

## 8. Participants from starting school to age 14: overview of results

### 8.1 Key findings

#### Box 8.1: Key findings for participants from starting school to age 14

- In the longitudinal analysis, significant improvements were observed across a number of indicators, particularly in the areas of independence and friendships. On the other hand, a number of indicators have deteriorated, particularly related to impact on family life and involvement in activities.
- Baseline and longitudinal outcomes vary with participant level of function. Participants with higher level of function tend to have better baseline outcomes and exhibit higher rates of improvement than those with lower level of function.
- Participants with a hearing impairment generally experience better outcomes than those with other disabilities.
- Participants from regional and remote locations, compared to those from major cities, show more positive results on some indicators – both at baseline and for longitudinal change. For example, they are more likely to be developing functional, learning and coping skills and are less likely to move out of a mainstream class.
- Children from a CALD background have worse outcomes on most baseline indicators.
- Baseline results for Indigenous participants are more mixed. Indigenous children tend to exhibit higher levels of independence, but their school experiences tend to be worse than for non-Indigenous children. As for the younger cohort, Indigenous children are less likely to live with their parents, and more likely to live in public housing.
- At baseline, 65% of participants attended school in a mainstream class, with 21% in a special school and 12% in a support class. The percentage in a mainstream class declines with school year, from 75% for K-2, to 64% for years 3-6, and 42% for years 7-10. The percentage also varies considerably by disability: for example, only 38% of children with an intellectual disability or Down syndrome attend school in a mainstream class, compared to almost 90% of children with a sensory disability, developmental delay, or global developmental delay.
- Parents and carers report that children attending a special school are more likely to feel genuinely included and happy at school. Parents and carers of children at a special school also report having better knowledge of their child's goals at school and tend to be more satisfied that the school listens to them in relation to their child's education.
- However, analysis of the impact of educational setting on other outcomes reveals that children enrolled in a support class or special school are less likely to be developing independence, to have a genuine say in decisions about themselves, to make friends outside the family, and to spend time with friends without an adult present. Hence from a broader perspective, participation in mainstream education confers benefits on independence, relationships, and social participation that are less likely to be experienced by children attending a special school.

### **Box 8.1: Key findings for participants from starting school to age 14 (continued)**

- Opinions on whether the NDIS has helped vary by domain for the starting school to 14 cohort, with the percentage responding positively ranging from 33% for access to education to 51% for independence. For education, however, the mainstream education system has a much bigger role in ensuring successful outcomes than the NDIS. Higher baseline plan utilisation is a strong predictor of a positive response across all four areas surveyed. The fact that utilisation tends to be lowest for the starting school to 14 cohort may contribute to the observed lower levels of satisfaction. Self-managing (either fully or partly) also tends to be associated with more positive responses. Participants entering the Scheme for early intervention are more likely to think that the NDIS has helped with independence and school than those entering due to disability.

## 8.2 Results overview

### 8.2.1 Outcomes framework questionnaire domains

Starting with the milestone of school commencement, this life stage follows children through to the early teenage years. Typically these years are characterised by increasing independence and development of relationships inside and outside the family. Hence the outcomes framework seeks to measure the extent to which participants:

- Grow in independence;
- Are welcomed and educated in their local school;
- Form friendships with peers and have positive relationships with family; and
- Participate in local social and recreational activities.

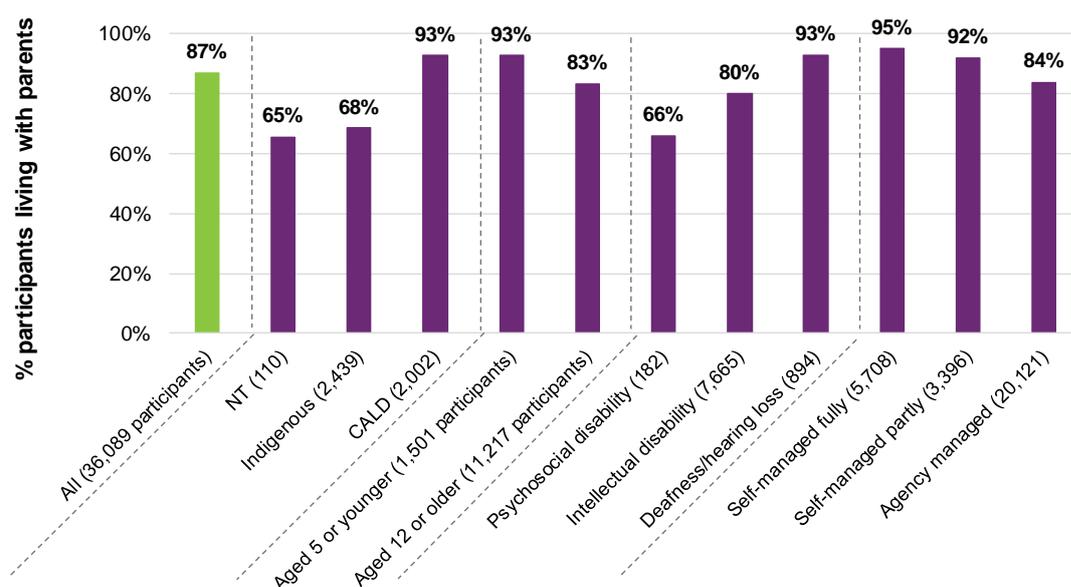
The LF questions for participants in the starting school to age 14 cohort allow a deeper investigation into the experiences of participants in educational and school settings, with eight extra questions devoted to these areas. There are also three extra questions about developing independence (on managing the demands of the world and becoming more independent), one on relationships (about the effect on siblings), and four on social participation (about vacation care and after school activities).

### 8.2.2 Participant living arrangements

Overall, 87% of children live with their parents. The percentage is much lower in NT (65%) and for Indigenous participants (68%), but higher for CALD participants (93%). There is a declining trend with age, from 93% for children aged 5 or younger to 83% for children aged 12 or older. Participants with psychosocial disability (66%) or an intellectual disability (80%) are less likely to live with their parents, and those with deafness/hearing loss (93%) are more likely to live with their parents. The percentage is higher for participants whose plan is self-managed (95%) compared to agency-managed (84%).

Overall, 9% of participants live in a private home rented from a public authority. The percentage is much higher in NT (50%) and for Indigenous participants (27%).

**Figure 8.1 Proportion of participants living with parents**

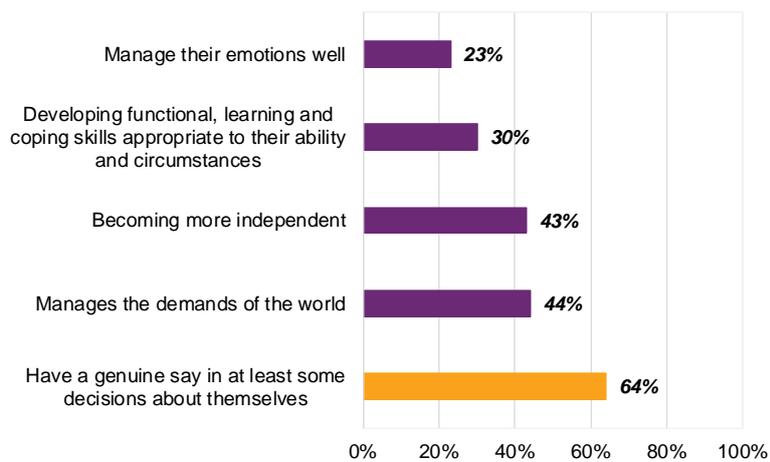


### 8.2.3 Baseline indicators – aggregate

#### *Independence*

Baseline levels of independence are generally low for this cohort. For example, only 23% of parents/carers say their child manages their emotions well, and only 30% think their child is developing functional, learning and coping skills appropriate to their ability and circumstances. Based on SF answers, 42% think their child is becoming more independent, and in the LF, 44% think their child manages the demands of their world. The most positive result is that 64% of children have a genuine say in at least some decisions about themselves.

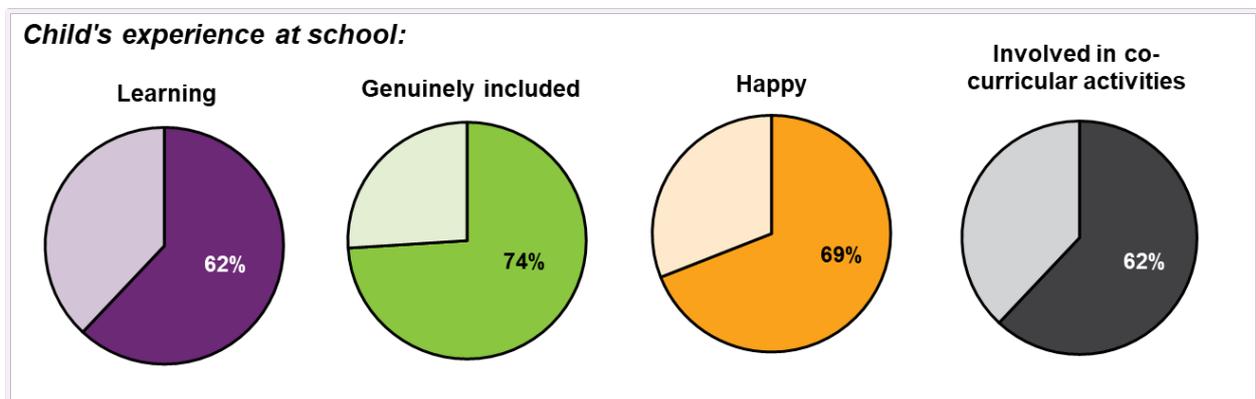
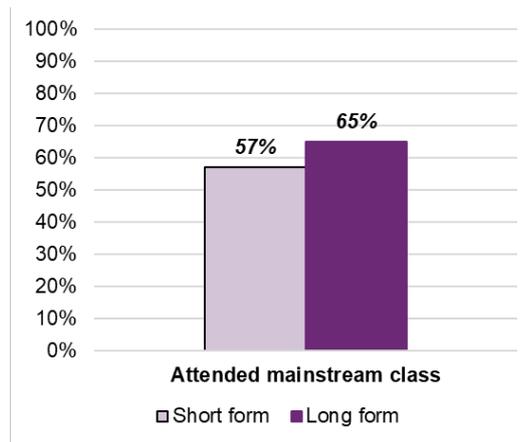
**Figure 8.2 Independence indicators**



#### *School*

57% of children responding to the SF attended school in a mainstream class (65% of those responding to the LF). Involvement of families and carers in their child's education was reasonably high: based on the LF, 73% were satisfied that their child's school listens to them in relation to their child's education, 77% knew their child's goals at school, and 69% thought their child's education was matched to those goals. Regarding the child's experience at school, 62% thought that their child was learning at school, 74% thought that their child was genuinely included and 69% thought that they were happy at school. 62% of children had been involved in co-curricular activities at school, most commonly in school plays or concerts. Only 44% of children who were not exempt had sat a NAPLAN test. A relatively high proportion of children (17%) had ever been suspended from school.

**Figure 8.3 School experiences**



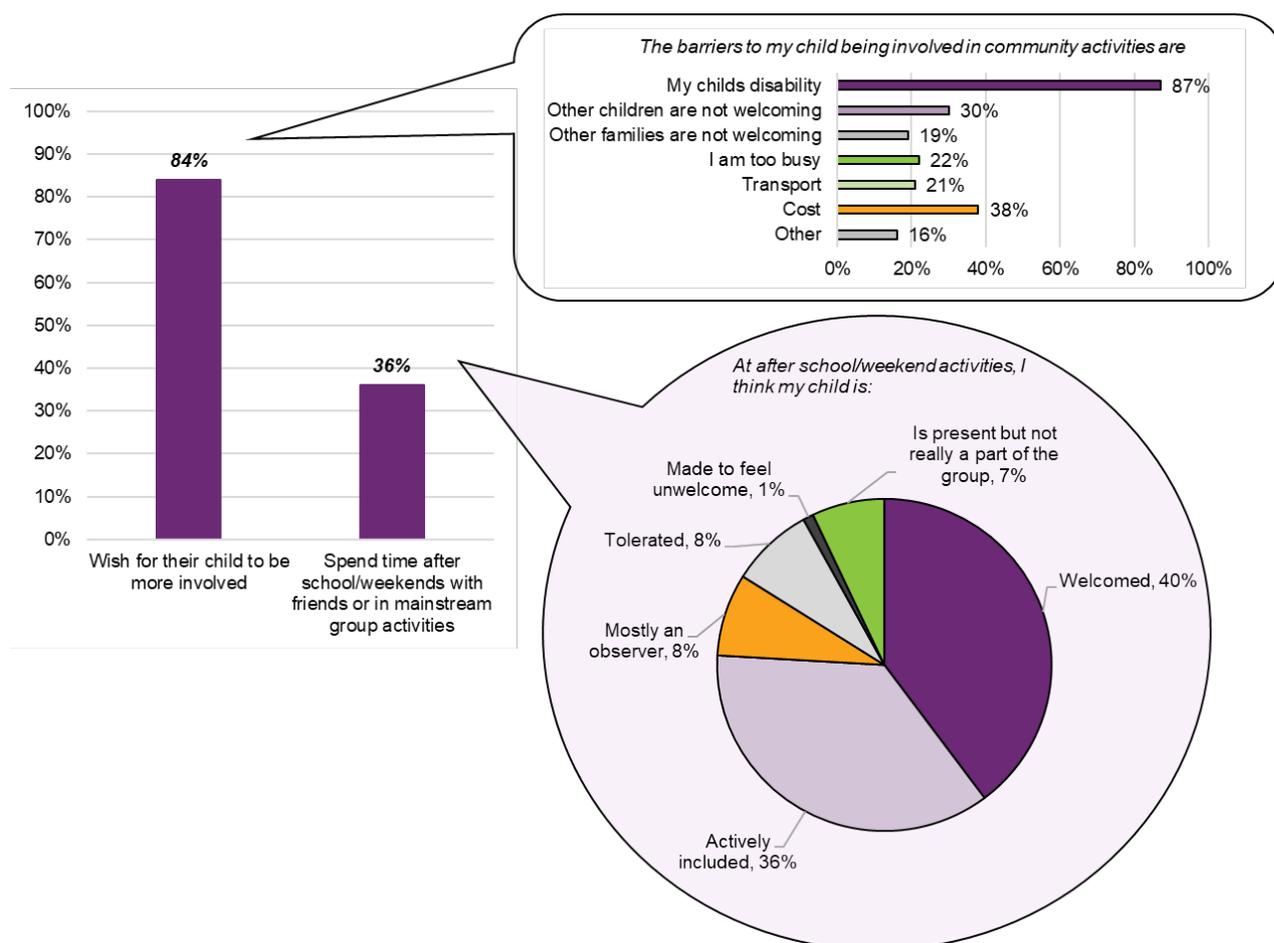
### **Relationships**

In relation to family life, only 28% of parents/carers think there is enough time to meet the needs of all family members (lower than the 55% for the pre-school cohort). 61% of those with more than one child expressed some concern about the effect of having a sibling with disability on their other children. However, 74% say that their child with disability gets along with their siblings. Overall, 88% say that their child fits into everyday family life (often or sometimes). Of those who go out without their child, 88% use informal care (the child stays with siblings, extended family, family friends or by themselves), although only 47% say they are happy with their childcare arrangements. Half the children have friends they enjoy spending time with, and 62% are able to make friends with people outside the family.

### **Participation**

Overall, participation in mainstream activities tends to be low for this cohort. Only 10% of parents/carers use a mainstream school holiday program and only 36% of children spend time after school and on weekends with friends or in mainstream group activities. A high proportion (86%) of parents/carers expressed a wish for their child to be more involved, and 87% of these perceived their child's disability as a barrier to being more involved. 60% of parents/carers had some difficulty in finding vacation care.

**Figure 8.4 Involvement in community activities**



### 8.2.4 Baseline indicators – participant characteristics

Baseline indicators have been analysed by participant characteristics using one-way analyses and multiple logistic regression modelling. Key findings from these analyses include:

- **Level of function**

Baseline indicators tend to be better for participants with higher level of function, and those with lower cost plans.

- **Culturally and linguistically diverse backgrounds**

Children from a culturally and linguistically diverse background have worse outcomes on most indicators.

- **Indigenous**

Results by Indigenous status are more mixed. Indigenous children are more likely to have a genuine say in decisions about themselves, to make friends outside the family, and to spend time with friends without an adult present. However they are less likely to attend school in a mainstream class, and their school experiences tend to be worse than for non-Indigenous children. For example, they are much less likely to have sat a NAPLAN test and to have been involved in co-curricular activities at school, but much more likely to have been suspended from school.

- **Age**

Results by age are also mixed. As expected, older children are more likely to spend time with friends without an adult present, and to have a genuine say in decisions

about themselves. However, time away from parents is less likely to be spent with friends or in mainstream activities, and older children are less likely to be in a mainstream class at school. Many of the outcomes related to friendships and family life also exhibit a deteriorating trend with age.

- **Disability**

Children with deafness/hearing loss have better outcomes across most indicators than children with other types of disability. Children with visual impairment and another sensory/speech disability also have a tendency to better outcomes on many indicators. Children with autism or a psychosocial disability do worse on most indicators, and those with an intellectual disability or Down syndrome also tend to do worse on many indicators.

- **Type of school**

Children attending a special school are more likely to feel genuinely included and happy at school than children in a mainstream or support class. Parents/carers of children at special schools have better knowledge of their child's goals at school and tend to be more satisfied that the school listens to them in relation to their child's education. However, children enrolled in a support class or special school are less likely to be developing independence, to have a genuine say in decisions about themselves, to make friends outside the family, and to spend time with friends without an adult present.

- **Geography**

Children from regional and remote locations show more positive results than those from major cities, across many of the indicators. For example, they are more likely to be developing functional, learning and coping skills.

- **Gender**

Girls are more likely than boys to attend school in a mainstream class, and much less likely to have been suspended from school. However, controlling for other factors, they are less likely to spend time with friends without an adult present.

## 8.2.5 Longitudinal indicators – aggregate

Longitudinal analysis describes how outcomes have changed for participants during the time they have been in the Scheme. Included here are participants entering the Scheme in the first year of transition (from 1 July 2016 to 30 June 2017) for whom a record of outcomes is available at two time points: at scheme entry and at approximately one year following scheme entry.

As expected during this relatively short period, many indicators have not changed a great deal. For this summary we select indicators based on a combination of statistical significance and magnitude of change<sup>33,34</sup>.

Table 8.1 summarises changes for the 13 selected indicators.

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<sup>33</sup> Since there is vastly more data available for the SF, with more than 7000 participants contributing to the analysis, statistical testing would identify indicators where the magnitude of change is unimportantly small, so we only consider SF indicators where the absolute magnitude of change in the indicator is greater than 0.02 (all of these changes are statistically significant). For the LF, where the quantity of data is much smaller (generally less than 400 participants), selection is based on statistical significance.

<sup>34</sup> Note that at least some of the observed change may be attributable to normal age-related development, since the children will be one year older at the second time point.

**Table 8.1 Selected longitudinal indicators for participants from starting school to age 14**

SF/LF	Domain	Indicator	Baseline	Review	Change	Improvement/ Deterioration
LF	1	% of children who manage the demands of their world	47.4%	58.0%	10.6%	Improvement
SF	1	% who say their child is becoming more independent	43.6%	46.4%	2.7%	Improvement
SF	1	% of children who spend time away from parents/carers other than at school	30.9%	32.7%	1.8%	Improvement
LF	2	% who know their child's goals at school	69.5%	79.7%	10.3%	Improvement
SF	3	% who say they are happy with the child care arrangements	46.2%	48.2%	2.0%	Improvement
SF	3	% of children who have friends that he/she enjoys spending time with	46.1%	48.5%	2.4%	Improvement
SF	4	% who say they would like their child to have more opportunity to be involved in activities with other children	79.5%	87.7%	8.2%	Context dependent
SF	1	% who say their child manages their emotions	25.4%	22.7%	-2.7%	Deterioration
SF	2	% of children attending school in a mainstream class	54.4%	52.5%	-1.9%	Deterioration
SF	3	% of children who get along with their siblings	76.2%	73.5%	-2.7%	Deterioration
SF	3	% who report having enough time each week for all members of family to get their needs met	28.1%	25.5%	-2.6%	Deterioration
SF	4	Of those who would like their child to be more involved in activities with other children, % who see their child's disability as a barrier	83.1%	88.7%	5.6%	Deterioration
LF	4	% of families/carers who found it easy to find vacation care	43.4%	35.6%	-7.9%	Deterioration

Key findings from Table 8.1 include:

- For domain 1 (independence), three of the four indicators show positive change, with more children becoming independent and able to manage the demands of their world, and spending time away from parents/carers. However, children are less likely to manage their emotions.
- For domain 2 (school), parents/carers are significantly more likely to know their child's goals at school, however the percentage in a mainstream class has declined.
- Domain 3 (relationships) shows an improvement in friendships and satisfaction with childcare, but a deterioration in relationships with siblings and time available for all family members.
- Domain 4 (community) indicators exhibit some deterioration, with more seeing their child's disability as a barrier to greater involvement, and fewer finding it easy to find vacation care.

### 8.2.6 Longitudinal indicators – participant characteristics

Analysis by participant characteristics has been examined in two ways:

3. A simple comparison of the percentage meeting the indicator at review with the percentage meeting the indicator at baseline. The difference (review-baseline) is compared for different subgroups.
4. Multiple regression analyses modelling improvement in the indicator. That is, for the subset without the indicator at baseline, the probability of meeting the indicator at review is modelled as a function of participant characteristics. For some indicators, deterioration has been modelled in a similar way.

It should be noted that these two analyses can produce different results, particularly where there is a large difference in the indicator at baseline between subgroups.

Some key features of the analyses for selected indicators are summarised below.

***My child is becoming more independent (overall improvement of 0.027)***

Based on the logistic regression model for improvement:

- Children with lower level of function, and those with cerebral palsy, were less likely to improve, whereas children with Down syndrome or a physical disability were more likely to improve.
- Children spending time with friends or involved in groups, and those participating in school holiday programs, were more likely to improve.
- Children fitting into family life and those from families where there was enough time to meet all family members' needs were more likely to improve.

***Attending school in a mainstream class (overall deterioration of 0.019)***

Based on a logistic regression model of moving from a mainstream class to a support class or special school:

- Children with lower level of function, older children, and those with an intellectual disability, were more likely to move out of a mainstream class.
- Participants in outer regional and remote areas are less likely to move out of a mainstream class.
- Participants living in public housing are more likely to move out of a mainstream class.
- The more positive the child's experiences at school at baseline, such as learning at school and being involved in co-curricular activities, the less likely the child is to move out of a mainstream class.

***My child's disability is a barrier to being more involved (overall deterioration of 0.056)***

Based on a model for moving from not perceiving the child's disability as a barrier, to perceiving it as a barrier:

- Families/carers of children with lower level of function, and of older children, are more likely to start perceiving their child's disability as a barrier.
- Families/carers of children who cannot manage their emotions well are more likely to start perceiving their child's disability as a barrier. Conversely, the likelihood of deterioration is lower for children who are becoming more independent.