

RESEARCH BRIEF

Academic Resilience: Child, Family, and Schooling Factors that Support ‘Closing the Gap’ Over the Early School Years

Background

At a population level, achievement gaps based on socio-economic gradients emerge very early for most Australian children and widen across the schooling years. But not ALL children who enter school and who are developmentally vulnerable will follow expected trajectories and have difficulties in being successful at school. Some will ‘close the gap’. What can we learn from these resilient children?

Aims

This research brief presents results from a study that addressed the following research questions:

- How well does teacher report data on the Australian Early Development Census (AEDC) in the first year of school predict academic achievement in Year 3?
- Which children who enter school vulnerable remain so, and which children show academic resilience and better-than-expected Year 3 achievement? That is, which children ‘close the gap’?
- What child, parenting, and school and engagement factors appear to contribute to this ‘closing the gap’ pathway for academically resilient children?

Key findings

Which students are vulnerable in Prep?

Children’s cognitive / language skills, as reported by teachers at school entry on the AEDC, were strongly predictive of children’s Year 3 academic achievement across all NAPLAN domains. On average, children in the bottom 50% of AEDC scores on the language / cognitive domain at school entry had significantly poorer academic achievement on Year 3 NAPLAN and were considered developmentally vulnerable. On average, children in the top 50% of AEDC scores on the language / cognitive domain were achieving at, or above year level expectations, by Year 3.

Which students are resilient by Year 3?

However, not every child identified as developmentally vulnerable at school entry in the language /cognitive domain on the AEDC performed more poorly on Year 3 NAPLAN. Approximately 44% of the developmentally vulnerable group achieved higher than expected NAPLAN scores at Year 3 and could be classified as academically resilient. These resilient children performed as well as, or better, than many children who had not been considered vulnerable at school entry, across all NAPLAN domains in Year 3.

Girls were more likely to be resilient in writing and boys were more likely to be resilient in mathematics and reading. Resilient children were more likely to be non-Indigenous, live in urban areas, and come from higher socio-economic homes.

What supports academic resilience for vulnerable children?

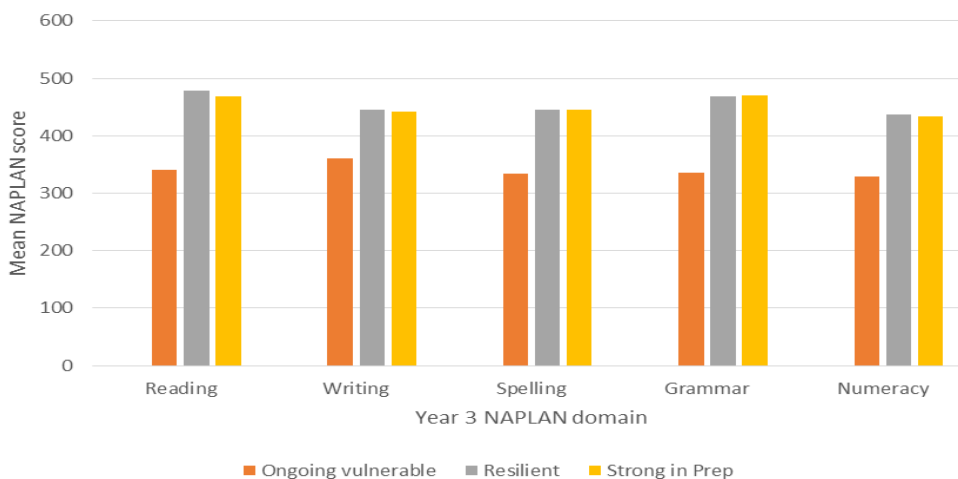
In an exploration of child, parenting and school factors that contributed to resilience, the most important factors measured when children were in Year 1 of school that related to academic resilience by Year 3 were:

- Higher attentional regulation skills
- Higher receptive vocabulary skills.

Other factors that appeared to support academic resilience were: fewer peer problems; fewer behavioural sleep problems; higher levels of parenting consistency by mothers and fathers; lower levels of parenting anger by mothers and fathers; higher levels of parental engagement in children’s school; higher levels of teacher self-efficacy; and children’s self-reported positive feelings of ‘liking’ school.

Vulnerable children with stronger attentional regulation skills and vocabulary were more likely to close the gap, between Prep to Year 3.

Resilient children (see grey bar below) performed as well as or better than children who were not vulnerable in Prep (yellow bar) by Year 3, across all NAPLAN domains. Ongoing vulnerable children (orange bar) had poorer AEDC scores and poorer Year 3 NAPLAN scores.



Implications

These findings suggest that developmentally vulnerable children with poorer vocabulary and attentional regulation skills across the early school years are less likely to close the gap. Targeting these specific skills for all children may enable children to close the achievement gap in the early years of school.

Recommendations:

- Reframe current approaches to behaviour management to have a stronger focus on support for the development of self-regulation and build teacher skills to be able to use effective strategies in this area.
- Focus on rich language activities within meaningful contexts that includes greater balance in teacher and child talk time.
- Provide age appropriate pedagogy to all year levels that includes project-based learning, open-ended activities, and games that enable richer peer and adult interactions.

In addition, strategies to build school-based parent involvement and address early peer problems within the school environment are likely to also support resilient pathways.

These analyses suggest that it is not only children with the lowest 25% of scores on the AEDC who are vulnerable to poorer academic outcomes, but all children whose scores are in the bottom 50% of scores on the cognitive / language AEDC domain.

The secondary data analysis approach in this research demonstrates the utility and value of data linkage to address educational research imperatives. Opportunities to partner in projects with government and other organisations to use secondary data and data linkage are important to inform education policy and practice.

Study methodology

This study used data from *Growing Up in Australia: The Longitudinal Study of Australian Children (LSAC)*. Analyses included 2,118 children from the LSAC Birth cohort who had linked AEDC and NAPLAN data available, along with LSAC survey data from teachers, parents, and children about children's early school experiences. Multiple analyses steps included regression to address the first research question, person-centred predictive equations to address the second research question, and multinomial logistic regression modelling to address the final research question.

For further information on this study please contact:

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