

# 5

## Wellbeing of children and young people

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This chapter examines children's wellbeing as measured at the first wave of data collection for the Pathways of Care Longitudinal Study (POCLS), which took place, on average, 17 months after the first entry into out-of-home care (OOHC). The developmental domains of interest are the children's physical health, social-emotional wellbeing and cognitive/learning ability. The chapter provides information relevant to the study's second Key Research Question: *'What is the physical health, socio-emotional wellbeing and cognitive/learning ability of the children entering OOHC compared with other children in the community?'*<sup>1</sup> Appendix 5 includes details of the measures used to describe child wellbeing in this chapter.

### 5.1 Children's physical health

Children's physical health is connected to a variety of outcomes in adulthood (Currie, Stabile, Manivong & Roos, 2010), and also affects their current functioning in other major life domains; for example, socio-emotional wellbeing and learning progress (e.g., Behrman, 1996).

Being overweight or obese in childhood is recognised as a major health concern worldwide, with the prevalence of childhood obesity in Australia having doubled since 1985 (Booth et al, 2001). It is a risk for numerous health problems including Type II diabetes and cardiovascular disease (Decklebaum & Williams, 2001). It can also adversely affect social-emotional wellbeing (Loth, Mond, Wall & Neumark-Sztainer, 2011).

<sup>1</sup> Please see Chapter 2 for a description of the data analysis undertaken in this report.

The type and amount of children's nutritional intake influences multiple aspects of health, including growth, obesity, glucose metabolism, iron and other stores, and bone and heart health (Wake, Hardy, Canterford, Sawyer & Carlin, 2007). Poor sleep impacts on daytime functioning, and can impede children's academic progress and social adjustment (Quach, Hiscock, Canterford & Wake, 2009; Scharf, Demmer, Silver & Stein, 2013). Poor sleep can also be a symptom of depression (American Psychiatric Association, 2013). The presence of diagnosed health conditions in children may place additional demands on caregivers and their families (Murphy, Christian, Caplan & Young, 2006), which may make the long-term placement of children with such conditions more difficult. Children with diagnosed health conditions need timely and appropriate services which may improve their outcomes and reduce the burden on caregivers.

These aspects of children's physical development and health are measured by caregiver reports in the POCLS. Information on the services provided to address children's health needs, and the degree to which these needs are being adequately addressed, is presented in Chapter 8.

### Information about children's health

Table 5.1 shows that almost all caregivers had received the Medicare card or number (96%) for the child placed in their care, and four fifths had received the child's immunisation records. Immunisation records were more commonly received by caregivers of younger than older age groups (94% of 9–35 month olds and 86% of 3–5 year olds compared with 63% of 6–11 year olds and 50% of 12–17 year olds). 'Blue Books' (the child's personal health record) were received by caregivers of 60% of children overall, and 90% of children aged 9–35 months. Caregivers had received details of health assessments for close to two thirds of children. Around 30% of caregivers had received some details of the birth family's medical history, while a small number (8%) had received other kinds of health information.

**Table 5.1: Caregiver reports of receiving child health information, by child age<sup>1</sup>**

	9–35 months		3–5 years		6–11 years		12–17 years		All children	
	n	%	n	%	n	%	n	%	n	%
Medicare card or number	540	95.2	258	97.4	319	97.0	119	96.0	1,236	96.2
Immunisation record	529	93.5	228	86.0	204	62.6	61	50.4	1,022	80.0
Blue Book	508	89.8	147	55.5	99	30.2	17	14.2	771	60.3
Health assessment	366	66.8	169	64.3	187	57.7	70	57.9	792	63.1
Family medical history	174	31.3	70	26.6	86	26.5	30	24	360	28.7
Other	52	9.2	26	9.8	9	2.7	9	7.3	96	7.5
<b>Total</b>	<b>548–567</b>		<b>263–265</b>		<b>324–329</b>		<b>120–124</b>		<b>1,255–1,285</b>	

<sup>1</sup> Column percentages do not add up to 100%, as multiple types of information may have been received.

## Children's general physical health

Caregiver perceptions of children's general physical health during the past four weeks are shown in Table 5.2. Although not as accurate as a professional medical assessment, many research studies have used respondent ratings to assess health status and these have been shown to be predictive of mortality and functional ability (Saloman, Nordhagen, Oza & Murray, 2009).

Close to 90% of children aged 0 to 11 years were reported to be in 'excellent' or 'very good' health. However, health levels tended to be lower among 12–17 year olds in the POCLS, with 70% reported by caregivers as being in 'excellent' or 'very good' health, 22% in 'good' health, and 8% in 'fair', 'poor' or 'very poor' health.

**Table 5.2: Caregiver ratings of child's general physical health, by child age**

	9–35 months		3–5 years		6–11 years		12–17 years		All children	
	n	%	n	%	n	%	n	%	n	%
Excellent	337	59.4	147	55.5	170	51.7	43	34.7	697	54.2
Very good	171	30.2	95	35.9	123	37.4	44	35.5	433	33.7
Good	45	7.9	22	8.3	33	10.0	27	21.8	127	9.9
Fair	10	1.8	1	0.4	2	0.6	4	3.2	17	1.3
Poor	3	0.5	0	0	1	0.3	5	4.0	9	0.7
Very poor	1	0.2	0	0	0	0	1	0.8	2	0.2
<b>Total</b>	<b>567</b>		<b>265</b>		<b>329</b>		<b>124</b>		<b>1,285</b>	

Ratings by children aged 12–17 years about their health in the past four weeks are shown in Table 5.3 and reveal that around 60% felt they were in 'excellent' or 'very good' health, but 13% thought their health was only 'fair' or 'poor'. This compares with 70% and 8% of caregiver ratings respectively. (However, the groups are not identical, with 94 children and 124 caregivers providing ratings of the young person's health.)

The two older groups of children were also asked whether they had engaged in physical activity on a daily basis during the previous six months. The great majority had done so – 96% of 7–11 year olds<sup>2</sup> and 88% of 12–17 year olds.

<sup>2</sup> As interviews were offered to children aged 7 years and older, the age range for this item is 7–11 years rather than the 6–11 years age band used elsewhere.

**Table 5.3: Children aged 12–17 years ratings of their physical health compared with caregiver ratings**

	Child report		Caregiver report	
	n	%	n	%
Excellent	38	40.4	43	34.7
Very good	20	21.3	44	35.5
Good	24	25.6	27	21.8
Fair	11	11.7	4	3.2
Poor/ Very poor	1	1.1	6	4.8
<b>Total</b>	<b>94</b>		<b>124</b>	

## Health conditions

Caregivers were asked a series of questions about whether the child or young person had particular health conditions or a developmental delay (shown in Table 5.4). Asthma was the most common condition reported (11% overall), followed by problems with eyesight (10%). Other types of conditions with a prevalence of more than 5% were teeth problems/problems with oral hygiene, hearing problems, and emotional/psychological/nervous problems. Overall, 20 differing types of health conditions were reported. Some conditions were more common at older ages (eyesight problems, teeth problems/problems with oral hygiene, emotional/psychological/nervous difficulties) while others were more common at younger ages (hearing problems, food or digestive allergies, bronchitis).

Comparing these data to the 2007/08 Australian Bureau of Statistics National Health Survey (NHS; ABS, 2009) shows that the POCLS findings are reasonably similar to population trends in terms of the types and prevalence of the most common long-term conditions<sup>3</sup>.

Cognitive/language developmental delays were reported among 12% of the POCLS children, most frequently at 3–5 years of age (18%). Emotional/social/behavioural developmental delays were present in 10% of children, with higher rates in the two older age brackets (15% at 6–11 years and 17% at 12–17 years). Physical developmental delays were reported for 5% of children, most commonly at 9–35 months. Comparative data from the 2007/08 NHS<sup>4</sup> show that, while the data items are not identical, rates of psycho-social disabilities were considerably higher among the POCLS children than in the general population.

<sup>3</sup> The 2007/08 Australian Bureau of Statistics National Health Survey (ABS, 2009) found that asthma was the most frequent long-term condition among children aged 1 to 14 years, with a prevalence of 10%. The next most common conditions were eyesight problems (8%), hay fever and allergic rhinitis (7%) and undefined allergies (5%). It should be noted that the ABS data is based on a smaller age range than the POCLS data.

<sup>4</sup> The 2007/08 Australian Bureau of Statistics National Health Survey (ABS, 2009) found that just over 2% of 1 to 14 year old Australian children had behavioural and emotional problems, while fewer than 2% had psychological development problems. It should be noted that the ABS data is based on a smaller age range than the POCLS data.

**Table 5.4: Caregiver reports of children's health conditions and developmental delays, by child age<sup>1</sup>**

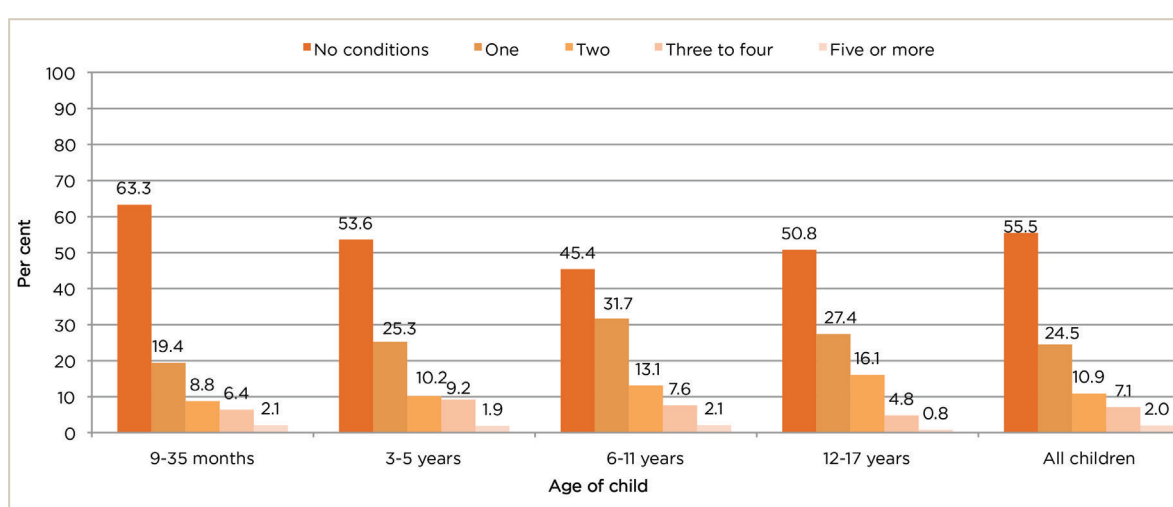
	9-35 months		3-5 years		6-11 years		12-17 years		All children	
	n	%	n	%	n	%	n	%	n	%
Asthma	71	12.5	27	10.2	32	9.7	16	12.9	146	11.4
Problems with eyesight	24	4.2	26	9.8	60	18.2	21	16.9	131	10.2
Problems with teeth/oral hygiene	10	1.8	32	12.1	50	15.2	19	15.3	111	8.6
Problems with hearing	41	7.2	13	4.9	18	5.5	0	0	72	5.6
Emotional, psychological, nervous difficulties	7	1.2	19	7.2	22	6.7	21	16.9	69	5.4
Food or digestive allergies	34	6.0	8	3.0	4	1.2	1	0.8	47	3.7
Other allergies	20	3.5	12	4.5	10	3.0	1	0.8	43	3.3
Heart condition or disease	19	3.4	9	3.4	7	2.1	0	0	35	2.7
Bronchitis	28	4.9	1	0.4	2	0.6	1	0.8	32	2.5
Respiratory allergies e.g., hay fever	14	2.5	4	1.5	6	1.8	2	1.6	26	2.0
Foetal alcohol spectrum disorder	10	1.8	3	1.1	6	1.8	0	0	19	1.5
Cerebral palsy	6	1.1	1	0.4	2	0.6	0	0	9	0.7
Epilepsy	1	0.2	2	0.8	5	1.5	1	0.8	9	0.7
Blood disorder	2	0.4	1	0.4	3	0.9	2	1.6	8	0.6
Kidney condition or disease	4	0.7	1	0.4	3	0.9	0	0	8	0.6
Diabetes	0	0	2	0.8	0	0	0	0	2	0.2
Any other long-term condition	59	10.4	31	11.7	52	15.8	13	10.5	155	12.1
Developmental delay – cognitive/language	49	8.6	48	18.1	40	12.2	14	11.3	151	11.8
Developmental delay – emotional/social/behavioural	22	3.9	32	12.1	50	15.2	21	16.9	125	9.7
Developmental delay – physical	44	7.8	9	3.4	14	4.3	0	0	67	5.2
None of the above	359	63.3	142	53.6	149	45.4	63	50.8	713	55.5
<b>Total</b>	<b>567</b>		<b>265</b>		<b>328–329</b>		<b>124</b>		<b>1,284</b>	

<sup>1</sup> Column percentages do not add up to 100%, as children may have had multiple health conditions and/or developmental delays.

Approximately 44% of the POCLS children had at least one long-term medical condition or a developmental delay of some type: 25% had one diagnosed health problem, 11% had two health problems, 7% had three or four such problems while 2% had five or more differing health problems (Figure 5.1). This is higher than the Australian child population<sup>5</sup>.

There appeared to be age differences, with greater proportions of the youngest POCLS children being free of health problems (63% of 9–35 month olds and 54% of 3–5 year olds) by comparison with older children (45% of 6–11 year olds and 51% of 12–17 year olds).

**Figure 5.1: Caregiver reports of the number of health conditions, by child age**



## Injuries requiring medical attention

Caregivers were asked whether the child had sustained an injury requiring medical attention since coming to live with them (Table 5.5). This had occurred for 15% of children overall, with rates relatively constant from 0 to 11 years (range of 12–16%), but more than doubling among 12–17 year olds (31%). The most common type of injury was cuts, scrapes or bruises (7%), with other types of injuries occurring among less than 3% of the sample overall. Among 12–17 year olds, the most common injuries were cuts, scrapes or bruises (11%), broken or fractured bones (11%) and sprains or strains (8%).

It appeared that children in foster and relative/kinship care had very similar types and rates of injuries; however, those in residential care had higher overall rates of injuries requiring medical attention: cuts, scrapes, bruises, and broken/fractured bones.

<sup>5</sup> The 2007/08 Australian Bureau of Statistics National Health Survey (ABS, 2009) found that 37% of the general population of children had a long-term condition. It should be noted that the ABS data is based on a smaller age range than the POCLS data.

**Table 5.5: Caregiver reports of child injuries requiring medical attention, by child age<sup>1</sup>**

	9–35 months		3–5 years		6–11 years		12–17 years		All children	
	n	%	n	%	n	%	n	%	n	%
Cut, scrape or bruise	33	5.8	26	9.8	17	5.2	13	10.5	89	6.9
Broken or fractured bones	4	0.7	8	3.0	6	1.8	13	10.5	31	2.4
Dental injury	4	0.7	3	1.1	7	2.1	3	2.4	17	1.3
Sprain or strain	2	0.4	1	0.4	4	1.2	10	8.1	17	1.3
Burn or scald	3	0.5	1	0.4	4	1.2	4	3.2	12	0.9
Dislocation	2	0.4	0	0.0	0	0.0	2	1.6	4	0.3
Poisoning by substance or liquid	0	0.0	1	0.4	0	0.0	1	0.8	2	0.2
Internal injury	0	0.0	1	0.4	0	0.0	0	0.0	1	0.1
Multiple injuries	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Other	19	3.4	5	1.9	9	2.7	1	0.8	34	2.7
No injuries requiring medical attention	501	88.4	222	83.8	283	86.0	85	68.6	1,091	84.9
<b>Total</b>	<b>567</b>		<b>265</b>		<b>329</b>		<b>124</b>		<b>1,285</b>	

<sup>1</sup> Column percentages do not add up to 100%, as children may have had multiple types of injuries.

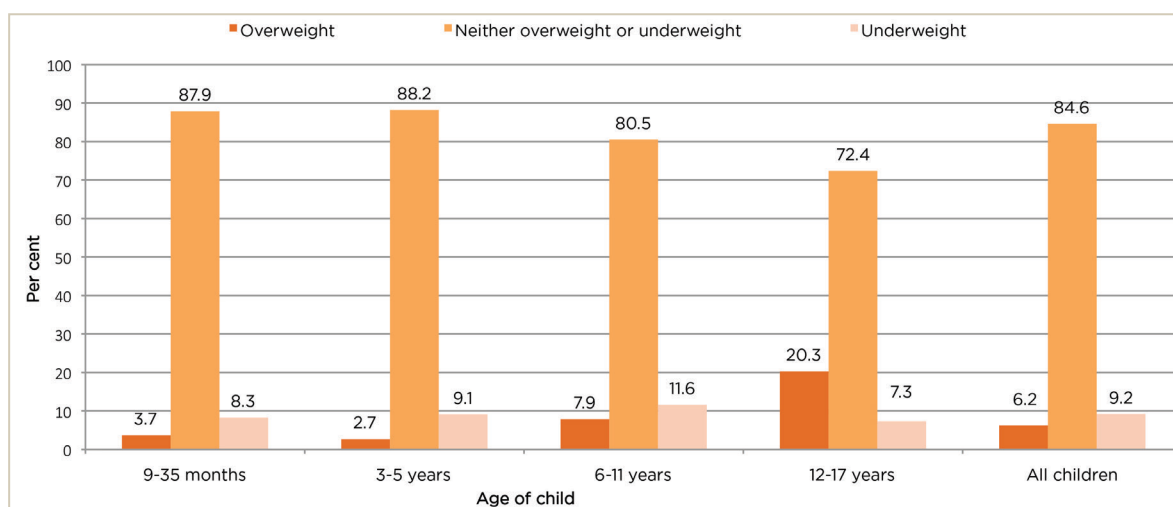
## Children's weight

Caregiver ratings of children's weight<sup>6</sup> were used to obtain an approximate picture of children's weight status. It is recognised that these ratings will not provide a precise measure of weight, but in the absence of actual measurements, they may be used to identify children with weight issues. However, some research suggests that subjective ratings of weight may correlate only moderately with actual BMI status (Campbell, Williams, Hampton & Wake, 2006) and as such this data should be treated with caution.

Most children (85%) were rated as being neither overweight nor underweight, 6% were rated as overweight, and 9% as underweight (Figure 5.2). It appeared that children aged 0 to 5 years were more frequently rated as neither overweight nor underweight (88%), than older children. The percentage seen as neither overweight nor underweight dropped for 6–11 and 12–17 year olds (81% and 72% respectively). If not in this mid-category, those aged less than 5 years tended to be seen as underweight rather than overweight. Among 12–17 year olds in particular, if children were not in the mid-category, they were more often rated as overweight than underweight (20% compared with 7%).

<sup>6</sup> Direct measures of height and weight were not sought from the POCLS children due to possible negative reactions from them as well as from their caregivers. Measurement of weight in particular can be a sensitive issue for some children and may jeopardise retention in subsequent waves.

Figure 5.2: Caregiver perceptions of children's weight, by child age



### Children's dietary patterns

Caregivers were asked how many serves of vegetables, fruit, soft drinks/cordial/sports drinks and takeaway foods children consumed daily, weekly or less frequently. This information has been aggregated for this report by using the *Australian Guide to Healthy Eating* (AGHE) recommendations that were current at the time of the Wave 1 data collection<sup>7</sup>.

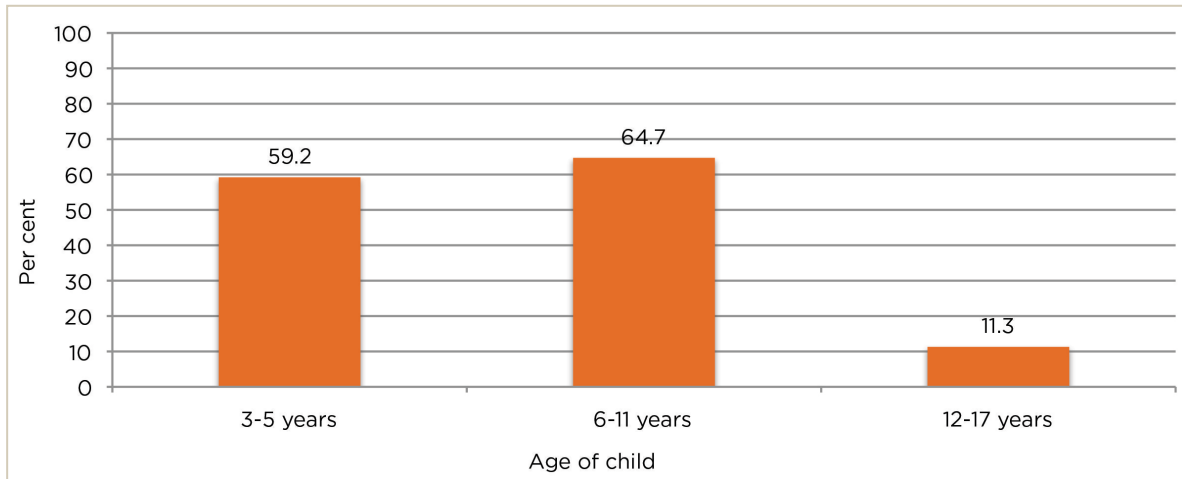
Figure 5.3 shows that almost 60% of 3–5 year olds and 65% of 6–11 year olds consumed the recommended number of daily vegetable serves, according to caregiver reports, but rates were much lower among 12–17 year olds (11%). Only a minority of children did not have any vegetables each day (11–19% across the three age bands).

Figure 5.4 shows that, according to caregivers, more than 90% of 3–5 and 6–11 year olds consumed the recommended number of daily serves of fruit, but the rate fell to approximately one fifth among 12–17 year olds. This may in part be due to the larger number of serves (three) needed to meet the recommended guidelines for 12–17 year olds (a further 56% of the POCLS 12–17 year olds consumed one to two serves of fruit daily).

<sup>7</sup> The AGHE recommendations for children of different age groups were as follows: for 3–7 years of age, one serve of fruit and two serves of vegetables daily; at 8–11 years, one serve of fruit and three serves of vegetables daily; and at 12–17 years, three serves of fruit and four serves of vegetables daily. To accommodate the age band of 6–11 years used in this report, the AGHE guidelines were adjusted as they have differing criteria for 6–7 year olds and 8–11 year olds (as described above). Thus, children in this age band were considered to be meeting the AGHE guidelines if they consumed one serve of fruit and two serves of vegetables. The AGHE does not outline recommended intakes for children aged 9–35 months so results are not shown for this age group.

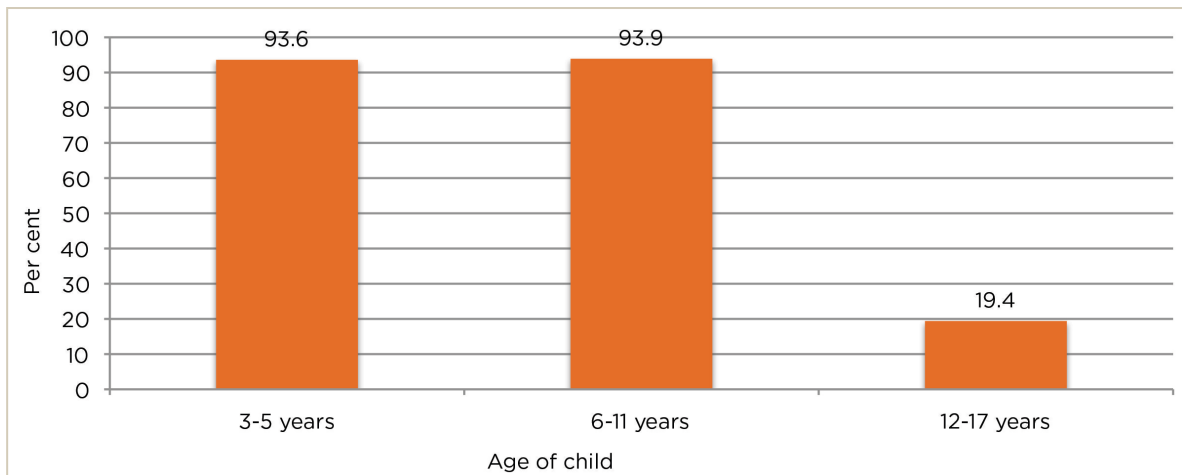


Figure 5.3: Caregiver reports of the percentage of children who consumed the recommended daily number of vegetable serves, by child age<sup>1</sup>



<sup>1</sup> n=894, excludes children aged 9–35 months.

Figure 5.4: Caregiver reports of the percentage of children who consumed the recommended daily number of fruit serves, by child age<sup>1</sup>



<sup>1</sup> n=894, excludes children aged 9–35 months.

Comparison with the Longitudinal Study of Australian Children (LSAC) shows that, while the age ranges and criteria used are not identical across the studies, the findings are generally very consistent, and indicate that the POCLS children were meeting the healthy eating guidelines at similar rates to other Australian children (although the age groups compared differ somewhat)<sup>8</sup>.

<sup>8</sup> The LSAC is a large representative longitudinal study of Australian children residing in urban and rural areas of all Australian states and territories. The LSAC data on diet are available for children aged 2 to 11 years. As reported by Daraganova and Thornton (2014), almost 50% of the LSAC children were consuming the recommended number of daily serves of vegetables, but rates dropped to 18% of 8–9 year olds and 32% of 10–11 year olds (using the recommended guideline of three daily serves). With regard to the consumption of fruit, nine tenths of 2–7 year old LSAC children met the daily recommendations as did 65% of 8–9 year olds and 55% of 10–11 year olds.

Turning now to consumption of less healthy foods, 24% of the POCLS sample aged 2–17<sup>9</sup> years old was reported by caregivers to drink at least one soft drink or equivalent type of beverage daily (Table 5.6). Rates were much higher among 12–17 year olds (46%), while 2 year olds had the lowest rates of all (13%). The proportion who never drank soft drinks decreased steadily with age, from 75% of 2 year olds to 21% of 12–17 year olds. Having a take-away meal such as a burger, pizza or chips was reported by caregivers to occur at least weekly for 41% of the sample. Again, this was much more common among 12–17 year olds (58%) than younger children (31% of 2 year olds, 35% of 3–5 year olds and 45% of 6–11 year olds). A higher proportion of younger children aged 2 years and 3–5 years had never consumed these types of take-away foods (33% and 23% respectively) than older children aged 6 to 17 years (15–18%).

**Table 5.6: Caregiver reports of the types of foods and drinks children consumed, by child age<sup>1</sup>**

	2 years		3–5 years		6–11 years		12–17 years		All children <sup>1</sup>	
	n	%	n	%	n	%	n	%	n	%
<b>Cups of soft drink, cordial or sports drink</b>										
1+ per day	22	12.6	50	18.9	86	26.2	55	46.2	213	24.0
3–6 a week	2	1.1	10	3.8	27	8.2	17	14.3	56	6.3
1–2 a week	20	11.4	43	16.2	64	19.5	21	17.6	148	16.7
Doesn't drink soft drink, cordial or sports drink	131	74.9	162	61.1	151	45.9	26	21.0	470	53.0
<b>Total</b>	<b>175</b>		<b>265</b>		<b>328</b>		<b>119</b>		<b>887</b>	
<b>Takeaway food such as burgers, pizza, chips</b>										
3 or more times a week	1	0.6	1	0.4	3	0.9	10	8.3	15	1.7
1–2 times a week	53	30.3	93	34.7	145	44.2	60	49.6	350	39.4
3–4 times a month	3	1.7	2	0.8	3	0.9	1	0.8	9	1.0
1–2 times a month	61	34.9	109	41.1	127	38.7	28	23.1	325	36.6
Rarely or never	57	32.6	61	23.0	50	15.2	22	18.2	190	21.4
<b>Total</b>	<b>175</b>		<b>265</b>		<b>328</b>		<b>121</b>		<b>889</b>	

<sup>1</sup> This question was asked for children 2–17 years.

## Children's sleep patterns

Information was collected from caregivers on the sleeping patterns and problems in children aged 9–35 months. Sleeping issues in infancy and toddlerhood can have a large impact on children's wellbeing and adjustment and may be an indicator of ongoing trauma or distress (Scharf, Demmer, Silver & Stein, 2013). They may also adversely impact on caregivers and family life. Sleep can also emerge as a significant problem in adolescence and can be a sign of depression. Reports of the sleeping patterns of children aged 12–17 years were collected.

<sup>9</sup> These questions were asked of caregivers of children aged 2 years and older, not of caregivers of children aged 9 months to 23 months.

According to caregiver reports, almost all 9–35 month old children ‘always’ or ‘usually’ went to bed about the same time each night (95%), with fewer than 2% reported as ‘rarely’ or ‘never’ doing so (Table 5.7). Almost three quarters of caregivers did not find the child’s sleeping pattern a problem for them and a further 20% felt that this was only a small issue. Approximately 10% of caregivers saw the child’s sleeping habits as being a ‘moderate’ or ‘large’ problem for them.

These rates can be compared to rates found for children participating in the LSAC and show that, while the age ranges differ somewhat, it does not appear that 9–35 month old POCLS children experienced higher rates of sleep problems than children in the general community<sup>10</sup>.

Nonetheless, it was quite common for some children to very regularly experience sleeping issues such as waking in the night, sleeping restlessly, or being unhappy about sleeping alone. Approximately one third experienced one or more of these types of sleeping issues on four or more nights a week. Caregivers may feel that sleep issues are to be expected, since as noted previously, very few (10%) perceived the child’s sleep pattern to be a moderate or large problem for them.

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<sup>10</sup> A total of 17% of the LSAC Wave 1 infant cohort aged 0–1 years were reported to be experiencing ‘Moderate’ or ‘Severe’ sleeping problems (Martin, Hiscock, Hardy, Davey & Wake, 2007). Combining LSAC data over the first two waves, 25% of children aged 0–3 years were reported to have ‘Moderate’ or ‘Severe’ sleeping problems in at least one of the two data collection waves (Quach, Gold, Hiscock, Mensah, Lucas, Nicholson & Wake, 2013).

**Table 5.7: Caregiver reports of sleep patterns among children aged 9–35 months**

	All 9–35 month olds	
	n	%
<b>Goes to bed at the same time each night</b>		
Always	377	66.5
Usually	163	28.7
Sometimes	17	3.0
Rarely	9	1.6
Never	1	0.2
<b>Whether sleeping pattern/habits are a problem for the caregiver</b>		
No problem at all	401	70.7
A small problem	112	19.8
A moderate problem	42	7.4
A large problem	12	2.1
<b>Issues child has on four or more nights per week<sup>1</sup></b>		
Waking during the night	134	23.6
Restless sleep	70	12.3
Not happy to sleep alone	38	6.7
Difficulty getting off to sleep at night	37	6.5
Seeming tired in the morning	22	3.9
Nightmares, night terrors	18	3.2
None of the above	387	68.3
<b>Total</b>	<b>567</b>	

<sup>1</sup> Column percentages do not add up to 100%, as children may have multiple issues.

Slightly more than half of children aged 12–17 years (54%) reported that they felt they got ‘plenty’ of sleep, but almost one quarter (23%) felt they did not get enough sleep (Table 5.8). As poor sleep may impede school progress and psychosocial wellbeing and can be a sign of depression, this trend may be of concern.

**Table 5.8: Children aged 12–17 years self report on sleep quantity**

	12–17 years old	
	n	%
Plenty	51	54.3
Just enough	21	22.3
Not quite enough	13	13.8
Not nearly enough	9	9.6
<b>Total</b>	<b>94</b>	

## 5.2 Children's socio-emotional wellbeing

Social and emotional adjustment is often assessed by the presence or absence of behaviour problems. Child and adolescent behaviour problems can have wide-ranging negative effects on individuals, their families and caregivers in both the short and longer term. They tend to persist over time and be difficult to remediate (Lahey et al, 2004; Lavigne, Cicchetti, Gibbons, Binns, Larsen & DeVito, 2001). They can have adverse effects on children's social skill development (Segrin, 2000; Smart & Sanson, 2001), family and peer relationships (Bagwell, Molina, Pelham & Hoza, 2001), and school progress (DuPaul, McGoe, Echert & VanBrakle, 2001). Two major types of behaviour problems have been identified (Campbell, 2002): externalising problems such as hyperactivity, aggression and antisocial behaviour; and internalising problems such as anxiety and depression.

As well as behaviour problems, positive aspects of children's socio-emotional wellbeing are often assessed; for example, social competence/social skills. Socially competent behaviour is learned through interactions between the child and their family as well as in other relevant contexts such as childcare, school and peer groups (Semrud-Clikeman, 2007). Social skills enable a child to interact effectively with others and have been linked to positive outcomes such as academic achievement (Elias and Haynes, 2008), peer relationships (Ladd, 2005) and the development of socially responsible attitudes and civic mindedness (Smart, Sanson, Da Silva & Toumbourou, 2000).

### Socio-emotional problems and competencies among children aged 12–35 months

The Brief Infant Toddler Social Emotional Assessment Scale (BITSEA, Briggs-Gowan & Carter, 2006), completed by caregivers, was used to assess children's socio-emotional wellbeing. It is designed for use with 12–35 month old children and yields a total problem behaviour score and a total competency score based on 42 items that are rated on a scale from 0 to 2 (0 – not true/rarely; 1 – somewhat true/sometimes; 2 – very true/often).

The POCLS sample means were 8.2 for the total behaviour score and 15.8 for the total competency score (Table 5.9). Comparisons to the minimum and maximum possible scores (0–46 for problem total and 0–22 for competence total) indicate that the POCLS children typically showed some but not a large number of behaviour problems, and relatively high levels of competencies. Data from the LSAC were used to assess the comparative wellbeing of the POCLS children and showed that, as a group, the POCLS 12–35 month old children tended to show slightly lower levels of behaviour problems and lower levels of competencies than children in the general Australian community<sup>11</sup>.

<sup>11</sup> The LSAC contained fewer BITSEA problem items than the POCLS; therefore the POCLS problem total score was recalculated to remove the items not used in the LSAC so that a valid comparison could be made. The POCLS means were 6.9 for the recalculated problem total score and 15.8 for competence total, while the corresponding LSAC means were 7.5 on problem total and 17.2 on competence total (Smart, 2011).

The BITSEA provides normative cut-offs to enable identification of children showing very high levels of behaviour problems, or very low levels of competencies. Thus a total behaviour problem score that is in the highest 25% of the US normative sample may be used to identify a child as being in the possible problem range and a total competency score in the lowest 15% of the US normative sample indicates the child is in the possible deficit/delay range.

**Table 5.9: Mean levels of caregiver-reported socio-emotional problems and competencies on the BITSEA among children aged 12–35 months, by child’s cultural background**

	Aboriginal children	Culturally diverse children	Other Australian children	All 12–35 month olds
	Mean (95% CIs)	Mean (95% CIs)	Mean (95% CIs)	Mean (95% CIs)
Socio-emotional problems	7.7 (6.9, 8.6)	8.4 (6.7, 10.2)	8.6 (7.6, 9.5)	8.2 (7.6, 8.8)
Competence	16.2 (15.7, 16.6)	15.2 (14.1, 16.2)	15.8 (15.3, 16.3)	15.8 (15.5, 16.1)
Total for problems	186	38	227	476
Total for competencies	173	37	225	458

Table 5.10 shows that 17% of the POCLS children aged 12–35 months had high levels of problems (scores in the possible problem range) and low levels of competencies (scores in the possible deficit/delay range) according to the BITSEA norms. The norms also provide information about the severity of problems; for example, whether the child’s score was in the highest 4% on behaviour problems (i.e., the child had more problems than 95% of the normative sample), the top 5–9%, 10–14% or 15–24%. More children were at the most severe end of the problem and competency distributions than at the less extreme positions, pointing to the seriousness of the socio-emotional difficulties experienced by some children. (This trend was unexpected, as it is more usual to find a smaller proportion of children at the very tail of a distribution than at less acute points of the tail.)

Table 5.10: Children aged 12–35 months showing high levels of socio-emotional problems or low levels of competencies according to caregiver report on the BITSEA, by child’s cultural background

	Aboriginal children		Culturally diverse children		Other Australian children		All 12–35 month olds	
	n	%	n	%	n	%	n	%
Total with high levels of socio-emotional problems	28	15.1	8	21.1	43	18.9	83	17.4
Highest 4%	9	4.8	-	-	16	7.0	27	5.7
5% – 9%	5	2.7	2	5.3	13	5.7	20	4.2
10% – 14%	4	2.2	2	5.3	4	1.8	11	2.3
15% – 24%	4	2.2	4	10.5	3	1.3	10	2.1
25%	6	3.2	0	0.0	7	3.1	15	3.2
Total	186		38		227		476	
Total with low levels of competencies	25	14.5	7	18.9	49	21.8	78	17.0
Lowest 4%	7	4.0	3	8.1	19	8.4	34	7.4
5% – 9%	5	2.9	3	8.1	12	5.3	22	4.8
10% – 15%	13	7.5	1	2.7	8	3.6	22	4.8
Total	173		37		225		458	

Comparison of Aboriginal children, children from culturally diverse backgrounds and other Australian children revealed that group means were similar (Table 5.9), and the overlap in confidence intervals indicated that the groups did not significantly differ. Table 5.10 shows that slightly fewer Aboriginal children showed high levels of problems than other sub-groups of children (15% compared with 21% of children from culturally diverse backgrounds and 19% of other Australian children), with similar trends evident for low levels of competencies.

Children in foster care and relative/kinship care showed similar mean levels of total behaviour problems and total competencies (Table 5.11). However, as shown in Table 5.12, slightly fewer children in relative/kinship care than those in foster care showed high levels of problems (13% compared with 20%) or low levels of competencies (14% compared with 19%). As seen previously, when children showed such problems, they were more frequently at the most extreme point of the distribution rather than at less extreme positions.

Table 5.11: Mean levels of caregiver-reported socio-emotional problems and competencies on the BITSEA among children aged 12–35 months, by placement type

	Foster care	Relative/Kinship care
	Mean (95% CIs)	Mean (95% CIs)
Socio-emotional problems	8.6 (7.7, 9.4)	7.6 (6.7, 8.5)
Competence	15.7 (15.3, 16.2)	16.0 (15.5, 16.4)
Totals for problems	267	209
Total for competencies	255	203

Table 5.12: Children aged 12–35 months showing high levels of problems or low levels of competencies according to caregiver report on the BITSEA, by placement type

	Foster care		Relative/Kinship care	
	n	%	n	%
Total with high levels of socio-emotional problems	54	20.2	28	13.4
Highest 4%	18	6.7	8	3.8
5% – 9%	11	4.1	9	4.3
10% – 14%	8	3.0	3	1.4
15% – 24%	8	3.0	4	1.9
25%	9	3.4	4	1.9
Total	267		209	
Total with low levels of competencies	49	19.2	28	13.8
Lowest 4%	20	7.8	13	6.4
5% – 9%	13	5.1	9	4.4
10% – 15%	16	6.3	6	3.0
Total	255		203	

### Behaviour problems and competencies among 3–17 year old children

The Child Behaviour Checklist (CBCL, Achenbach & Rescorla, 2000, 2001) measures a range of child and adolescent behaviour problems and interpersonal competencies. It provides empirically derived scales that have been extensively used in prior research, and new scales that aim to parallel disorders as defined by the Diagnostic and Statistical Manual of Mental Disorders – DSM V. The CBCL also provides cut-offs to identify children showing differing levels of problems: a ‘clinical range’ score indicates that the child has high levels of problems of similar severity to children who are receiving clinical treatment for a diagnosed behavioural or mental disorder; a ‘borderline range’ score indicates that the child has elevated, but less severe, levels of problems; and a ‘normal range’ score indicates that the child is in the normal range of the general child population.



There are two versions containing 99 items for 1½–5 year olds and a 138 items for 6–18 year olds. Both versions have composite internalising, externalising and total problems scales. The version for 6–18 years also includes a Competence scale. There are also eight syndrome scales for both versions and five DSM-Oriented Scales for the 1½–5 year old version and six for the 6–18 year old version. All items are rated on a scale from 0 to 2 (0 not true; 1 somewhat or sometimes true; 2 very true or often true).

In the first wave of the POCLS the CBCL was used for children aged 3–17 years. In future waves, the CBCL will also be used for children 1½–2 years old instead of the BITSEA.

According to caregivers, approximately one fifth of the POCLS children aged 3–5 years showed clinical levels of internalising, externalising or total behaviour problems (Table 5.13). A further 6–8% were classified as ‘borderline’ on these three outcomes, while over 70% were in the ‘normal’ range. Fewer children showed problems on the empirically derived sub-scales, with the percentage showing clinical-level problems ranging from a low of 4% on sleep problems and somatic complaints to a high of 14% on attention problems and withdrawal. Similarly, the proportion showing clinical levels on the DSM-oriented scales ranged from 8% for attention deficit/hyperactivity problems to 17% for pervasive developmental problems (this scale assesses autistic-type symptoms).

One third of 6–11 year olds showed clinical levels of externalising problems, while 31% were in the clinical range on total behaviour problems (Table 5.14). Fewer showed clinical levels of internalising problems (18%). Notably, only 56% and 59% of 6–11 year olds were in the ‘normal’ range on externalising and total behaviour problems respectively. Rates of clinical-level problems tended to be lower on the specific sub-scales, ranging from 4% for somatic complaints to 21% for rule breaking on the empirically derived sub-scales, and from 3% for somatic problems to 27% for conduct problems on the DSM-oriented sub-scales.

Close to half the children aged 12–17 years were in the clinical range on externalising problems and total behaviour problems (45% and 47% respectively), and less than half were in the ‘normal’ range, according to caregiver reports (Table 5.15). Approximately one quarter showed clinical levels of internalising problems. Rates of clinical-level problems were lower for the specific sub-scales, ranging from 10% for somatic complaints and anxiety-depression to 21% for social problems and aggressive behaviour on the empirically derived scales; and from 9% for somatic problems to 23% for conduct problems on the DSM-oriented scales.

Comparisons with the child and adolescent component of the first National Survey of Mental Health and Wellbeing in Australia (SMHWB; Sawyer, Arney, Baghurst, Clark, Graetz, Kosky et al, 2000) show considerably higher rates of problems among the POCLS children, particularly in the two older age groups where rates of externalising and total behaviour problems were more than double among the POCLS 6–11 year olds and triple among 12–17 year olds<sup>12</sup>.

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<sup>12</sup> The National Survey of Mental Health and Wellbeing (SMHWB) recruited a nationally representative sample of 4,500 children aged 4–17 years in 1998, with parent reports on the CBCL used to ascertain child and adolescent mental health. Although the data are not identical (as the SMHWB reports gender-specific trends and uses two age bands of 4–12 years and 13–17 years), comparisons are still feasible. The SMHWB (Sawyer, Arney, Baghurst, Clark, Graetz, Kosky et al, 2000) found that among boys aged 4–12 years, 13.6% had clinical levels of externalising problems while 15.0% had clinical levels of internalising and total behaviour problems. For girls aged 4–12 years, rates were 12.2% for externalising, 11.3% for internalising, and 14.4% for total behaviour problems. Trends were similar for 13–17 year olds (among boys: 11.7% had clinical levels of externalising, 13.6% of internalising and 13.4% of total behaviour problems; among girls: 14.1% had clinical levels of externalising, 10.7% of internalising and 12.8% of total behaviour problems).

Table 5.13: Means and 95% confidence intervals for caregiver-reported CBCL empirical and DSM-oriented scales for children aged 3–5 years; proportions in normal, borderline and clinical range

	Mean (95% CIs)	% normal range	% borderline range	% clinical range
<b>Empirically based scales</b>				
Internalising	10.4 (9.3, 11.6)	74.0	7.6	18.5
Externalising	15.3 (14.0, 16.6)	70.9	8.3	20.8
Total problems	40.3 (36.7, 43.9)	72.8	6.0	21.1
Emotionally reactive	3.3 (2.8, 3.7)	81.5	8.7	9.8
Anxious-depressed	3.1 (2.8, 3.5)	88.7	6.0	5.3
Somatic complaints	1.6 (1.3, 1.8)	90.9	4.9	4.2
Withdrawn	2.5 (2.1, 2.8)	81.5	4.2	14.3
Sleep problems	2.7 (2.3, 3.0)	93.2	2.6	4.2
Attention problems	3.2 (2.9, 3.5)	77.7	7.9	14.3
Aggressive behaviour	12.1 (11.0, 13.2)	80.0	8.3	11.7
Other problems <sup>1</sup>	11.9 (10.7, 13.0)	-	-	-
<b>DSM-oriented scales</b>				
Affective problems	2.8 (2.4, 3.2)	87.2	2.3	10.6
Anxiety problems	3.7 (3.3, 4.2)	87.2	3.4	9.4
Pervasive developmental problems	4.6 (4.0, 5.1)	76.2	7.2	16.6
Attention deficit/hyperactivity problems	5.0 (4.6, 5.4)	85.3	7.2	7.6
Oppositional defiant problems	4.2 (3.8, 4.6)	83.4	3.4	13.2
<b>Total</b>	<b>265</b>			

<sup>1</sup> Scale did not have normative cut-offs.

Table 5.14: Means and 95% confidence intervals for caregiver-reported CBCL empirical and DSM-oriented scales for children aged 6–11 years; proportions in normal, borderline and clinical range

	Mean (95% CIs)	% normal range	% borderline range	% clinical range
<b>Empirically based scales</b>				
Internalising	7.0 (6.1, 7.8)	76.9	4.9	18.2
Externalising	12.6 (11.3, 13.9)	55.7	10.5	33.9
Total problems	38.2 (34.8, 41.6)	58.5	10.8	30.8
Anxious-depressed	3.5 (3.1, 4.0)	83.1	10.2	6.8
Withdrawn-depressed	1.8 (1.5, 2.1)	86.2	5.5	8.3
Somatic complaints	1.6 (1.4, 1.9)	91.1	4.9	4.0
Social problems	4.1 (3.7, 4.5)	77.2	9.9	12.9
Thought problems	3.4 (3.0, 3.9)	74.8	6.5	18.8
Attention problems	6.2 (5.6, 6.7)	70.2	12.6	17.2
Rule breaking behaviour	4.0 (3.5, 4.4)	72.0	7.4	20.6
Aggressive behaviour	8.6 (7.8, 9.5)	71.3	10.8	16.9
Other problems <sup>1</sup>	5.0 (4.6, 5.4)	-	-	-
<b>DSM-oriented scales</b>				
Affective problems	2.2 (1.9, 2.6)	82.8	8.0	9.2
Anxiety problems	2.1 (1.9, 2.4)	84.3	5.9	9.9
Somatic problems	0.9 (0.7, 1.0)	93.2	3.7	3.1
Attention deficit/hyperactivity problems	5.2 (4.8, 5.6)	72.3	12.3	15.4
Oppositional defiant problems	3.2 (2.9, 3.5)	80.3	6.5	13.2
Conduct problems	5.1 (4.5, 5.7)	64.3	9.2	26.5
<b>Total</b>	<b>327–329</b>			

<sup>1</sup> Scale did not have normative cut-offs.

Table 5.15: Means and 95% confidence intervals for caregiver-reported CBCL empirical and DSM-oriented scales for children aged 12–17 years; proportions in normal, borderline and clinical range

	Mean (95% CIs)	% normal range	% borderline range	% clinical range
<b>Empirically based scales</b>				
Internalising	10.2 (8.7, 11.7)	58.1	14.5	27.4
Externalising	16.6 (14.3, 18.8)	44.4	10.5	45.2
Total problems	47.6 (41.8, 53.3)	43.6	9.7	46.8
Anxious-depressed	4.5 (3.7, 5.3)	74.2	16.1	9.7
Withdrawn-depressed	3.5 (2.9, 4.1)	71.8	15.3	12.9
Somatic complaints	2.2 (1.6, 2.7)	84.7	5.7	9.7
Social problems	4.9 (4.1, 5.6)	61.3	17.7	21.0
Thought problems	3.7 (3.0, 4.4)	65.3	14.5	20.2
Attention problems	6.8 (6.0, 7.7)	64.5	19.4	16.1
Rule breaking behaviour	6.8 (5.7, 7.8)	62.9	17.7	19.4
Aggressive behaviour	9.8 (8.4, 11.2)	66.1	12.9	21.0
Other problems <sup>1</sup>	5.4 (4.7, 6.1)	-	-	-
<b>DSM-oriented scales</b>				
Affective problems	3.9 (3.2, 4.6)	67.7	17.7	14.5
Anxiety problems	2.3 (1.9, 2.7)	79.0	7.3	13.7
Somatic problems	1.3 (0.9, 1.7)	87.9	3.2	8.9
Attention deficit/hyperactivity problems	5.4 (4.7, 6.1)	66.1	16.1	17.7
Oppositional defiant problems	3.6 (3.1, 4.1)	75.0	12.9	12.1
Conduct problems	7.1 (6.0, 8.3)	50.8	26.6	22.6
<b>Total</b>	<b>124</b>			

<sup>1</sup> Scale did not have normative cut-offs.

The CBCL also measures children's academic and social competencies. Table 5.16 shows that among 12–17 year olds, approximately one fifth showed very low levels of competencies overall, while 60% were in the normal range. The areas in which children aged 12–17 years showed the highest rates of difficulties were the Social and School sub-scales (17% and 15% showed very low levels in these areas, respectively).

**Table 5.16: Means and 95% confidence intervals on caregiver-reported CBCL competency scales for children aged 12–17 years; proportions in normal, borderline and clinical range**

	Mean (95% CIs)	% normal range	% borderline range	% clinical range
Total competency	19.0 (18.2, 19.9)	60.4	17.8	21.8
Activities	9.0 (8.5, 9.5)	79.8	11.3	8.9
Social	6.2 (5.7, 6.6)	59.7	23.4	16.9
School	3.8 (3.6, 4.0)	80.2	5.0	14.9
Total	101–124			

Table 5.17 shows that Aboriginal children generally showed lower rates of clinical range behaviour problems than other Australian children (excluding children from culturally diverse backgrounds), according to caregiver reports. Similarly on competencies, Aboriginal children aged 12–17 years were less likely to show very low levels than other Australian children. Findings for children from culturally diverse backgrounds were not included due to the small numbers available at some ages (for example, at 3–5 years n=15, and at 12–17 years n=13).

Table 5.17: Percentage of children in borderline and clinical range on caregiver-reported CBCL internalising, externalising, total problems and total competency scales, by child age and cultural background<sup>1</sup>

	Aboriginal children		Other Australian children (excluding culturally diverse)	
	% borderline range	% clinical range	% borderline range	% clinical range
<b>3–5 year olds</b>				
Internalising	6.9	15.8	8.3	22.6
Externalising	6.9	20.8	10.5	23.3
Total problems	5.9	17.8	6.8	26.3
<b>Total</b>	<b>101</b>		<b>133</b>	
<b>6–11 year olds</b>				
Internalising	6.7	15.0	3.8	18.8
Externalising	10.0	32.5	10.0	38.1
Total problems	8.3	29.2	12.5	35.0
<b>Total</b>	<b>120</b>		<b>160</b>	
<b>12–17 year olds</b>				
Internalising	18.2	18.2	14.1	28.2
Externalising	9.1	39.4	9.9	46.5
Total problems	9.1	42.4	8.5	49.3
Total competency	10.0	13.3	24.1	20.4
<b>Total</b>	<b>30–33</b>		<b>54–71</b>	

<sup>1</sup> Findings for children from culturally diverse backgrounds were not included due to the small numbers available at some ages.

Table 5.18 shows that, among 3–5 year olds, children in foster care appeared to show higher rates of clinical range externalising and internalising problems than those in relative/kinship care, but were similar on total behaviour problems. Among 12–17 year olds, children in foster care again had higher rates of all types of behaviour problems than those in relative/kinship care and also more frequently showed very low competencies. Rates of clinical-level behaviour problems were highest among 12–17 year olds in residential care. However, since the number of children in residential care is small, these results should be interpreted with caution.

**Table 5.18: Percentage of children in borderline and clinical range on caregiver-reported CBCL internalising, externalising, total problems and total competency scales, by child age and placement type**

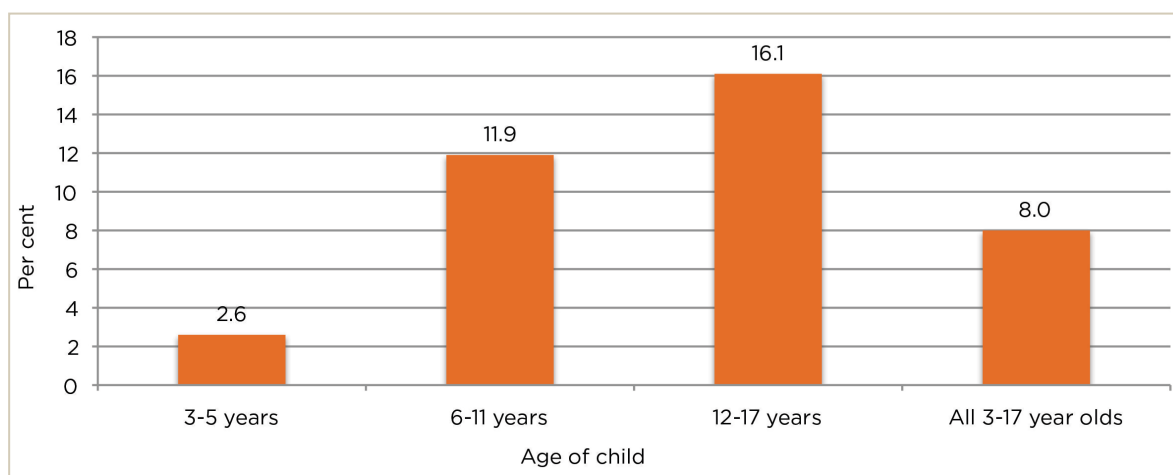
	Foster care		Relative/Kinship care		Residential care	
	% borderline range	% clinical range	% borderline range	% clinical range	% borderline range	% clinical range
3–5 year olds						
Internalising	6.5	21.6	8.7	15.1	-	-
Externalising	10.8	23.0	5.6	18.3	-	-
Total problems	6.5	21.6	5.6	20.6	-	-
Total	139		126		-	-
6–11 year olds						
Internalising	5.2	20.8	4.7	15.8	-	-
Externalising	6.5	44.2	14.0	24.6	-	-
Total problems	14.3	37.7	7.6	24.6	-	-
Total	154		171		-	-
12–17 year olds						
Internalising	10.9	26.1	9.6	23.1	30.8	38.5
Externalising	13.0	41.3	7.7	36.5	11.5	69.2
Total problems	10.9	43.5	9.6	36.5	7.7	73.1
Total competency	22.0	17.1	10.9	28.3		
Total	41–46		46–52		14–26	

### Use of prescription medication to control children's behaviour

Caregivers reported that 8% of children were taking prescribed medication to control their behaviour with the rate rising steadily with age from 3% at 3–5 years to 16% at 12–17 years (Figure 5.5). Table 5.19 shows that a slightly lower proportion of children from culturally diverse backgrounds were taking prescribed medications to control their behaviour (4%) than Aboriginal children and other Australian children (8% and 9% respectively). Similar proportions of children in foster and relative/kinship care were taking prescribed medications for behaviour management; however, rates were higher among children in residential care (39% compared with 8% of children in foster care and 6% of children in relative/kinship care).



Figure 5.5: Percentage of children taking prescribed medication to control their behaviour as reported by caregivers, by child age<sup>1</sup>



<sup>1</sup> This question was asked of caregivers of children aged 3 years and older.

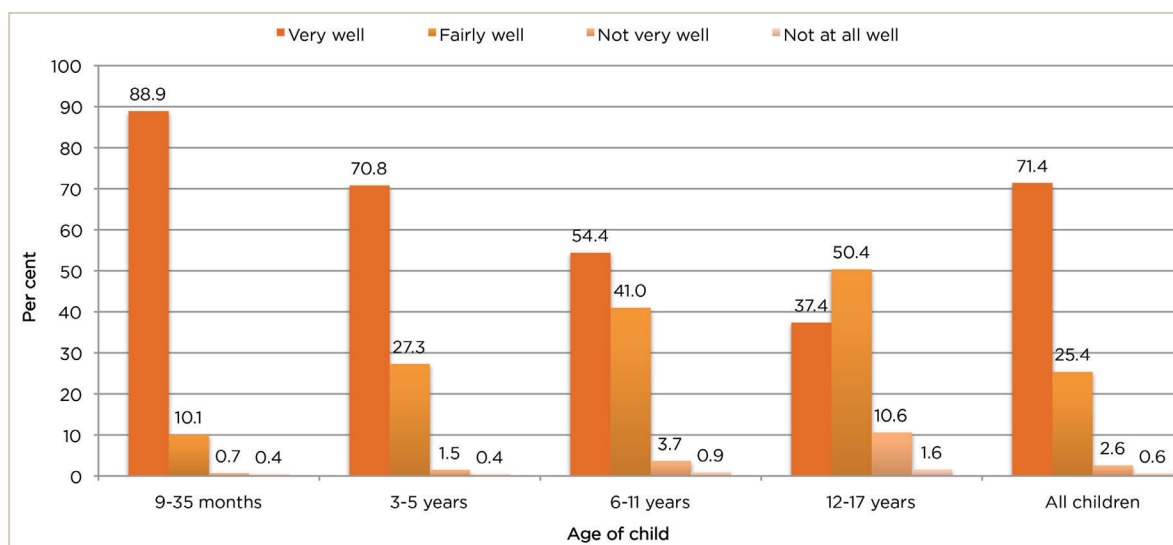
Table 5.19: Number and proportion of children taking prescribed medication to control their behaviour as reported by caregivers, by child's cultural background and placement type

	Aboriginal children		Culturally diverse children		Other Australian children	
	n	%	n	%	n	%
Yes	23	7.8	3	4.1	36	8.7
Total	296		73		413	
	Foster		Relative/Kinship		Residential	
	n	%	n	%	n	%
Yes	32	8.0	24	6.1	10	38.5
Total	401		393		26	

### Caregivers' perceptions of how the child is going

Caregivers were asked to give their general perception of how the child or young person was going, which may be used as an indicator of socio-emotional wellbeing (Figure 5.6). Overall, almost three quarters were perceived to be going 'very well'. There appeared to be age differences, with more caregivers of young children believing the child was going 'very well' (89% of caregivers of 9–35 month olds and 71% of caregivers of 3–5 year olds) than caregivers of older children (54% of 6–11 year olds and 37% of 12–17 year olds). On the other hand, very few caregivers believed the child was progressing 'not very well' or 'not at all well' (ranging from 1% of 9–35 month olds to 12% of 12–17 year olds).

Figure 5.6: Caregivers' perceptions of how the child is going, by child age



Another indicator used to infer wellbeing was the child's receipt of an award, prize or trophy for things done well in the past six months. Child and young person self reports revealed that more than nine tenths of 7–11 year olds<sup>13</sup> had received formal recognition for an achievement (92%) as had 60% of 12–17 year olds.

### Children's perceptions of their socio-emotional wellbeing

Children were asked a series of questions about their socio-emotional wellbeing. These differed across the two age bands<sup>14</sup> (7–11 and 12–17 years) to ensure that the questions used were developmentally appropriate.

Children aged 7–11 years were asked how often they had experienced a range of emotional states (happiness, worry, sadness, anger), and how often they had been in trouble (Table 5.20). They were then asked if they had talked to various people (e.g., carer family members, birth family members, and friends) when they were experiencing these emotional states and how helpful this support had been in general (Tables 5.21 and 5.22).

<sup>13</sup> These data were taken from the child interview which was offered to children seven years and older, hence the age band is 7–11 years rather than the 6–11 years age band used elsewhere.

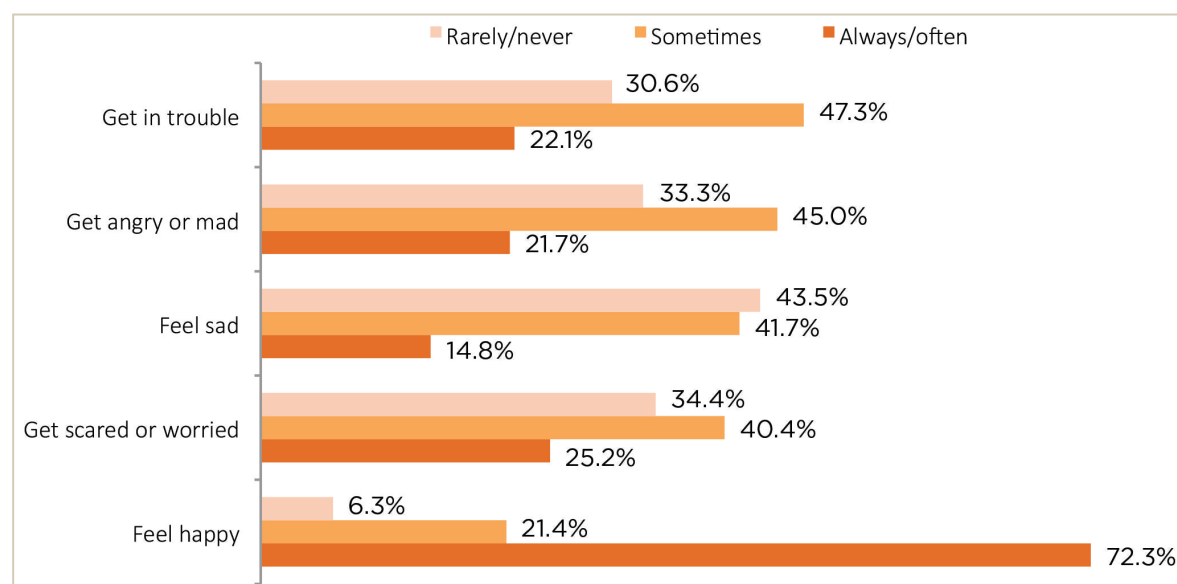
<sup>14</sup> Interviews were offered to children aged 7 years and older. Thus for this section, the age bands used are 7–11 years and 12–17 years.

Almost half (46%) of 7–11 year old children had ‘always’ been happy and a further 26% had ‘often’ been happy (Table 5.20). Only 6% felt they had ‘rarely’ or ‘never’ been happy. Between 15% and 25% had ‘always’ or ‘often’ felt scared/worried, sad, or angry/mad. The proportion who ‘rarely’ or ‘never’ experienced these emotions ranged from 33% to 43%. Trends were similar for the frequency of getting into trouble, with this happening ‘always’ or ‘often’ for 22% of children compared with ‘rarely’ or ‘never’ for 31% of children.

**Table 5.20: Children aged 7–11 years reports of happiness, distress, anger, or being in trouble**

	Always		Often		Sometimes		Rarely		Never	
	n	%	n	%	n	%	n	%	n	%
Feel happy	104	46.4	58	25.9	48	21.4	10	4.5	4	1.8
Get scared or worried	15	6.9	40	18.3	88	40.4	29	13.3	46	21.1
Feel sad	9	4.0	24	10.8	93	41.7	53	23.8	44	19.7
Get angry or mad	25	11.3	23	10.4	100	45.0	36	16.2	38	17.1
Get in trouble	21	9.5	28	12.6	105	47.3	40	18.0	28	12.6
Total	218–224									

**Figure 5.7: Children aged 7–11 years reports of happiness, distress, anger, or being in trouble**



**Table 5.21: Children aged 7–11 years reports of people spoken to when feeling worried, sad or angry<sup>1</sup>**

	Yes		No	
	n	%	n	%
People living with now	192	88.9	24	11.1
Own family	149	68.7	68	31.3
Teachers or school counsellors	144	66.1	74	33.9
Friends	124	57.4	92	42.6
Caseworkers	77	36.5	134	63.5
Other	31	14.7	180	85.3
<b>Totals</b>	<b>211–218</b>			

<sup>1</sup> Column percentages do not add up to 100%, as children could choose more than one type of confidant.

**Table 5.22: Children aged 7–11 years reports of how helpful the support had been**

	7–11 years	
	n	%
Very helpful	134	65.0
Quite helpful	56	27.2
Somewhat helpful	10	4.9
Not at all helpful	6	2.9
<b>Total</b>	<b>206</b>	

Table 5.21 shows that according to children, they most often talked with members of the caregiver family when experiencing these emotions (89%). Approximately two thirds had talked with members of their birth family or a teacher/school counsellor, while 57% had talked with friends. Slightly over one third had talked with their caseworker.

Almost all 7–11 year old children had found the support they received to be ‘very’ (65%) or ‘quite’ helpful (27%, Table 5.22). Few felt it had been only ‘somewhat’ or ‘not at all’ helpful (8%). As children were asked in general how helpful the support had been, it is not possible to determine how helpful each separate source of support had been. Nevertheless, it seemed that most 7–11 year old children had a support network available to them that they found helpful.

The older age group of 12–17 year olds were asked a series of questions<sup>15</sup> about:

- whether they had felt unhappy/sad/depressed; nervous/stressed/under pressure or been in trouble for their behaviour in the past six months
- how bad these feelings had been
- whether they had talked to anyone about these feelings
- how helpful others had been.

<sup>15</sup> These questions were taken from the 2008 NSW version of the Australian School Students' Alcohol and Drug (ASSAD) survey, which enables comparison to the general population of NSW adolescents.

Overall, 62% of children aged 12–17 years had experienced feelings of unhappiness, sadness or depression on one or more days in the past six months; 54% had felt nervous, stressed or under pressure on one or more days in this time period; and 74% had been in trouble because of their behaviour on one or more of these days (Table 5.23). Comparisons suggest that it is normal for young people to experience at least occasional psychosocial distress, with findings for the POCLS sample no worse than the NSW 2008 general population of young people except on getting into trouble because of one's behaviour<sup>16</sup>.

While it is not possible to determine how frequently children aged 12–17 years experienced psychosocial distress from these questions, an indication of the severity of these feelings was obtained. This showed that when these children experienced unhappiness, sadness or depression, almost one quarter perceived these feelings to be 'almost more than they could take' and a further one third thought they had been 'quite bad' (Table 5.23). Fewer of the POCLS children aged 12–17 years who experienced nervousness/stress under pressure reported these feelings to be 'almost more than they could take' (13%) or 'quite bad' (19%). When POCLS children had been in trouble for their behaviour, 5% felt it had been 'almost more than they could take' and 29% that it had been 'quite bad'.

Comparison with the general population shows that when the POCLS 12–17 year olds experienced distress or had been in trouble for their behaviour, they seemed to react more intensely than other children of the same age<sup>17</sup>. However, it should be noted that in the absence of information about the frequency of such feelings (i.e., on how many days in the past six months they had been experienced), the pervasiveness and seriousness of psychosocial distress cannot be determined.

The POCLS 12–17 year olds were also asked who they had spoken to about these feelings, and how helpful the support had been in general. For those experiencing psychosocial distress (i.e., unhappiness, sadness or depression; or nervousness, stress or being under pressure), friends were the most common source of support (63% and 65% respectively), followed by the caregiving family (52% and 47%), the birth family (46% and 37%) and teachers/school counsellors (39% and 35%). Around one quarter had discussed their distress with caseworkers (30% and 24% respectively). Only 31–42% felt their discussions with others had been 'very' helpful, while 34–36% felt they had been 'quite' helpful (Table 5.24). Nevertheless, only 10% of those experiencing unhappiness, sadness or depression and 5% of those experiencing nervousness, stress or being under pressure felt the discussions had been 'not at all' helpful.

<sup>16</sup> Data taken from the NSW ASSAD findings reported by the Centre for Epidemiology and Research (2009) show that 70% of the general population of 12–17 year olds in NSW in 2008 had experienced unhappiness, sadness or depression on one or more days in the previous six months; 67% had been nervous, stressed or under pressure, and 64% had been in trouble because of their behaviour in this time span.

<sup>17</sup> Among the 2008 NSW general population of 12–17 year olds, 7% reported that their feelings of unhappiness/sadness/depression were 'almost more than they could take' and 11% that they had been 'quite bad'; 5% that their feelings of nervousness/stress/being under pressure were 'almost more than they could take' and 12% that these had been 'quite bad'; while for only 3% was the trouble they had been in for their behaviour 'almost more than they could take' and for 10% it was 'quite bad' (Centre for Epidemiology and Research, 2009).

Looking next at being in trouble because of one's behaviour, the most common people adolescents had talked to were caregiving family members (60%), perhaps because the family were aware of the behaviour. Other types of people often talked to were the young person's birth family and friends. As for ratings of how helpful the support received was, slightly under one third felt the discussion had been 'very' helpful, a further 47% felt it had been 'quite' helpful, while 13% felt it had been 'not at all' helpful.

Thus 12–17 year olds appeared to have similar types of support figures to 7–11 year olds, but they tended to talk less often to these support figures about their feelings. Additionally, they seemed to have less positive perceptions of how helpful the support had been.

**Table 5.23: Children aged 12–17 years reports of distress or being in trouble in the last six months, and people consulted**

	Felt unhappy, sad or depressed		Felt nervous, stressed or under pressure		Been in trouble because of behaviour	
	n	%	n	%	n	%
<b>Distress or being in trouble</b>						
No	33	37.9	41	46.1	23	25.8
Yes, at home and school	35	40.2	22	24.7	33	37.1
Yes, only at home	12	13.8	7	7.9	15	16.9
Yes, only at school	7	8.0	19	21.3	18	20.2
<b>Total</b>	<b>87</b>		<b>89</b>		<b>89</b>	
<b>If yes, how bad was it</b>						
Almost more than I could take	12	23.1	6	12.5	3	4.8
Quite bad	17	32.7	9	18.8	18	28.6
Worse than usual	8	15.4	7	14.6	11	17.5
About usual	15	28.8	26	54.2	31	49.2
<b>Total</b>	<b>52</b>		<b>48</b>		<b>63</b>	
<b>Who spoken to<sup>1</sup></b>						
People living with now	29	51.5	22	46.8	38	60.3
Own (birth) family	26	45.6	17	37.0	26	41.3
Friends	36	63.2	30	65.2	30	48.4
Teachers or school counsellors	22	38.6	16	34.8	18	29.0
Caseworkers	17	29.8	11	24.4	15	23.8
Other	13	23.2	10	22.7	11	18.3
<b>Total</b>	<b>56–57</b>		<b>44–47</b>		<b>60–63</b>	

<sup>1</sup> Column percentages do not add up to 100%, as children could choose more than one confidant.

**Table 5.24: Children aged 12–17 years reports of how helpful the support had been**

	Felt unhappy, sad or depressed		Felt nervous, stressed or under pressure		Been in trouble because of behaviour	
	n	%	n	%	n	%
Very helpful	21	42.0	12	30.8	15	31.9
Quite helpful	17	34.0	14	35.9	22	46.8
Somewhat helpful	7	14.0	11	28.2	4	8.5
Not at all helpful	5	10.0	2	5.1	6	12.8
Total	50		39		47	

### Children aged 12–17 years reports of substance use

Several questions about substance use were asked of 12–17 year olds, with findings shown in Table 5.25. These were derived from the ASSAD survey and were selected because they have known acceptability to an adolescent population and are relatively brief.

By comparison with national trends from the 2011 ASSAD (White & Bariola, 2012), the POCLS adolescents reported considerably higher rates of cigarette use in their lifetime (44% of the POCLS sample compared with 23% of the ASSAD cohort), in the past four weeks (55% compared with 9%), and past seven days (48% compared with 7%). They had less often consumed alcohol, however, with fewer ever having consumed alcohol in their lifetime (49% compared with 74%), the last four weeks (21% compared with 29%) or the last seven days (9% compared with 17%). However, they were somewhat more likely to have used illicit drugs in their lifetime (22% compared with 16%), and in the last four weeks (15% compared with 8%). Thus, it appears that the POCLS children aged 12–17 years reported higher levels of cigarette and illicit drug use, but lower levels of alcohol consumption than the general adolescent population.

**Table 5.25: Children aged 12–17 years who reported use of cigarettes, alcohol or drugs<sup>1</sup>**

	Never		Ever in lifetime		In last four weeks <sup>2</sup>		In last seven days	
	n	%	n	%	n	%	n	%
Smoked cigarettes	51	56.0	40	44.0	22	55.0	19	47.5
Consumed alcohol	45	50.5	44	49.4	9	20.5	4	9.1
Used illicit drugs	71	78.0	20	22.0	3	15.0	2	10.0

<sup>1</sup> N=91 children answered the 'ever' smoked cigarette question, 89 answered the 'ever' consumed alcohol question, and 91 answered the 'ever' used drugs question. The n decreased with each subsequent question depending on how many had answered the previous question affirmatively.

<sup>2</sup> Includes those who had used the substance in the last seven days. Use in the last four weeks or seven days was calculated as the proportion who had 'ever' used in their lifetime.



### 5.3 Children's cognitive and language development

Children's cognitive and language capacities are key influences on their developmental pathways. Research indicates that high-level cognitive abilities are predictive of better school achievement (Deary, Strand, Smith & Fernandes, 2007), higher occupational status in adulthood (Sigelman & Rider, 2008), psychological wellbeing (Robinson, 1998), and decreased risk of mortality (Jokela, Batty, Deary, Gale & Kivimaki, 2009). Conversely, lower cognitive abilities are a risk factor for adolescent delinquency (Ge, Donnellan & Wenk, 2001; McGloin & Pratt, 2003), learning difficulties (Hoard, Geary & Hamson, 1999), and externalising behaviour problems (Elliott & Mirsky, 2002; Schoenmaker, Mulder, Dekovic & Matthys, 2013). Cognitive ability has been identified as a key contributor to resiliency among children growing up in high-risk environments (e.g., the seminal work of Werner & Smith, 1989). Language development is a crucial developmental task and underpins many later competencies. Language impairment in the early years is a strong predictor of academic, social and behavioural problems and can have long-term, negative social and economic impacts (Bornstein, Hahn & Suwalsky, 2013; Law, Rush, Schoon & Parsons, 2009; Schoon, Parsons, Rush & Law, 2010).

To measure children's timely attainment of developmental milestones, the POCLS used the caregiver-completed Ages and Stages Questionnaire (ASQ-3; Squires & Bricker, 2009). The ASQ-3 assessed children's developmental status from 9 to 66 months of age over a range of domains (e.g. motor skills, problem solving, and language development). Language skills were assessed by three measures, as differing instruments were required to assess this rapidly developing capacity. To assess the early emergence of cognitive and language skills, the caregiver-completed Communication and Symbolic Behaviour Scales Infant and Toddler Checklist (CSBS-ITC; Wetherby & Prizant, 2003) for children aged 9–23 months was used. For children aged 24–35 months, the caregiver-completed toddler and early-childhood versions of the Macarthur-Bates Communicative Developmental Inventories III (MCDI-III; Fenson, Marchman, Thal, Dale, Bates & Reznick, 2007; Fenson, Pethick, Renda, Cox, Dale & Reznick, 2000) were used. Finally, for children aged 3–17 years, the interviewer-administered Peabody Picture Vocabulary Test IV (PPVT-IV; Dunn & Dunn, 2007) assessed children's receptive language skills. To assess general non-verbal intelligence, the interviewer-administered Matrix Reasoning Test from the Wechsler Intelligence Test for Children (WISC-IV; Wechsler, 2003) was used with children aged 6–16 years.

#### Children's attainment of developmental milestones

The caregiver-completed Ages and Stages Questionnaire (ASQ-3) measures child development across five domains: Communication; Gross Motor skills; Fine Motor skills; Problem Solving and Personal-Social capacities. The measure has 19 different versions to assess development at differing ages and normative cut-offs are provided which enable differentiation of children developing typically from those who are not. There are 30 items rated on a scale as 10 (yes), 5 (sometimes) and 0 (not yet). In the POCLS, the ASQ was used in relation to children aged 9–66 months. The wording of the questionnaires were amended (with permission) to be appropriate for the Australian context and to enable administration by interviewer (without the need for any carer testing of child skills, which is part of the carer-completed measure).



Table 5.26 shows that for children aged 9–35 months and 36–66 months more than 80% of children were developing typically. Table 5.27 shows that 9–35 month old Aboriginal children and children from culturally diverse backgrounds were generally similar, although those from culturally diverse backgrounds appeared to be faring worse on gross motor development than the other two sub-groups (28% compared with 18% and 16% respectively); however, the small sample of culturally diverse children should be noted and findings interpreted with caution. However, 36–66 month old Aboriginal children tended to show higher rates of atypical development on almost all scales than other Australian children. Due to the very small sample size available for children from culturally diverse backgrounds in the age bracket of 36–66 months, their results are not discussed.

**Table 5.26: Caregiver reports of children’s development on the ASQ-3, mean scores, 95% confidence intervals, typical and atypical development, by child age**

	Mean (95% CIs)		Developing typically		A typical development	
			n	%	n	%
9–35 months						
Communication	42.1	(40.7, 43.5)	458	87.2	67	12.8
Gross Motor	46.8	(45.4, 48.3)	431	81.9	95	18.1
Fine Motor	43.5	(42.1, 44.8)	448	85.2	78	14.8
Problem Solving	42.2	(40.9, 43.5)	433	82.3	93	17.7
Personal-Social	44.7	(43.5, 45.9)	459	87.4	66	12.6
Total	525–526					
36–66 months						
Communication	46.0	(43.9, 48.1)	181	82.6	38	17.4
Gross Motor	50.4	(48.5, 52.2)	190	86.0	31	14.0
Fine Motor	39.8	(37.4, 42.2)	188	85.1	33	14.9
Problem Solving	45.7	(43.6, 47.7)	187	84.6	34	15.4
Personal-Social	49.2	(47.5, 50.9)	199	90.5	21	9.6
Total	219–222					

Table 5.27: Caregiver reports of children's atypical development on the ASQ-3, by child age and cultural background

	Aboriginal children		Culturally diverse children		Other Australian children	
	n	%	n	%	n	%
<b>9–35 months</b>						
Communication	23	11.6	5	11.9	32	12.4
Gross Motor	36	18.1	12	27.9	42	16.3
Fine Motor	36	18.1	7	16.3	30	11.6
Problem Solving	31	15.6	7	16.3	48	18.6
Personal-Social	23	11.6	6	14.0	31	12.0
<b>Total</b>	<b>199</b>		<b>42–43</b>		<b>258</b>	
<b>36–66 months</b>						
Communication	16	20.5	4	-	16	14.2
Gross Motor	13	16.5	3	-	13	11.4
Fine Motor	15	19.0	3	-	12	10.5
Problem Solving	18	22.8	1	-	13	11.4
Personal-Social	9	11.5	2	-	9	7.9
<b>Total</b>	<b>69–79</b>		<b>13<sup>1</sup></b>		<b>103–114</b>	

1 Due to the small sample size (less than 20), percentages are not shown and results are not discussed further.

Comparison of children in foster and relative/kinship care revealed that slightly more children in foster care appeared to show atypical development across each area than those in relative/kinship care (Table 5.28), with differences most evident on gross motor development at 9–35 months (21% compared with 15%), and on problem solving and fine motor development (20% compared with 11%; 18% compared with 12%; respectively) at 36–66 months.

**Table 5.28: Caregiver reports of atypical development on the ASQ-3, by child age and placement type**

	Foster care		Relative/Kinship care	
	n	%	n	%
<b>9–35 months</b>				
Communication	42	14.0	25	11.2
Gross Motor	62	20.6	33	14.7
Fine Motor	48	16.0	30	13.3
Problem Solving	55	18.3	38	16.9
Personal-Social	38	12.6	28	12.5
<b>Total</b>	<b>301</b>		<b>224</b>	
<b>36–66 months</b>				
Communication	21	19.1	17	15.6
Gross Motor	17	15.2	14	12.8
Fine Motor	20	17.9	13	11.9
Problem Solving	22	19.6	12	11.0
Personal-Social	12	10.8	9	8.3
<b>Total</b>	<b>110–112</b>		<b>109</b>	

## Language development

To assess early emerging language capacities, the caregiver-completed Communication and Symbolic Behaviour Scales Infant and Toddler Checklist (CSBS-ITC) was used in relation to 9–23 month old children. There are 24 items in the CSBS-ITC checklist and it consists of three sub-scales – Social, Speech and Symbolic – which combine to form a Total Score. The scales yield standard scores and percentiles, with percentile scores at or below the 10th percentile considered of concern.

While the majority of children were developing normally, approximately one quarter had speech development that was ‘of concern’, and one fifth showed ‘of concern’ levels on symbolic skill levels (Table 5.29), according to caregiver reports on this scale. Furthermore, approximately one fifth was in the ‘of concern’ range on the total composite score. These rates were considerably higher than the 10% expected according to the norms.

Fewer children from culturally diverse backgrounds showed developmental levels ‘of concern’ on the social, speech and total scales by comparison with other sub-groups (e.g., 18% showed slower than average speech development compared with 31% of Aboriginal children and 25% of other Australian children) (Table 5.30). Again, the small number of children from culturally diverse backgrounds indicates that caution is needed in interpreting these findings. A higher proportion of Aboriginal children were in the ‘of concern’ range on the speech and symbolic sub-scales than other Australian children.

Children in foster care appeared to have slightly higher rates of developmental levels ‘of concern’ across all scales than those in relative/kinship care (Table 5.31), with the greatest difference occurring on the social (20% compared with 15%) and total development scales (23% compared with 18%).

Table 5.29: Caregiver-reported CSBS mean standard scores, 95% confidence intervals, and proportion at or below 10th percentile

	Mean standard scores (95% CIs)	At or below 10th percentile	
		n	%
Social	9.8 (9.4, 10.2)	54	17.6
Total	307		
Speech	8.7 (8.4, 9.1)	82	26.5
Total	309		
Symbolic	9.2 (8.8, 9.5)	55	18.8
Total	292		
Total	94.7 (93.2, 96.4)	77	21.0
Total	366		

Table 5.30: Number and proportion at or below 10th percentile on the caregiver-reported CSBS, by child's cultural background

	Aboriginal children		Culturally diverse children		Other Australian children	
	n	%	n	%	n	%
Social	18	16.4	3	10.7	28	18.2
Speech	34	30.6	5	17.9	38	24.5
Symbolic	25	23.8	7	25.9	20	13.8
Total	27	20.8	5	14.3	37	20.6
Total	105–130		27–35		145–180	

Table 5.31: Number and proportion at or below 10th percentile on the caregiver-reported CSBS, by placement type

	Foster care		Relative/ Kinship care	
	n	%	n	%
Social	35	19.7	19	14.7
Speech	50	27.9	32	24.5
Symbolic	35	20.7	20	16.3
Total	49	23.2	28	18.1
Total	169–211		123–155	

The caregiver-completed Macarthur-Bates Communicative Developmental Inventories III (MCDI-III) was used to assess language development among children aged 24–35 months. There are two versions, the MacArthur Communicative Development Inventories Short Form and the MacArthur-Bates Communicative Developmental Inventories, which were used for children aged 24–29 months and 30–35 months respectively. For both versions, caregivers were asked, using the list provided, which words they had heard the child use in daily speech. This measure consists of 100 vocabulary words for children aged 24–35 months (plus one item about word combinations for 24–29 month olds). The number of words indicated by the carer is summed to give a total out of 100 which can be converted to percentile ranks. Caregivers of the older group of children (30–35 months) were also asked whether children used sentences varying in complexity.

Percentiles are provided that can be used to identify children showing slower than average language development. The recommendation of Heilman, Weismer, Evans and Hollar (2005) has been followed in applying a cut-off of ‘below the 15th percentile’ to identify children as having significantly poorer language skills.

Using this cut-off, 13% of 24–29 month old and 28% of 30–35 month old children showed slower than average language acquisition in terms of the number of words used in their daily speech (Table 5.32). A higher proportion (41%) showed slower than average use of complex sentences.

**Table 5.32: Caregiver-reported MCDI-III mean percentile scores, 95% confidence intervals, and number and proportion below the 15% percentile, by child age**

	Mean percentile scores and 95% CIs	% below 15th percentile	
		n	%
24–29 months			
Words	45.7 (40.2, 51.1)	11	12.6
Total	87		
30–35 months			
Words	37.0 (31.2, 42.7)	23	27.7
Sentences	2.6 (1.9, 3.3)	35	40.7
Total	83–86		

Bearing in mind the relatively small sample sizes<sup>18</sup>, Table 5.33 shows that similar percentages of children in foster and relative/kinship care displayed slower than average vocabulary development at 24–29 months (although the rate of problems in both groups was less than that expected via the norms). At 30–35 months, it appeared that more children in foster than relative/kinship care showed slower than average vocabular and sentence development, with rates higher than would be expected via the norms.

<sup>18</sup> Due to very small cell sizes, the comparisons of Aboriginal, culturally diverse and other Australian children are not presented here.

**Table 5.33: Number and proportion below the 15% percentile on the caregiver-reported MCDI-III, by placement type**

	Foster care		Relative/ Kinship care	
	n	%	n	%
<b>24–29 months</b>				
Words	6	12.8	5	13.2
<b>N</b>	<b>47</b>		<b>38</b>	
<b>30–35 months</b>				
Words	14	31.1	9	23.7
Sentences	24	52.2	11	27.5
<b>Total</b>	<b>45–47</b>		<b>38–40</b>	

The interviewer-administered Peabody Picture Vocabulary Test Version 4 (PPVT-IV) was used to assess language capacities in children aged 3 to 17 years. The PPVT-IV measures children’s understanding of spoken words (i.e., their receptive language skills) and can be used to assess growth in vocabulary acquisition over time. There are 228 items in the test, but covering a wide age range, so children complete a smaller number of items. The mean standard score for the US normative sample is 100 and the standard deviation is 15. Thus, scores below 85 may be interpreted as indicating language skills below the normal range and scores above 115 as language skills above the normal range. These would place children in the lowest and highest 15% of the normative US sample distribution.

Table 5.34 shows the POCLS mean standard scores for differing age groups and reveals that across all ages, the mean score was lower than the normative mean of 100. Additionally, the mean standard score decreased as age increased, with the mean standard score for 12–17 year olds close to the cut-off for ‘below normal’ range language skills.

The proportion of children within each age group whose language skills were ‘below normal range’, ‘within normal range’, or ‘above normal range’ are also shown in Table 5.34. The proportion in the ‘below normal range’ level rose from 17% at 3–5 years (which was close to normative expectations), to 27% at 6–11 years and 42% at 12–17 years. Conversely, few children were ‘above normal range’: 5% at 3–5 years, and 3% at the two older ages. The high percentage of 12–17 year olds showing below normal range language skills was particularly noteworthy.

Table 5.34: PPVT-IV mean standard scores, 95% confidence intervals, and the number and proportion below, within, or above normal range, by child age

	Mean and 95% CIs	Standard score below 85		Standard score 85 – 115		Standard score above 115	
		n	%	n	%	n	%
3–5 years							
Standardised score	93.9 (92.3, 95.4)	41	17.3	184	77.6	12	5.1
Total	237						
6–11 years							
Standardised score	90.6 (89.1, 92.2)	83	27.4	212	70.0	8	2.6
Total	303						
12–17 years							
Standardised score	86.3 (83.4, 89.1)	44	42.3	57	54.8	3	2.9
Total	104						

Proportionately more Aboriginal children and children from culturally diverse backgrounds showed ‘below normal range’ language skills, while fewer were ‘within the normal range’ or ‘above the normal range’ than other Australian children (Table 5.35). These trends were particularly marked for children from culturally diverse backgrounds, but likely reflect these children’s lesser exposure to the English language. (It is to be expected that those from culturally diverse backgrounds will score more poorly than other children as English is likely to be their second language.)

**Table 5.35: Number and proportion below, within, or above normal range on the PPVT-IV, by child's cultural background**

	Standard score below 85		Standard score 85 – 115		Standard score above 115	
	n	%	n	%	n	%
Aboriginal children	69	29.5	160	68.4	5	2.1
<b>Total</b>	<b>234</b>					
Culturally diverse children	19	33.9	37	66.1	-	-
<b>Total</b>	<b>56</b>					
Other Australian children	77	23.8	231	71.3	16	4.9
<b>Total</b>	<b>324</b>					

Comparison of children in differing placement types (Table 5.36) revealed that proportionately more children in foster care showed 'below normal range' language skills than those in relative/kinship care (28% and 23% respectively). The rate of 'below normal range' language skills among children in residential care was 48%, which was considerably higher than found for children in other placement types, although the very small sample of children in residential care should be noted. Very few children in all three placement types showed 'above normal range' language skills (fewer than 5%).

**Table 5.36: Number and proportion below, within, or above normal range on the PPVT-IV, by placement type**

	Standard score below 85		Standard score 85 – 115		Standard score above 115	
	n	%	n	%	n	%
Foster care	85	28.0	206	67.8	13	4.3
<b>Total</b>	<b>304</b>					
Relative/Kinship care	73	22.9	236	74.0	10	3.1
<b>Total</b>	<b>319</b>					
Residential care	10	47.6	11	52.4	0	0
<b>Total</b>	<b>21</b>					

## Cognitive development

The interviewer-administered Matrix Reasoning Test (MR) from the Wechsler Intelligence Test for Children Version 4 (WISC-IV; Wechsler 2004) was used to assess general non-verbal intelligence among children aged 6 to 16 years. The 35 items in the MR sub-scale yields a standard score with a possible range of one to 19. The normative mean is 10 with a standard deviation of three. Thus scores below seven are indicative of 'below normal range' cognitive abilities (i.e., in the lowest 15% of the normative population of children) and scores above 13 are indicative of 'above normal range' cognitive abilities (i.e., in the highest 15% of the normative population of children).

Table 5.37 shows mean standard scores for children aged 6–11 years and 12–16 years. As for the PPVT-IV, these are below the normative mean of 10, and are lower



among 12–16 year olds than 6–11 year olds. Further, a higher proportion of children were in the ‘below normal range’ category than expected according to the norms (28% of 6–11 year olds and 30% of 12–16 year olds compared with 15% expected). As seen for the PPVT-IV, a much smaller proportion was in the ‘above normal range’ category (4% of 6–11 year olds and 3% of 12–16 year olds compared with 15% expected).

**Table 5.37: Mean standard scores on the MR test, 95% confidence intervals, and the number and proportion below, within, or above normal range, by child age**

	Mean and 95% CIs	Standard score below 7		Standard score between 7 and 13		Standard score above 13	
		n	%	n	%	n	%
6–11 years							
Standardised score	8.2 (7.9, 8.5)	84	28.0	204	68.0	12	4.0
Total	300						
12–16 years							
Standardised score	7.8 (7.2, 8.3)	29	29.9	65	67.0	3	3.1
Total	97						

Children from culturally diverse backgrounds were less likely to show ‘below normal range’ cognitive capacities and a higher proportion was in the ‘normal’ and ‘above normal’ ranges than the Aboriginal children and other Australian children (Table 5.38). In fact, the proportion in the ‘below normal range’ for children from culturally diverse backgrounds was close to that expected according to the norms. Aboriginal children and other children tended to be faring less well, with greater proportions in the ‘below normal range’ and fewer in the ‘normal’ and ‘above normal’ range categories.

**Table 5.38: Number and proportion below, within, or above normal range on the MR test, by child’s cultural background**

	Standard score below 7		Standard score between 7 and 13		Standard score above 13	
	n	%	n	%	n	%
Aboriginal children	46	33.6	90	65.7	1	0.7
Total	137					
Culturally diverse children	7	16.3	32	74.4	4	9.3
Total	43					
Other Australian children	59	29.2	133	65.8	10	5.0
Total	202					

The rate of ‘below normal range’ cognitive capacities among children in foster care was double that of children in relative/kinship care (39% compared with 18% respectively, Table 5.39). As seen earlier, comparatively few children in these two placement types showed ‘above normal range’ capacities (4%). While children in residential care were likely faring more poorly than those in other placement types, the small sample size precludes further interpretation.

**Table 5.39: Number and proportion below, within, or above normal range on the MR test, by placement type**

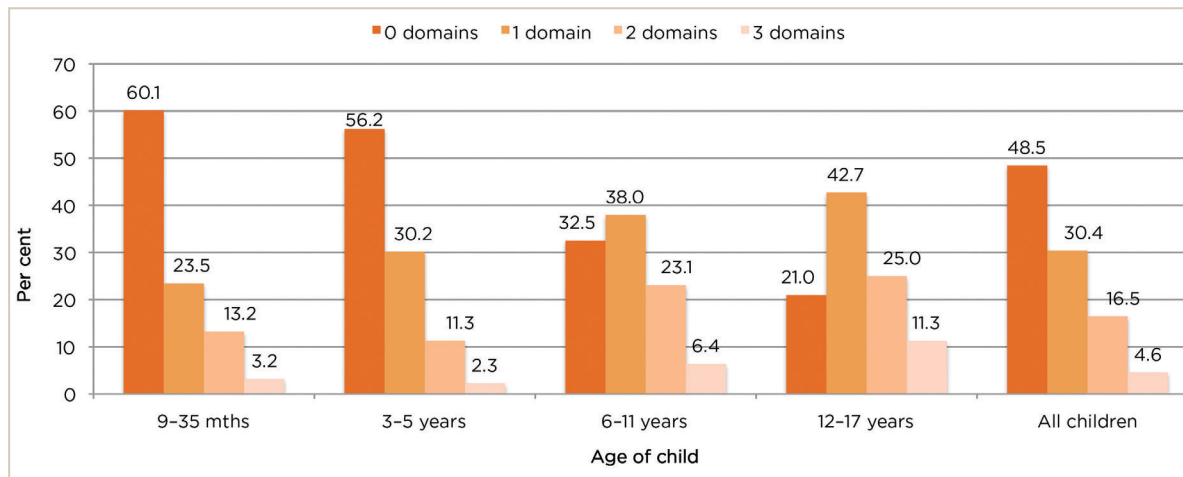
	Standard score below 7		Standard score between 7 and 13		Standard score above 13	
	n	%	n	%	n	%
Foster care	69	38.6	103	57.5	7	3.9
<b>Total</b>	<b>179</b>					
Relative/Kinship care	36	17.9	158	78.6	7	3.5
<b>Total</b>	<b>201</b>					
Residential care	8	-	9	-	1	-
<b>Total</b>	<b>18</b>					

## 5.4 How the children are faring overall

The baseline data described in this chapter shows the children’s wellbeing across different domains of functioning including the child’s physical health, socio-emotional wellbeing and cognitive/learning ability. Figure 5.8 below shows the proportions of children showing problems in 0 to 3 domains of wellbeing calculated according to the age ranges and key study measures<sup>19</sup>. Approximately half (48%) of the study children were not showing problems across any developmental domains measured, 30% showed problems in one developmental domain, 16% showed problems in two developmental domains, while 5% showed problems across all three developmental domains measured. Children aged 12–17 years showed more problems in all areas of wellbeing measured than younger children.

<sup>19</sup> The following variables were used to classify whether or not a child showed problems across each of the three domains of wellbeing (physical health, socio-emotional wellbeing and cognitive/learning ability), according to the age of the child. Health: ASQ-3 (atypical development on gross motor or fine motor 9 months–5 years) and at least two long-term diagnosed physical health conditions (6–17 years). Socio-emotional: BITSEA (problem scale cut-off 9–35 months), CBCL (total problem cut-off 3–17 years). Cognitive/learning: ASQ-3 (atypical development on communication or problem solving 9–35 months), PPVT-IV (below normal range 3–17 years), MR (below normal range 6–16 years). See Table 2.6 for a description of the measures used in the POCLS interview to examine children’s wellbeing.

Figure 5.8: Proportions of children showing developmental problems across 0 to 3 domains of functioning, by child age



## 5.5 Summary of key findings

### Physical health

- Overall, most children seemed to be progressing well in terms of their general physical health and lifestyle, although a sizable proportion also had a long-term health condition.
- Approximately half were perceived by caregivers to be in 'Excellent' general physical health and a further one third was seen as being in 'Very good' health.
- The great majority of children were judged by caregivers to be neither underweight nor overweight and appeared to be following a healthy diet, with fruit and vegetables consumed at least daily.
- Few (15%) had sustained an injury needing medical attention, most commonly a cut, scrape or bruise.
- On the other hand, half the sample had a health condition or developmental delay, with one fifth having two or more health conditions. 12-17 year olds tended to be faring more poorly, with fewer seen as being in excellent or good health, and a higher proportion having long-term health conditions. They tended to be more injury-prone, and were also more often consuming a less healthy diet.

### Socio-emotional wellbeing

- Children were not faring as well on socio-emotional adjustment with the proportions showing high levels of behaviour problems increasing with age from 17% among 12-35 month old children, to 47% among 12-17 year olds.
- Externalising problems (e.g., aggression, hyperactivity) were more common than internalising problems (e.g., anxiety, depression) for those aged over 6 years.
- Among 12-17 year olds, approximately one-fifth showed very low levels of competencies overall.

- Additionally, most caregivers felt that children were progressing very well, and many 6-17 year olds had received an award, prize or trophy for things done well in the past six months.

### **Cognitive/Language ability**

- More than four fifths of children aged 9–66 months were meeting developmental milestones on aspects such as communication, gross and fine motor skills, problem solving and personal-social skills, as reported by caregivers.
- However, approximately one quarter of children aged 9–23 months showed slower than average speech development.
- A sizable minority of the POCLS children aged 6 years and above showed below normal range language skills (27% of 6–11 year olds and 42% of 12–17 year olds).
- On non-verbal intelligence, almost twice as many 6–16 year old children were in the ‘below normal range’ category than would be expected according to norms, although overall, approximately 70% of children were in the normal range on this measure.

## **5.6 Conclusion**

This chapter presented baseline data on the physical health, socio-emotional wellbeing and language/cognitive development of the POCLS children who entered OOHc for the first time. Overall, approximately half (48%) of the study children were not vulnerable across any developmental domains measured, 46% were vulnerable in one or two developmental domains and 5% were vulnerable across all three developmental domains. In terms of their physical health, most children seemed to be progressing well when compared with children in the general population. In the area of socio-emotional wellbeing, the POCLS children showed higher levels of behaviour problems from 3 years of age than usually found in the general population, particularly of the externalising type. This was especially evident among 12–17 year olds. Finally, children aged 9 months to 5 years were generally developing normally in terms of developmental milestones, but there were some signs of slower than average language development. While the majority of children were in the normal range on cognitive abilities and language development, rates of difficulties in these areas were higher among children aged 6 years or older than would be expected by normative comparisons. Children in residential care appeared to be experiencing poorer wellbeing than children in other placement types.