

# Using data to help children thrive

## Limestone Coast

21 November 2023

This presentation uses data from the Australian Early Development Census (AEDC). The AEDC is funded by the Australian Government Department of Education. The findings and views reported are those of the author and should not be attributed to the Department or the Australian Government.

**Part 1 – Setting the scene**

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**Part 4 – Connecting with community**

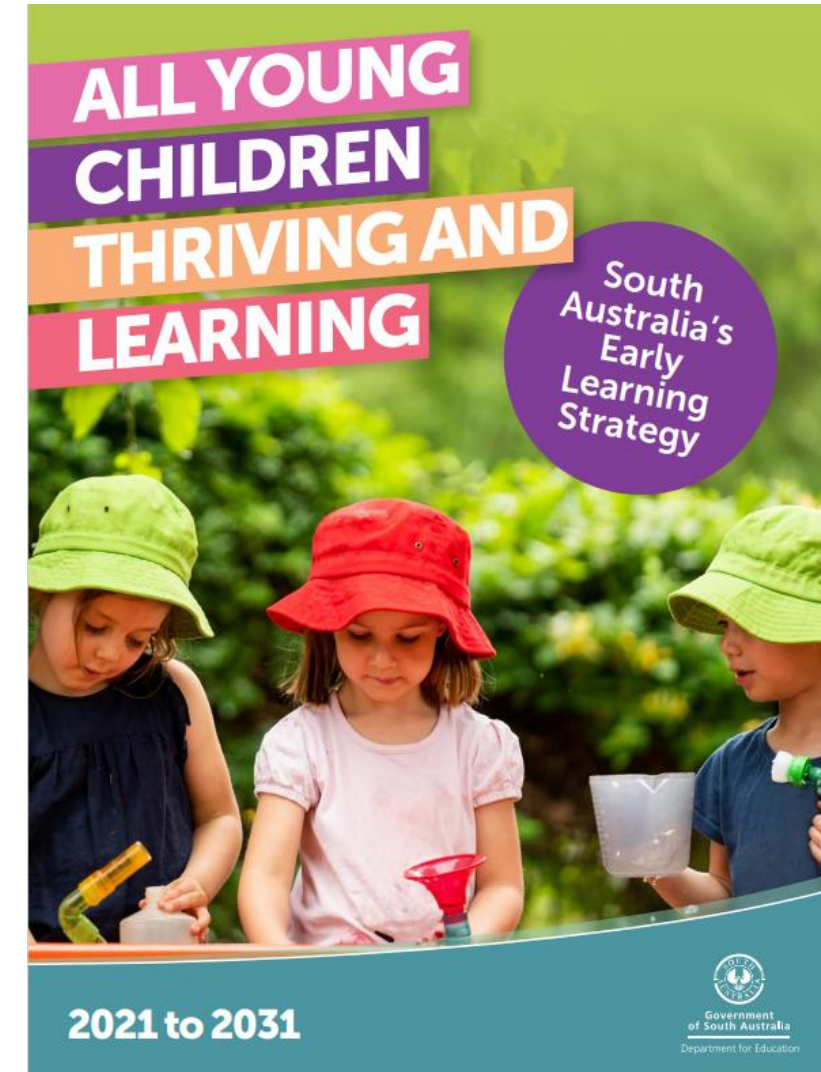


# **Part 1**

## **Setting the scene**



- Nearly 1 in 4 children being developmentally vulnerable when they start school in South Australia
- We all want to see children developing well, learning and thriving in our local communities.
- The Department's [Early Learning Strategy 2021 – 2031](#) has a focus on supporting communities to develop **responsive** and **evidence informed** local programs to improve early childhood development outcomes.
- Our challenge is to consider the AEDC trends for our local communities in our policy and planning to:
  - improve balance between universal and targeted service provision,
  - build local stakeholder partnerships,
  - reduce barriers to access services, and
  - increase reach of early intervention approaches.



## The Royal Commission into Early Childhood Education and Care [Final Report](#) released in August 2023

- 43 recommendations, focusing on three key areas.

### Recommendation 1:

#### A long-term ambition to help South Australia's children thrive

*That the State Government sets a twenty-year goal to reduce the rate of South Australian children entering school developmentally vulnerable, as measured by the Australian Early Development Census, from the current rate of 23.8 per cent to 15 per cent.*

[Government of South Australia response](#) to final report recommendations is available



Royal Commission into  
Early Childhood  
Education and Care

## REPORT

South Australia  
August 2023

  
Royal Commission into  
Early Childhood Education & Care

# Why focus on the early years?

## **Return on investment**

Investing time, effort and resources in the early years brings lifelong benefits to children and the whole community.

## **Brain development in children:**

- A child's brain develops in response to both genes and the environment.
- While genes provide the initial map for development, it is the experiences and relationships that literally shape the brains of babies and children.
- Significant 'wiring' occurs during the first years of a child's life and this effectively programs child development.

## **We know that:**

- Brain development is vulnerable to toxic stress (depending on length and number of stressors for the child)
- Families have an extremely important ongoing influence on children's development.
- The community and service environments in which children and families interact also play a key role in supporting optimal development

# **Part 2**

## **About the AEDC**



# What is the AEDC?

- Nationwide census
- Snapshot of children's development in their first year of full-time school
- Data collected every 3 years since 2009
- Teacher completed instrument (100 questions)
- Schools and children in 3 education sectors
- Collects data on 5 developmental domains
- Validated for use with Aboriginal and Torres Strait Islander children



In 2021, 20,259 (97.8%) children from 601 schools took part, the highest child participation rate to date in SA



# Why is the AEDC important?

## The AEDC:

- is the most comprehensive collection of its kind in the world
- provides a snapshot of children's early development in their first 5 years
- data can help identify what is working well and areas for improvement
- helps governments, communities and support services improve understanding of how to best support children and families
- provides vital information to help shape the future and wellbeing of our children

## Global

- [Sustainable development goals](#)
- [UNICEF Rights of the Child](#)

## National

- [Closing the Gap](#) – 55% on track by 2031
- Early childhood policy and data linkage research

## State

- [SA Royal Commission into ECEC](#)
- [SA Outcomes Framework for Children and Young People](#)
- [State Public Health Plan](#)
- [Early Learning Strategy](#)

## Local

## Government

- [Regional Public Health Plan](#)
- Strategic plan & Accountability plans

## Community

- Community services policy and service provision
- Partnership approaches in response to AEDC results

## ECEC & schools

- [Department for Education Strategic Plan](#)
- ECEC and school improvement planning, programs and policies

# AEDC Domains



## Physical health and wellbeing

Children's physical readiness for the school day, physical independence and gross and fine motor skills.



## Social competence

Children's overall social competence, responsibility and respect, approach to learning and readiness to explore new things.



## Emotional maturity

Children's pro-social and helping behaviours, and absence of anxious and fearful behaviour, aggressive behaviour and hyperactivity and inattention.



## Language and cognitive skills (school-based)

Children's basic literacy, interest in literacy, numeracy and memory, advanced literacy and basic numeracy.



## Communication skills and general knowledge

Children's communication skills and general knowledge based on broad developmental competencies and skills measured in the school context.

### Summary indicators

### Meaning

OT5

Developmentally on track on five domains

DV1

Developmentally vulnerable on one or more domain(s)

DV2

Developmentally vulnerable on two or more domains

### AEDC indicators

- For each domain, children receive a score from 0 to 10
- Using 2009 data, cut-offs (0-10) were set to define 3 categories of development for each domain:
  - **Developmentally vulnerable** (below 10th percentile)
  - **Developmentally at risk** (10th to 25th percentile)
  - **Developmentally on track** (above 25th percentile)
- The cut-offs (0-10 scale) are fixed over time, this allows us to track changes in the % of children who are developmentally on track, at risk and vulnerable on each domain for successive cohorts of children

Relevant links: [About the AEDC domains \(aedc.gov.au\)](http://aedc.gov.au)  
[Understanding the results \(aedc.gov.au\)](http://aedc.gov.au)

# **Part 3**

## **Looking at the data and research**



# Australia and the AEDC



The number of children included in the AEDC has increased over the years, from over 260,000 in 2009 children to over 305,000 in 2021

In total, around 1.5 million children were included over the last 5 cycles

# Research tells us

AEDC results can be **predicted by:**

- Perinatal indicators
- Preschool attendance
- Playgroup attendance
- Child protection contacts

AEDC results can **predict:**

- NAPLAN
- Academic achievements
- Wellbeing
- Life course outcomes

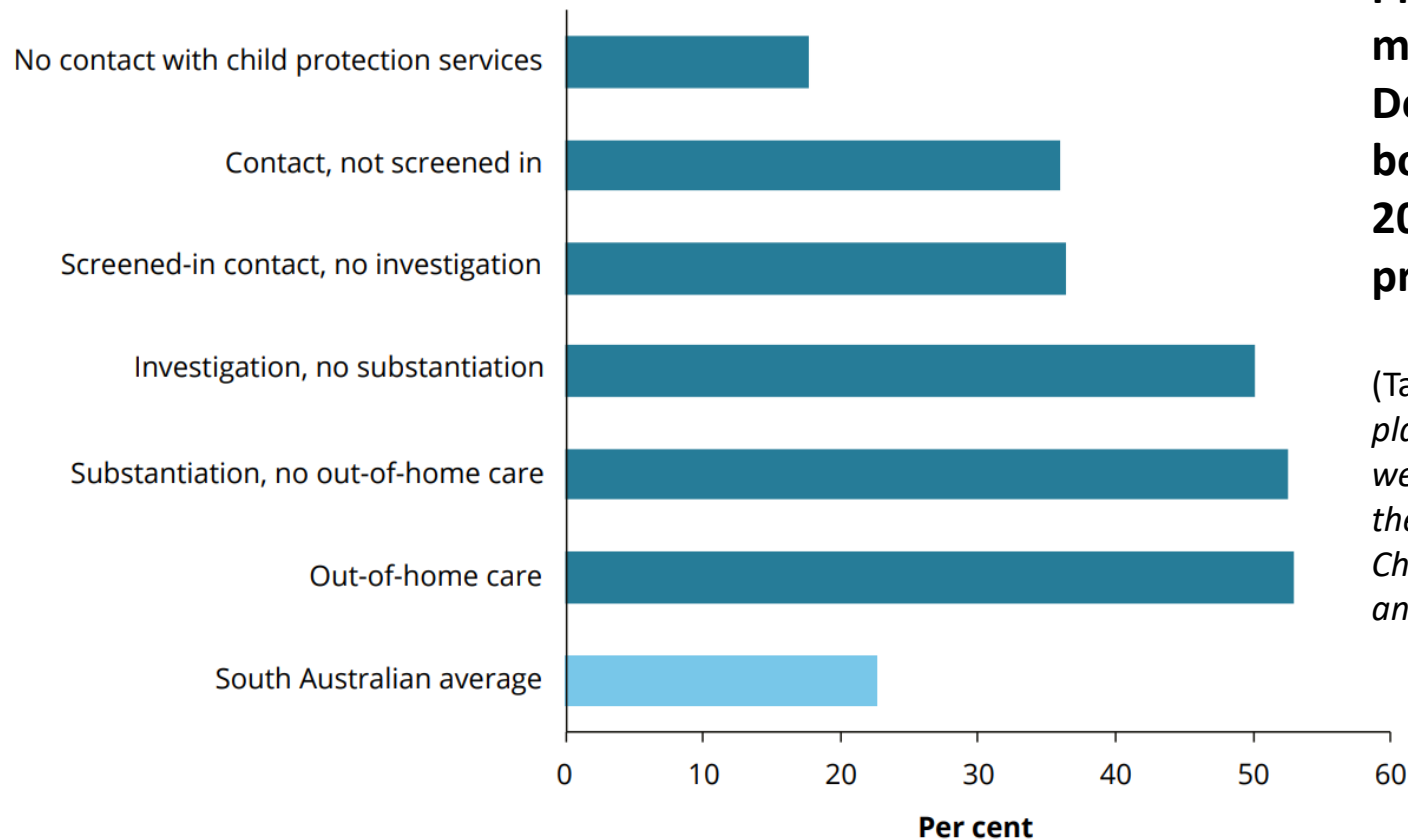
If a child attends **playgroup** or **preschool** they are less likely to be measured as developmentally vulnerable on 1 or more or 2 or more domains

If a child experiences **out of home care (Child Protection System)** they are 3 times more likely to be measured as developmentally vulnerable on 1 or more domains as they start school and to perform poorly in Year 3 NAPLAN

If a child is measured as developmentally vulnerable on 1 or more domains at the time they start school, they are 2 times more likely to score in the bottom 20% of students completing NAPLAN

# Developmental vulnerability and contact with the child protection system (South Australia)

## Contact with child protection system

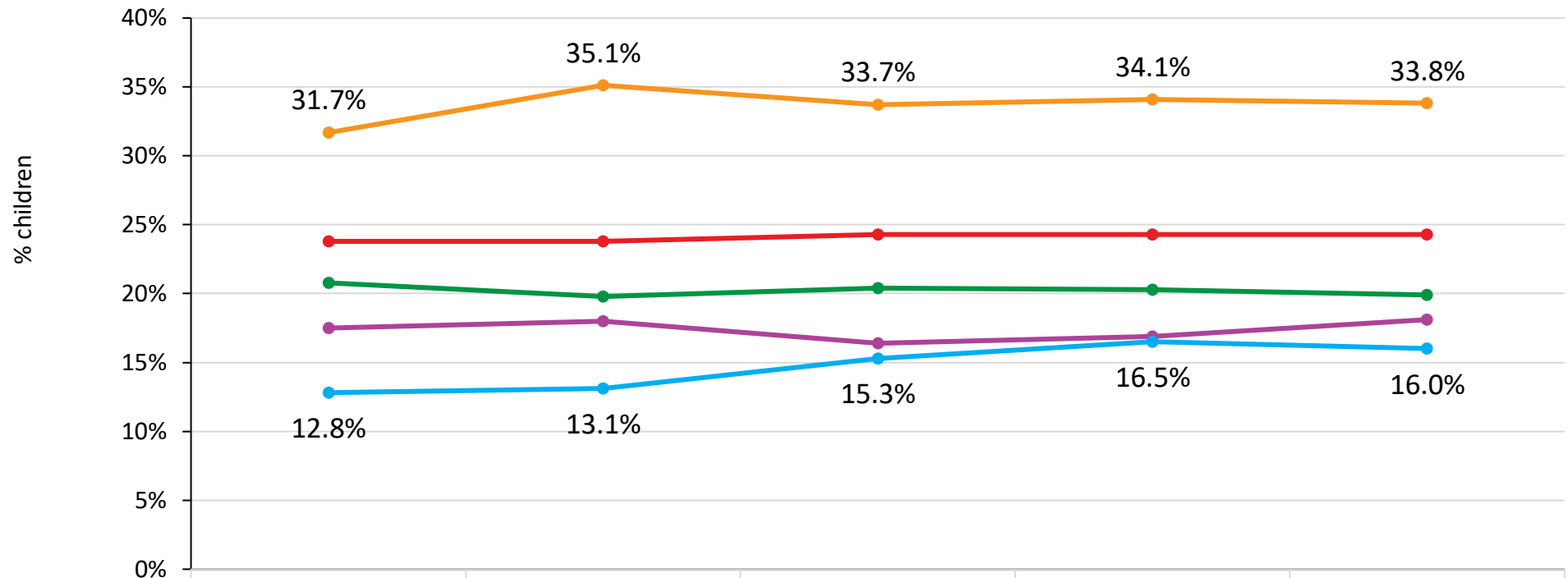


**Proportion of children vulnerable on 1 or more domains of the Australian Early Development Census at age 5 for children born in South Australia between 1999 and 2005, by level of contact with the child protection system**

*(Table from An innovative linked data platform to improve the wellbeing of children—the South Australian Early Childhood Data Project by Pilkington R. et al – full reference and link below)*

*Note:* Each category refers to 1 or more contacts with the child protection system at that level.

# Developmental vulnerability by SEIFA (South Australia)



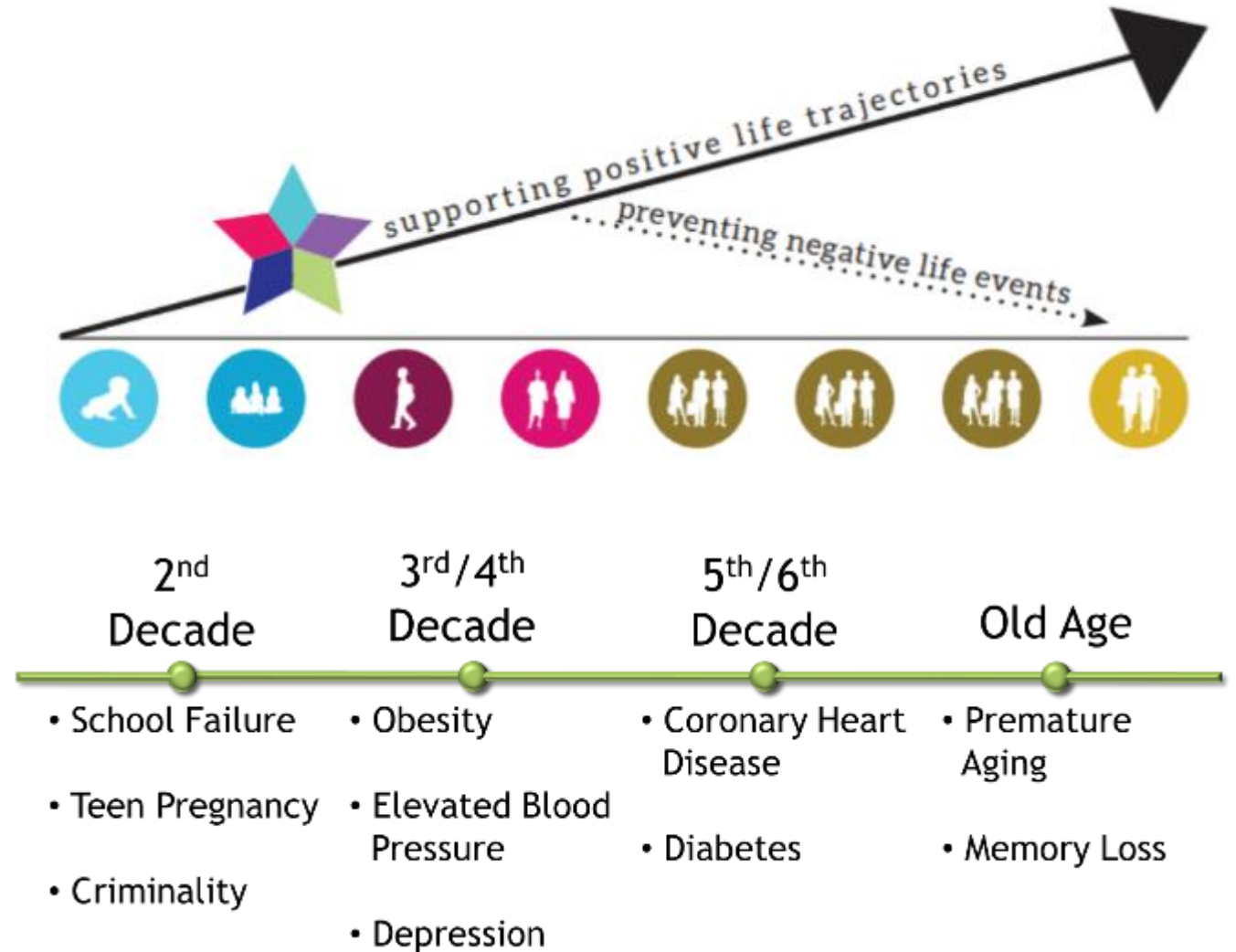
	2009	2012	2015	2018	2021
Quintile 1 (most disadvantaged)	31.7%	35.1%	33.7%	34.1%	33.8%
Quintile 2	23.8%	23.8%	24.3%	24.3%	24.3%
Quintile 3	20.8%	19.8%	20.4%	20.3%	19.9%
Quintile 4	17.5%	18.0%	16.4%	16.9%	18.1%
Quintile 5 (least disadvantaged)	12.8%	13.1%	15.3%	16.5%	16.0%



# AEDC predicts Life course outcomes

## Research tells us:

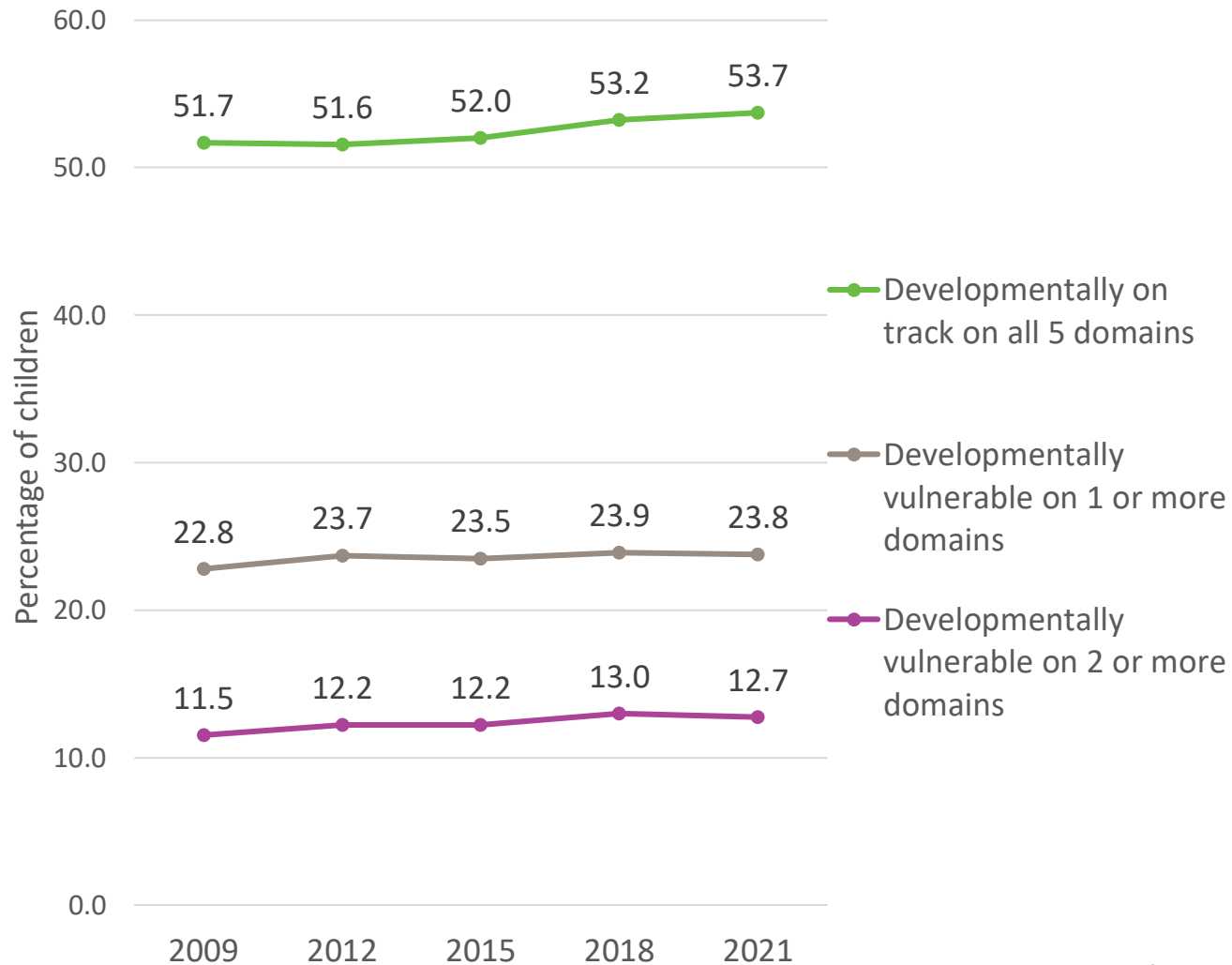
- Early intervention and the prevention of developmental vulnerability leads to improved outcomes in health, wellbeing and academic success.
- Children that are developmentally 'on track' are more likely to experience a positive life trajectory, reducing negative events.



Source: Hertzman 2011



# AEDC Summary for South Australia



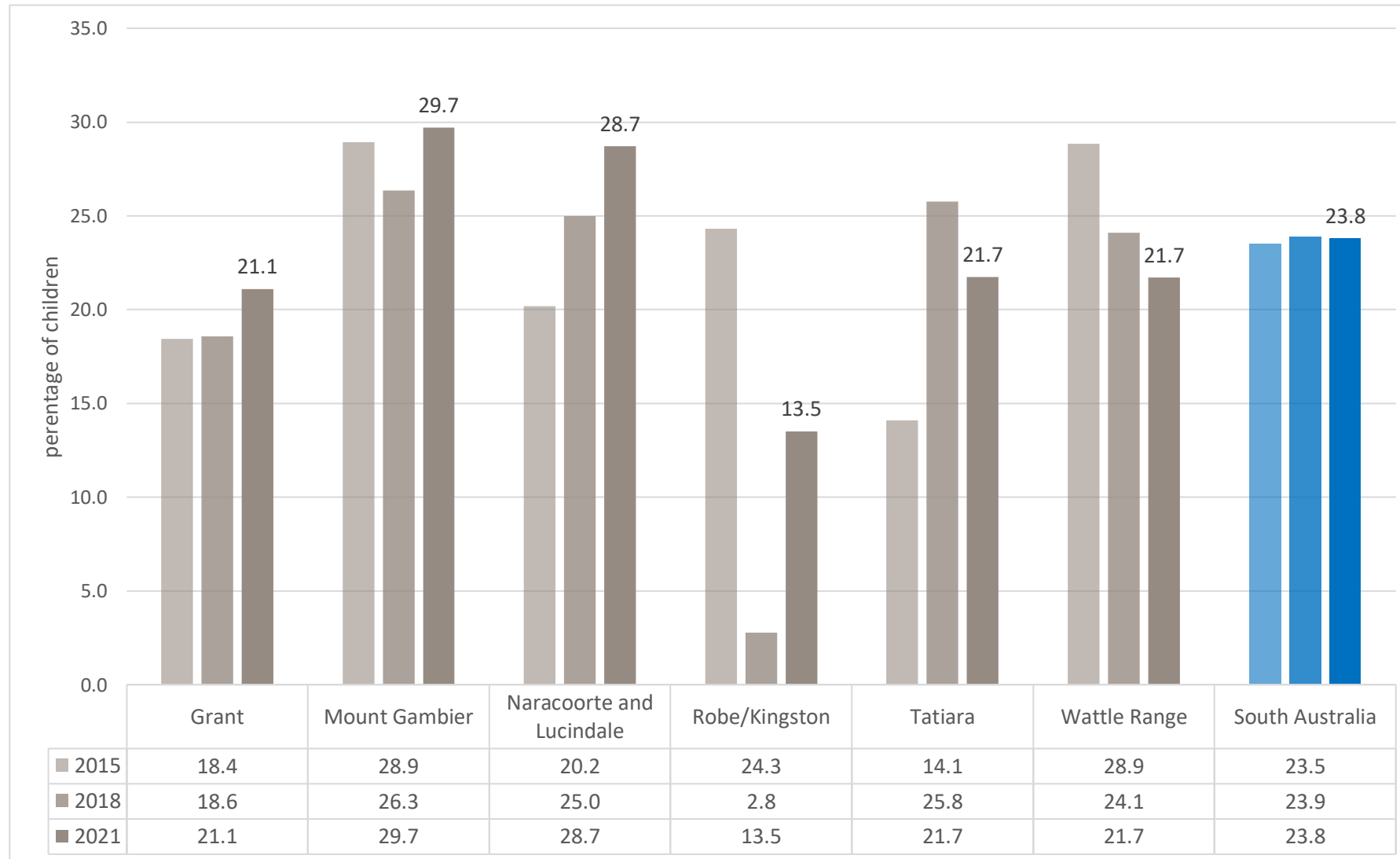
Going against the national trend, SA results remained relatively stable in 2021

In SA, OT5 has continued increasing since 2012

Nearly 1 in 4 children are developmentally vulnerable on 1 or more domains when starting school

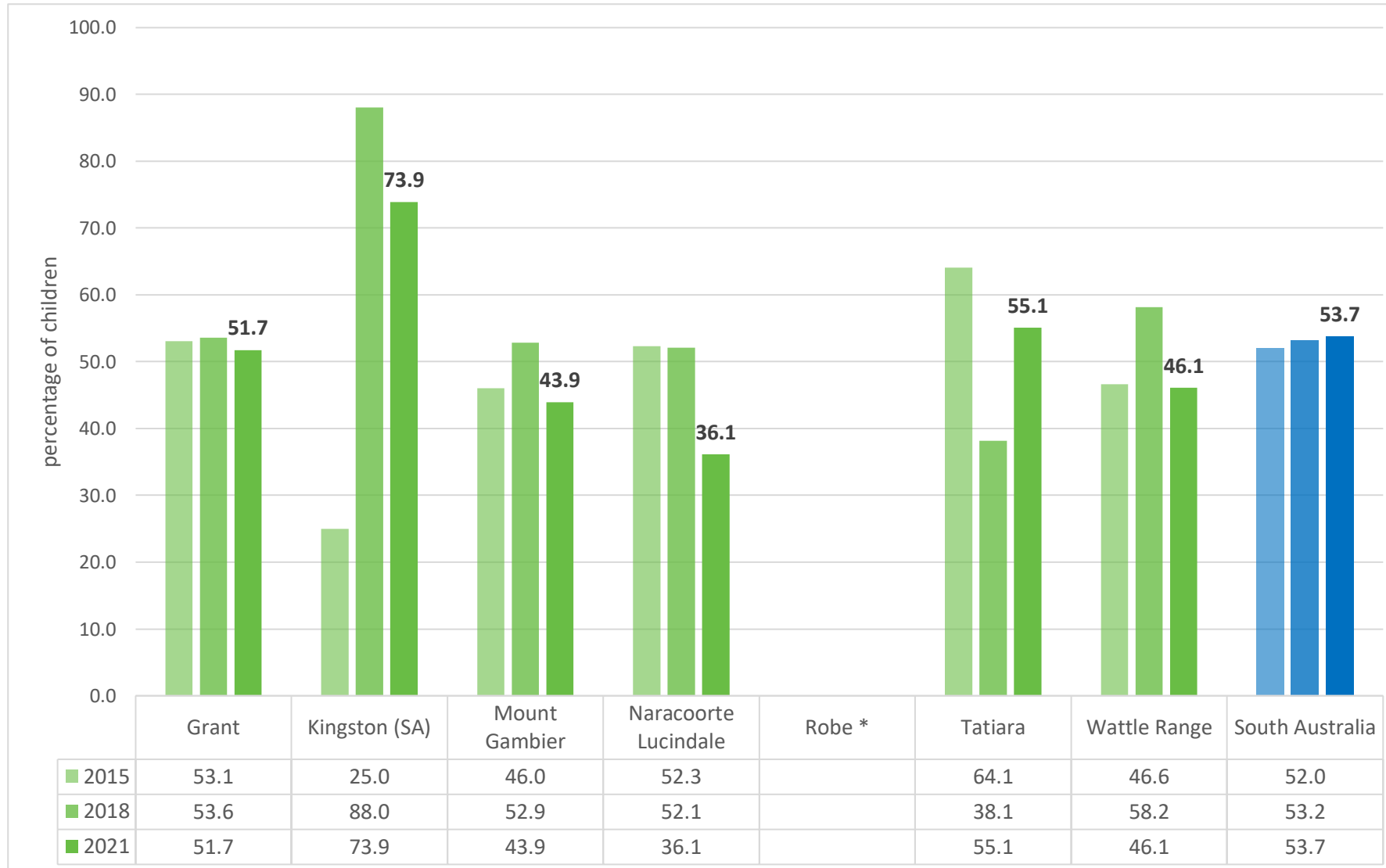
The SA % of DV1 remains higher than the national results

# Developmentally vulnerable on 1 or more domains



Community	No children 2021**
Grant	23
Mount Gambier	79
Naracoorte and Lucindale	31
Robe/Kingston	5
Tatiara	15
Wattle Range	28

# Developmentally on track on all 5 domains



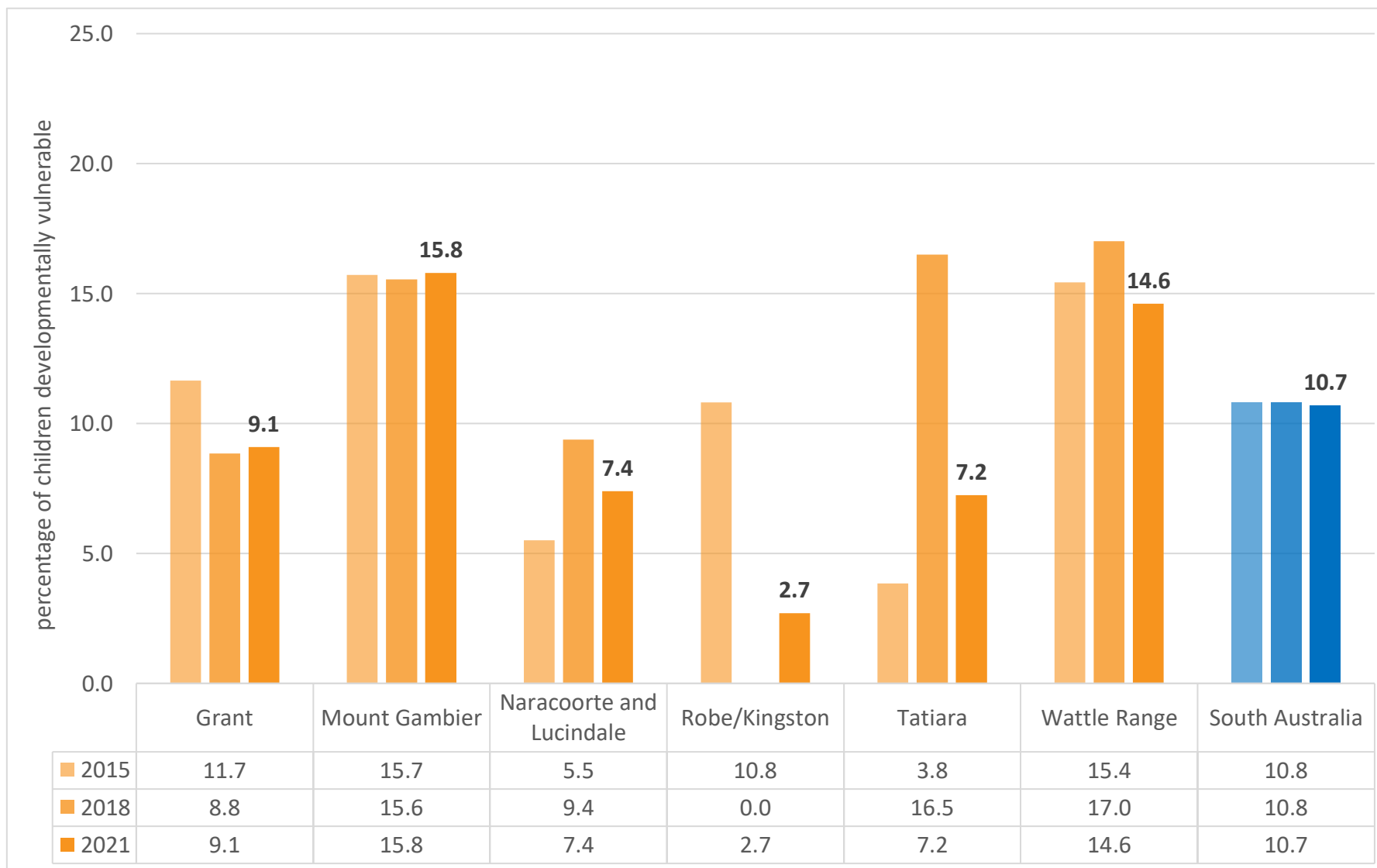
Local Government Area	No children 2021**
Grant	45
Kingston (SA)	17
Mount Gambier	127
Naracoorte Lucindale	39
Robe	*
Tatiara	38
Wattle Range	59

Source: [AEDC Public tables by LGA](#)

\* Data is not reported due to suppression rules

\*\* Number of children developmentally on track on all 5 domains

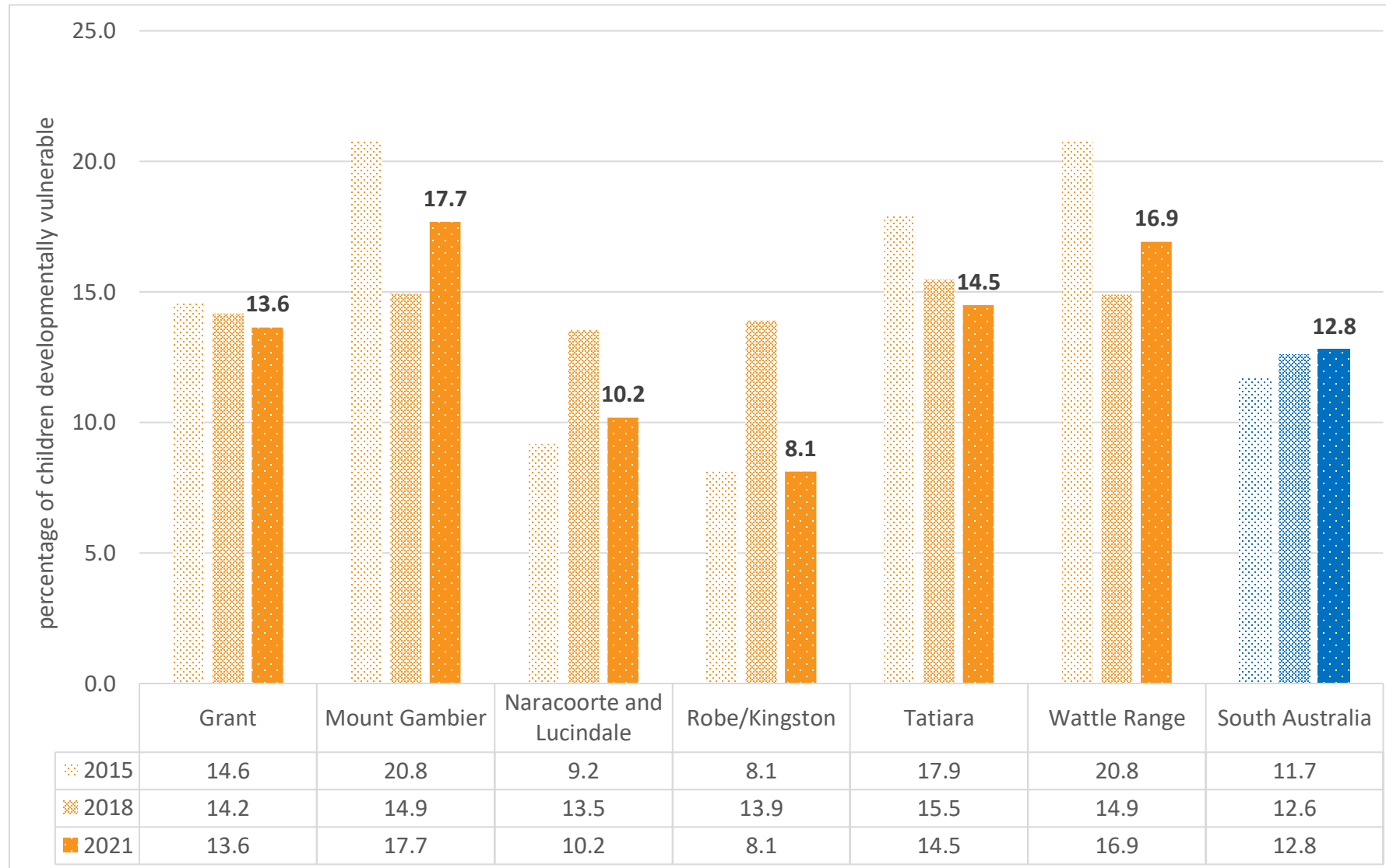
# Physical health and wellbeing



Children learn best when they are healthy, independent and physically ready for each day of school

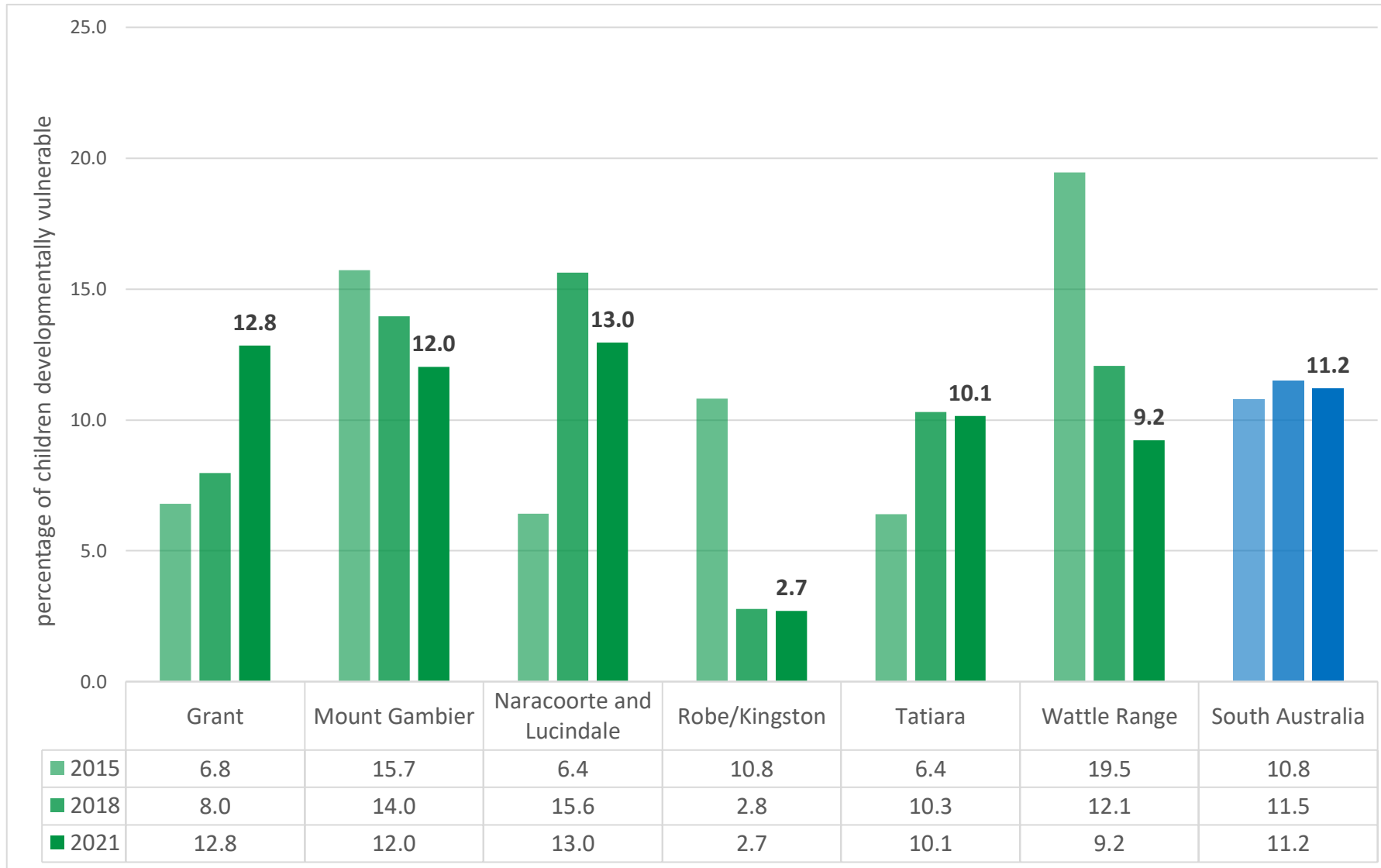
Community	No children 2021*
Grant	10
Mount Gambier	42
Naracoorte and Lucindale	8
Robe/Kingston	1
Tatiara	5
Wattle Range	19

# Physical health and wellbeing – Readiness for school



Community	No children 2021*
Grant	15
Mount Gambier	47
Naracoorte and Lucindale	11
Robe/Kingston	3
Tatiara	10
Wattle Range	22

# Social competence



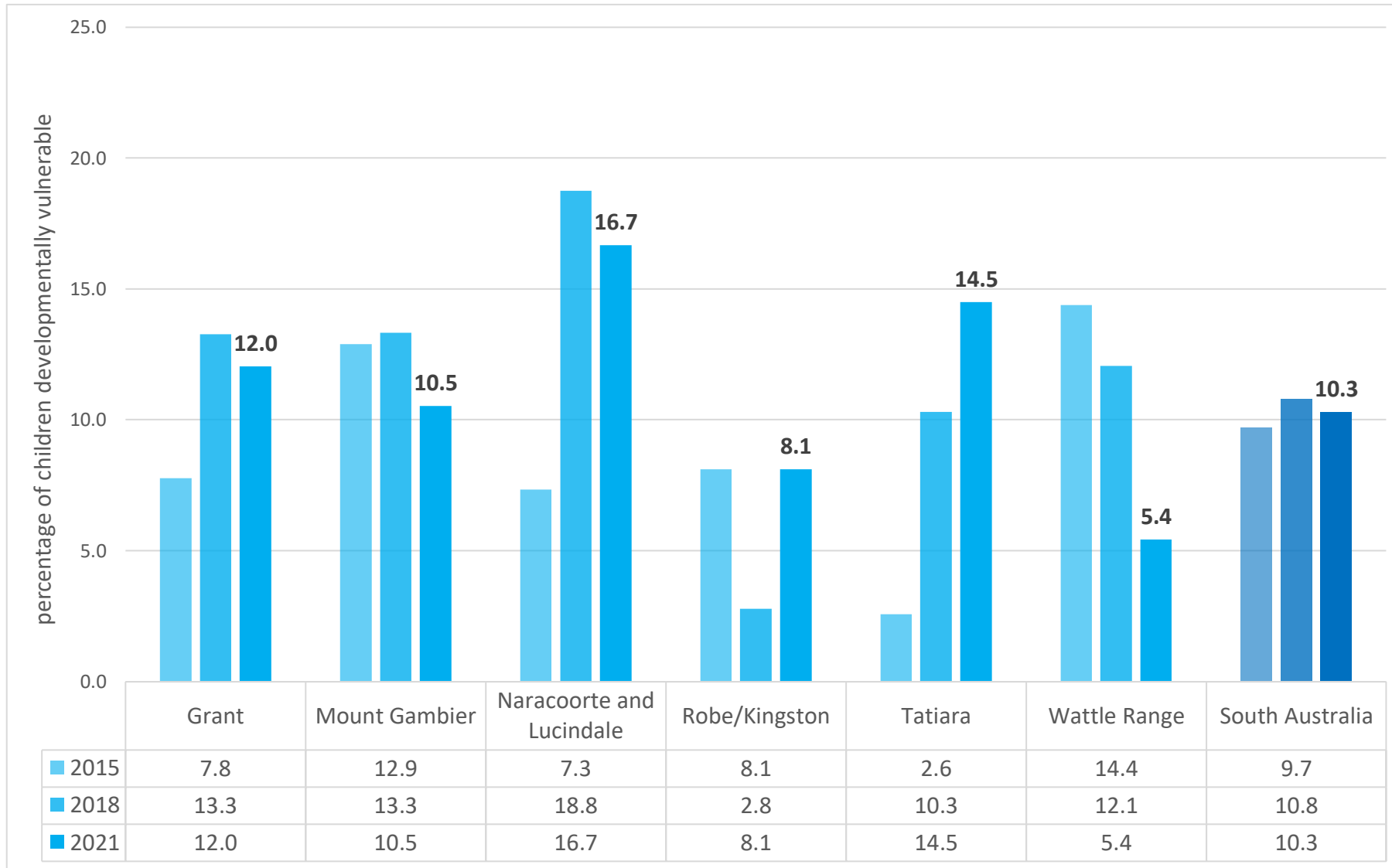
Children do well in social settings when they are confident, happy to try new things and can get along well with other children

Community	No children 2021*
Grant	14
Mount Gambier	32
Naracoorte and Lucindale	14
Robe/Kingston	1
Tatiara	7
Wattle Range	12

Source: [AEDC Community Profiles 2021](#)

\* Number of children developmentally vulnerable

# Emotional maturity



Children adapt best to a classroom environment when they can consider others, concentrate, have patience and are beginning to manage their emotions.

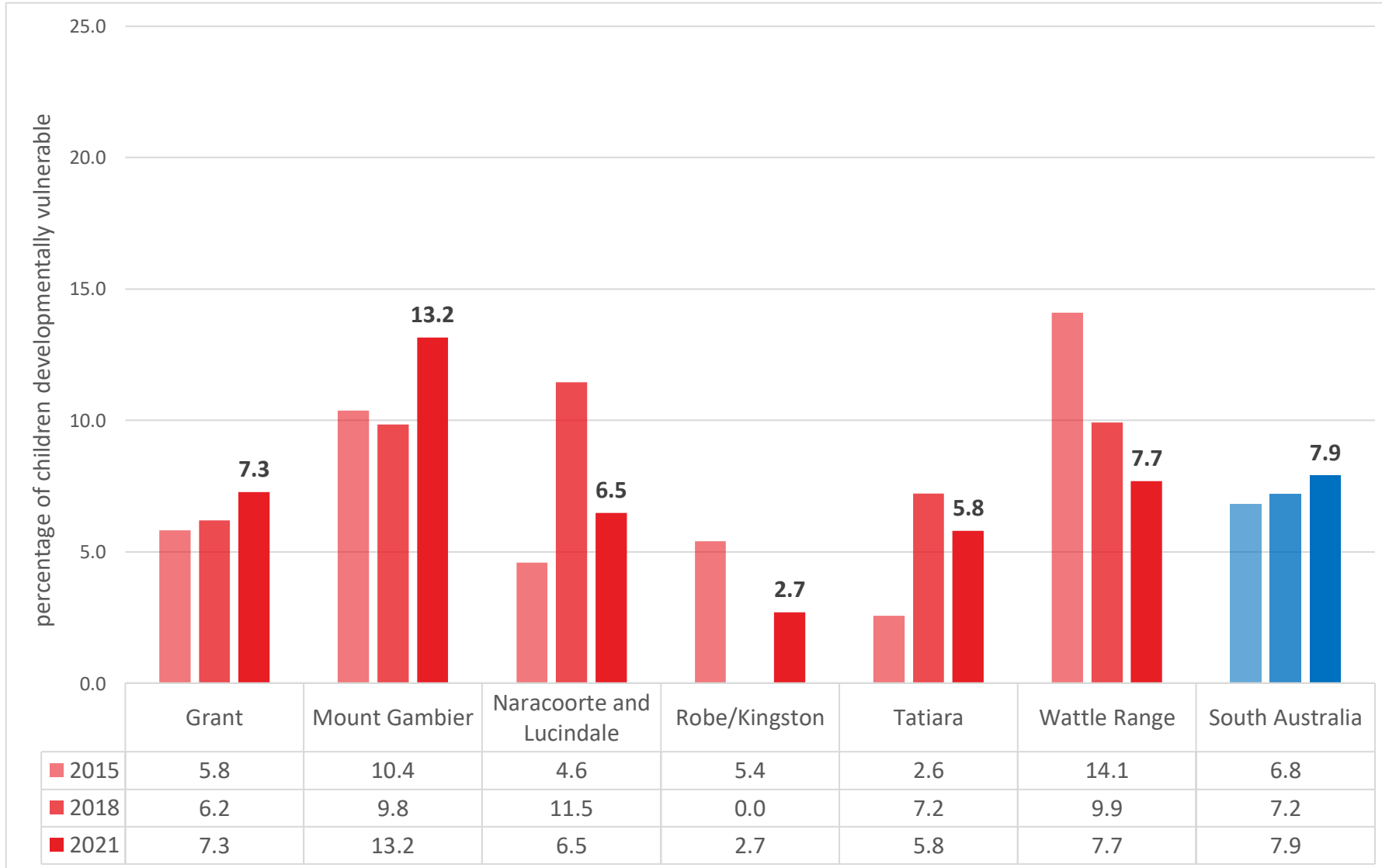
Community	No children 2021*
Grant	13
Mount Gambier	28
Naracoorte and Lucindale	18
Robe/Kingston	3
Tatiara	10
Wattle Range	7

Source: [AEDC Community Profiles 2021](#)

\* Number of children developmentally vulnerable

# Language and cognitive skills (school-based)

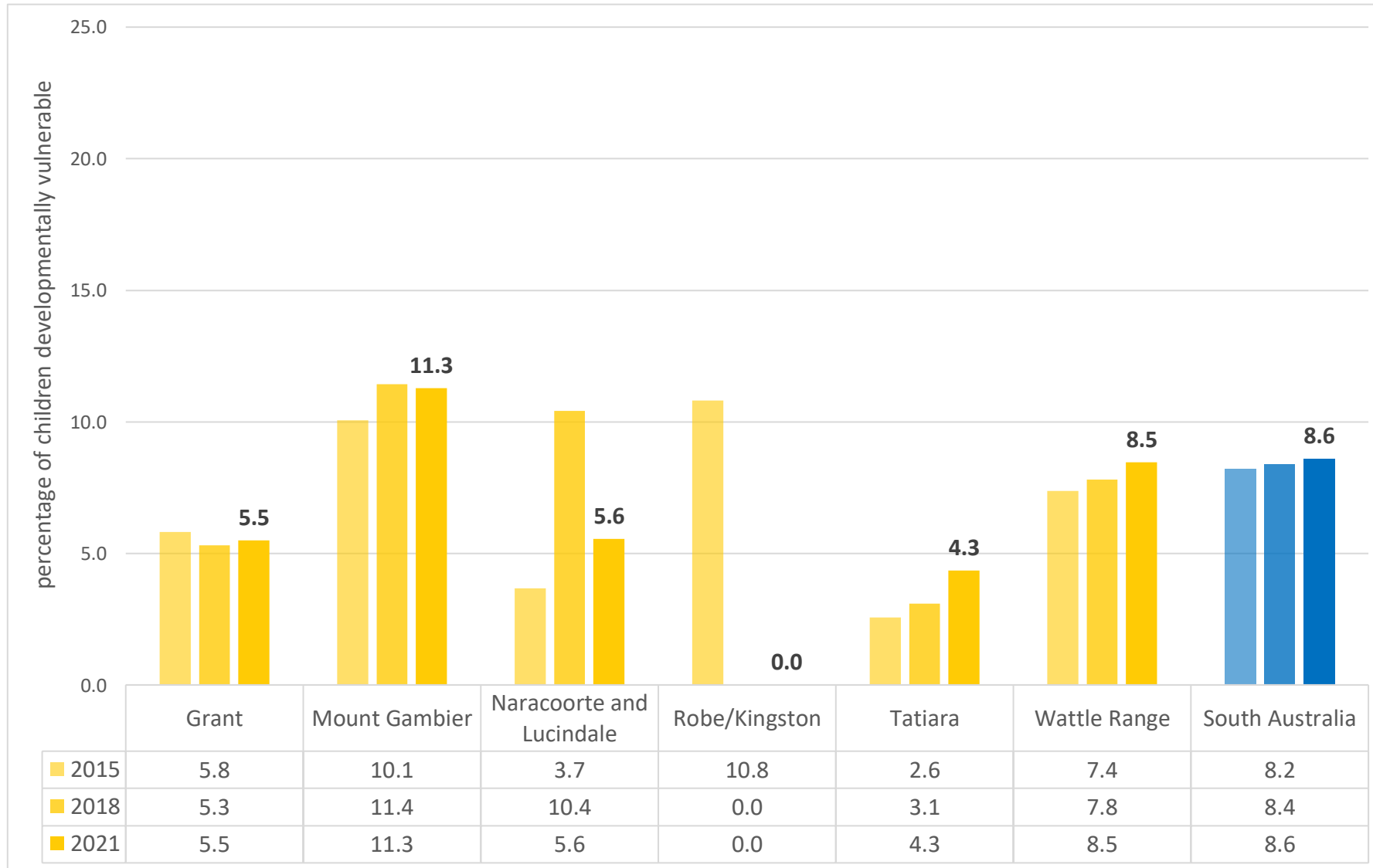
Children love to learn. Reading, counting and recognising numbers and shapes, are important for school and life



Community	No children 2021*
Grant	8
Mount Gambier	35
Naracoorte and Lucindale	7
Robe/Kingston	1
Tatiara	4
Wattle Range	10



# Communication skills and general knowledge



Children love to talk about their world with other children and adults.

Community	No children 2021*
Grant	6
Mount Gambier	30
Naracoorte and Lucindale	6
Robe/Kingston	0
Tatiara	3
Wattle Range	11

Source: [AEDC Community Profiles 2021](#)

\* Number of children developmentally vulnerable

# AEDC data – early childhood programs

Playgroup attendance	2015		2018		2021	
	n	%	n	%	n	%
Grant	13	46.4	11	57.9	24	66.7
Mount Gambier	24	35.3	35	55.6	30	35.7
Naracoorte and Lucindale	32	62.7	24	51.1	29	56.9
Robe/Kingston	11	84.6	28	96.6	26	86.7
Tatiara	32	52.5	14	30.4	9	31.0
Wattle Range	44	78.6	42	61.8	30	76.9

As a protective factor children and families benefit from participating in early years child-parent programs eg playgroup

Note, this information is to the best of the teacher’s knowledge.

# AEDC data – children’s support

Support - children with special needs status	2015		2018		2021	
	n	%	n	%	n	%
Grant	4	3.7	≤3	≤2.6	≤3	≤2.7
Mount Gambier	23	13.0	45	14.6	49	18.1
Naracoorte and Lucindale	8	6.8	4	4.0	≤3	≤2.7
Robe/Kingston	≤3	≤7.9	≤3	≤8.1	≤3	≤7.5
Tatiara	≤3	≤3.8	4	4.0	≤3	≤4.3
Wattle Range	10	6.3	4	2.8	4	3.0

Support - children identified by teachers as requiring further assessment	2015		2018		2021	
	n	%	n	%	n	%
Grant	16	15.2	15	13.6	21	18.8
Mount Gambier	43	13.0	45	14.6	49	18.1
Naracoorte and Lucindale	23	20.9	17	17.5	19	19.2
Robe/Kingston	≤3	≤7.9	≤3	≤8.1	≤3	≤8.1
Tatiara	6	7.8	12	12.5	9	13.2
Wattle Range	18	11.5	17	11.9	18	14.6

This information can help you understand the support needs of children in your sites and communities.

An increase in the proportion of children teachers report as requiring further assessment could indicate increased complexity in child needs, concerns with referral networks or educators being better equipped to identify and refer children for further assessment

# AEDC data - transition to school

Child has parents who are actively engaged with the school in supporting their child's learning	2015		2018		2021	
	n	%	n	%	n	%
Grant	103	96.3	110	96.5	106	93.8
Mount Gambier	303	89.1	301	91.5	252	88.7
Naracoorte and Lucindale	105	89.7	92	92.0	100	90.9
Robe/Kingston	34	89.5	36	97.3	38	100.0
Tatiara	77	97.5	95	94.1	67	95.7
Wattle Range	146	91.8	132	91.0	125	93.3

Children benefit from having parents who:

- are actively engaged with their child's school
- regularly read to children

Child is regularly read to/ encouraged in his/her reading at home	2015		2018		2021	
	n	%	n	%	n	%
Grant	99	92.5	106	93.0	97	85.8
Mount Gambier	288	84.7	279	84.8	236	83.1
Naracoorte and Lucindale	105	89.7	84	84.0	96	87.3
Robe/Kingston	34	89.5	36	97.3	36	94.7
Tatiara	75	94.9	92	91.1	66	94.3
Wattle Range	137	86.2	123	84.8	115	85.8

Note, this information is to the best of the teacher's knowledge.

# Summary of trends for Limestone Coast

	Strengths	Areas for improvement/further investigation
Mount Gambier	<p>From 2018 to 2021, decreased developmental vulnerability and increased on track for <b>emotional maturity</b>.</p>	<p>From 2009 to 2021, increased developmental vulnerability on one or more, two or more and across all domains, and decreased 'on track' for all domains.</p> <p>From 2018 to 2021, increased developmental vulnerability on <b>language and cognitive skills (school based)</b> and <b>communication skills and general knowledge</b>.</p>
Wattle Range	<p>From 2018 to 2021, decreasing developmental vulnerability on one or more (not statistically significant) and two or more domains (statistically significant), as well as decreased developmental vulnerability in <b>emotional maturity</b> from 2018 to 2021.</p>	<p>From 2009 to 2021, increased developmental vulnerability for <b>physical health and wellbeing</b> and <b>communication skills and general knowledge</b>; as well as decreased 'on track' for <b>physical health and wellbeing</b> from 2009 to 2021.</p> <p>Decreased 'on track' for <b>physical health and wellbeing</b>, <b>social competence</b> and <b>communication skills and general knowledge</b> from 2018 to 2021. The 'at risk' groups for these domains has also increased</p>

# Summary of trends for Limestone Coast

	Strengths	Areas for improvement/further investigation
Naracoorte & Lucindale	<p>From 2018 to 2021, increased 'on track' in <b>social competence</b> and decreased developmental vulnerability in <b>language and cognitive skills (school based)</b>.</p> <p>From 2018 to 2021, decreased developmental vulnerability in two or more domains.</p>	<p>From 2009 to 2021, increased developmental vulnerability on one or more domains, as well as <b>social competence</b> and <b>language and cognitive skills (school based)</b> and decreased 'on track' for <b>physical health and wellbeing</b>, <b>emotional maturity</b>, <b>language and cognitive skills (school based)</b> and <b>communication skills and general knowledge</b>.</p> <p>From 2018 to 2021, decreased 'on track' in <b>emotional maturity</b>.</p>
Tatiara	<p>From 2009 to 2021, decreased developmental vulnerability on one or more and two or more domain; as well as decreased developmental vulnerability and increased on track for <b>physical health and wellbeing</b>, <b>social competence</b>, <b>language and cognitive skills (school based)</b> and <b>communication skills and general knowledge</b> from 2009 to 2021.</p> <p>From 2018 to 2021, decreased developmental vulnerability for <b>physical health and wellbeing</b> and increased 'on track' for <b>physical health and wellbeing</b>, <b>language and cognitive skills (school based)</b> and <b>communication skills and general knowledge</b> from 2018 to 2021.</p>	<p>Decreased 'on track' for <b>emotional maturity</b> from 2009 to 2021.</p>

# Summary of trends for Limestone Coast

	Strengths	Areas for improvement/further investigation
Grant	<p>Increasing participation in playgroup since 2015.</p>	<p>From 2009 to 2021, increased developmental vulnerability on one or more and two or more domains, as well as increased developmental vulnerability on <b>social competence</b> and <b>emotional maturity</b>.</p> <p>From 2009 to 2021, decreased 'on track' for <b>physical health and wellbeing, social competence, emotional maturity</b> and <b>communication skills and general knowledge</b>.</p> <p>From 2018 to 2021, decreased 'on track' for <b>physical health and wellbeing</b> and increased developmental vulnerability for <b>social competence</b>.</p>
Robe/Kingston	<p>From 2009 to 2021, decreased developmental vulnerability on one or more and two or more domains, as well as on <b>social competence</b>, and <b>communication skills and general knowledge</b> from 2009 to 2021.</p> <p>Increased 'on track' for all domains from 2009 to 2021.</p> <p>100% parent engagement with school, and 94.7% of families reading at home.</p>	

# How to find the data for your community?

The screenshot shows the AEDC website interface. At the top, there is a navigation bar with links for ABOUT, PRIVACY, RESOURCES, RESEARCH, FAQs, CONTACT, and SIGN IN. The AEDC logo is on the left, and the text 'Our Children · Our Communities · Our Future' is on the right. Below this is a dark navigation bar with links for PARENTS, EARLY CHILDHOOD, COMMUNITIES, SCHOOLS, RESEARCHERS, and DATA, along with a search bar. The main content area features a breadcrumb trail 'You are here: Home > Data' and a descriptive paragraph: 'The AEDC census data provides a snapshot of children's development that can inform communities and support planning, policy and action.' Below this, a section titled 'How the data can be viewed' is divided into three columns: DATA EXPLORER, DATA PRODUCTS, and KEY FINDINGS. Each column contains a small image of the respective tool and a brief description of its capabilities.

**DATA EXPLORER**

Explore results by AEDC community and local community and compare with jurisdictional and national results. Download 2021 Community Profiles.

**DATA PRODUCTS**

Access additional data products such as time series public tables by LGA, SA2, SA3, SA4, GCCSA, Remoteness, GIS data and SEIFA

**KEY FINDINGS**

Key findings, with an interactive chart showing trends in the AEDC for individual domains and summary indicators from 2009 to 2021 at the national and jurisdictional level



# **Part 4**

## **Connecting with community**



# AEDC community story - Mid Murray Family Connections



# Why communities use the AEDC

Provides a common language around children's development and wellbeing

- Supports people to come together to work toward a common goal

Provides reliable data to support groups to reflect on the context of children and families and plan their services and supports

- Informs an approach to localised needs assessment: consider the scale and intensity of support needs and how these differ across communities
- Reflect on the experience of families in accessing the system of supports available
- Reflect on the strengths and protective factors that already exist in communities
- Develop collaborative and place-based approaches to improving outcomes for children and families



# Complementary data

AEDC is just one dataset

Combine AEDC data with other datasets to create a richer understanding of the community (strengths and challenges) to inform your work, including:

- [Australian Bureau of Statistics \(ABS\)](#), including QuickStats
- [Social Health Atlases of Australia \(PHIDU\)](#)
- [Community profiles and population forecasts \(.id\)](#)
- [South Australian Government Data Directory \(Data.SA\)](#)
- [Location SA Map Viewer](#)

Also ask yourself:

- What data do you already have access to?
- What community engagement data is available for your area?
- What anecdotal information is available?
- What information may local partners be able to provide to help in creating the community context picture?

AEDC Data explorer provides ABS data such as: completed year 12, recent address change, SEIFA, Young single parents and unemployment.

# AEDC Practice Principles

# Resources for parents & community members

- [Early Years SA app](#), provides trusted information complementing the blue book
- [My Local Services](#), a free app that delivers localised council information to residents of South Australia
- [Raising Children Network](#), has expert parenting information from pregnancy onwards.
- [Open your world](#) provides South Australians and their families with valuable resources, tools and information to support improving wellbeing by staying healthy, active and connected.
- [Parenting SA](#) has practical guides and short videos about raising children.



# Resources for parents and community members (continued)

- [Learning Potential](#) has tips and ideas about helping your child's learning.
- [Starting Blocks](#) provides parents with information about early childhood education and care.
- [Great Start](#) provides everyday ideas for learning.
- [Our Learning SA](#) has resources to help families and children to continue learning between school and home.
- [The free Bright Tomorrows app](#) has 1000s of ideas to help build a child's brain.
- [The Let's Read](#) website has tips and tools to promote reading with young children.
- [Visit the National Disability Insurance Scheme website](#) for information about accessing support if you have concerns about your child's development.



# Resources for community stakeholders

- [2021 AEDC National Report](#)
- [AEDC Choosing effective interventions fact sheet](#)
- [AEDC Early Childhood Sector User Guide \(aedc.gov.au\)](#)
- [AEDC Community stories \(aedc.gov.au\)](#)
- [AEDC research findings / research snapshots](#)
- [AEDC Data explorer](#)
- [AEDC Resources for Communities \(aedc.gov.au\)](#)
- [AEDC FAQ's](#)
- [Centre for Community Child Health : Platforms \(rch.org.au\)](#)
- [The Australian Physical Literacy Framework \(pescholar.com\)](#)





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w [About AEDC in SA](#) | w [www.education.sa.gov.au](http://www.education.sa.gov.au) | w [aedc.gov.au](http://aedc.gov.au) |

Note: national results drawn from the 2021 AEDC National report and SA data sourced from the SA 2021 AEDC Pivot Table  
Quote from Inclusive SA (State Disability Inclusion plan 2019-2023)