's school readiness. *Can J Behav Sci* 2007;39:1–22.
- Goldfeld S, Sayers M, Brinkman S, Silburn S, Oberklaid F. The process and policy challenges of adapting and implementing the Early Development Instrument in Australia. *Early Educ Dev* 2009;20:978–91.
- Forget-Dubois N, Lemelin JP, Boivin M *et al*. Predicting early school achievement with the EDI: A longitudinal population-based study. *Early Educ Dev* 2007;18:405–26.
- Guhn M, Gadermann A, Zumbo BD. Does the EDI measure school readiness in the same way across different groups of children? *Early Educ Dev* 2007;18:453–72.
- Guhn M, Zumbo B, Janus M, Hertzman C. Validation theory and research for a population-level measure of children's development, wellbeing, and school readiness. *Soc Indic Res* 2011;103:183–91.
- Brinkman S, Silburn S, Lawrence D, Goldfeld S, Sayers M, Oberklaid F. Investigating the validity of the Australian Early Development Index. *Early Educ Dev* 2007;18:427–51.
- Silburn S, Brinkman S, Ferguson-Hill S, Styles I, Walker R, Shepherd C. *The Australian Early Development Index (AEDI) Indigenous Adaptation Study*. Perth, Australia: Curtin University of Technology and Telethon Institute for Child Health Research, 2009.
- Andrich D, Styles I. Final report on the psychometric analyses of the Early Development Instrument (EDI) using the Rasch Model. *Technical Paper Commissioned for the Development of the Australian Early Development Index (AEDI)*. Perth, WA: Murdoch University, 2004.
- Janus M, Brinkman S, Duku E, Hertzman C, Santos R, Sayers M. *The Early Development Instrument. A Population-based Measure for Communities*. Hamilton, ON: Offord Centre for Child Studies, 2007.
- Brinkman S, Gregory T, Harris J, Hart B, Blackmore S, Janus M. 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. *Child Indic Res* 2013;6:695–708.
- Australian Bureau of Statistics. *ASGC Remoteness Classification: Purpose and Use*. (Census Paper No. 03/01). Canberra: Australian Bureau of Statistics, 2003.
- Australian Bureau of Statistics. *Information Paper: An Introduction to Socioeconomic Indexes for Areas (SEIFA)*. Australian Bureau of Statistics, 2008.
- Sayers M, Coutts M, Goldfeld S, Oberklaid F, Brinkman S, Silburn S. Building better communities for children; community implementation and evaluation of the Australian Early Development Index. *Early Educ Dev* 2007;18:519–34.
- Janus M, Brinkman S, Duku E. Validity and psychometric properties of the Early Development Instrument in Canada, Australia, United States and Jamaica. *Soc Indic Res* 2011;103:283–97.
- Goldfeld S, O'Connor M, Sayers M, Moore T, Oberklaid F. Prevalence and correlates of special health care needs in a population cohort of Australian children at school entry. *J Dev Behav Pediatr* 2012;33:319–27.
- Brinkman SA, Gialamas A, Rahman A *et al*. Jurisdictional, socioeconomic and gender inequalities in child health and development: analysis of a national census of 5-year-olds in Australia. *BMJ Open* 2012;2:e001075.

22. Harper S, King NB, Meersman SC, Reichman ME, Breen N, Lynch J. Implicit value judgments in the measurement of health inequalities. *Milbank Quarterly* 2010;88:4–29.
23. Brinkman S, McDermott R, Lynch JW. Better understanding trajectories of child development: opportunities for data linkage with the Australian Early Developmental Index (AEDI). *SA Public Health Bull* 2010;7:7–11.
24. Lynch JW, Law C, Brinkman S, Chittleborough C, Sawyer M. Inequalities in child healthy development: Some challenges for effective implementation. *Soc Sci Med* 2010;71:1219–374.
25. Boyd J, Ferrante A, O’Keefe C, Bass A, Randall S, Semmens J. Data linkage infrastructure for cross-jurisdictional health-related research in Australia. *BMC Health Serv Res* 2012;12:480.