Growing Up in Australia

The Longitudinal Study of Australian Children

2007–08 Annual Report

Contents

The Hon. Jenny Macklin MP

Foreword from the Minister for Families, Housing, Community Services and Indigenous Affairs

All Australian children deserve the best start in life.

They need to grow up in strong, resilient families and supportive communities.

To make sure we deliver targeted services to support families and communities, we need to take a strong, evidence-based approach to policy development.

Good social policy depends on solid research.

Research like that being undertaken in partnership by the Department of Families, Housing, Community Services and Indigenous Affairs, the Australian Institute of Family Studies and child development experts, which is producing the comprehensive data we need.

Growing Up in Australia: The Longitudinal Study of Australian Children has been underway for four years.

Over that time, information has been collected on a range of issues including parenting, family relationships, childhood education, childcare and health.

This is vital to identify where early intervention programs and prevention strategies can be most effective.

The study also provides the data that researchers need to examine developmental pathways and to understand why children have different intellectual, social and health outcomes.

It helps us get a clearer picture of the different life experiences of Australian children. It also guides our thinking on what we need to do to give children the best opportunities to succeed.

And it demonstrates how partnerships between policy makers and researchers can yield data of high quality and significant policy relevance.

Of course, none of this research would be possible without the co-operation of all the children and their families who continue to participate in the study. I want to thank them, along with the research team, for their involvement in this important project.

Jenny Macklin
Minister for Families, Housing,
Community Services and Indigenous Affairs

Growing Up in Australia: The Longitudinal Study of Australian Children (LSAC) addresses a range of questions about children's development and wellbeing. Information is collected on the study children's physical health and social, cognitive and emotional development over infancy and childhood, as well as their experiences in significant environments such as the family, child care, pre- and primary school and their broader neighbourhoods and community contexts.

Professor Alan Hayes

The study involves two cohorts of children that are broadly representative of the Australian population—approximately 5,000 infants aged 0–1 years (B or infant cohort) and 5,000 children aged 4–5 years (K or child cohort). The first two waves of the study were completed in 2004 and 2006, and the third wave is currently in progress. In addition, two between-waves mail surveys were undertaken in 2005 (Wave 1.5) and 2007 (Wave 2.5).

The 2007–08 financial year featured a number of key events for *Growing Up in Australia*. Data from the second wave of data collection was released in September 2007. The second between-waves survey was distributed in August 2007 and the data released in May 2008. Following preliminary interviews in August and September 2007, interviewing of the main Wave 3 sample commenced in April 2008 and will conclude in late 2008. The inaugural LSAC conference was held in Melbourne in December 2007. Wave 4 development commenced in late 2007 and has continued through 2008.

Release of Wave 2 data

With the release of the second wave of study data in September 2007, the first set of longitudinal data became available for analysis. At the end of June 2008, there were 124 registered users of Wave 2 data, and the total number of data users reached 236.

The release of the Wave 2 data has been supported by two data user training workshops; one held in December 2007 in Melbourne and the other in Canberra in February 2008. There were approximately 30 attendees at each workshop, with very positive feedback received from both. It is intended that data workshops will continue to be offered on a regular basis.

Inaugural LSAC conference

The Institute hosted the inaugural LSAC conference in Melbourne on 4–5 December 2007. There were approximately 150 attendees, and 35 papers presented findings from the first two waves of the study. Further information on the conference is provided on page 37.

Wave 2.5

The second between-waves survey (Wave 2.5) was conducted between August and December 2007. Families were sent a questionnaire covering topics such as children's media and technology use, parental working arrangements and the child support

arrangements of separated parents. Included in this *Annual Report* is an overview of Wave 2.5, plus findings concerning children's media and technology use and parents' attitudes towards and patterns of work.

Wave 3 data collection

Content for the Wave 3 data collection was finalised during the first half of 2007. Preliminary interviews were undertaken from August to October 2007, with over 400 interviews conducted. Following this, some refinement was made to the measures and fieldwork processes. In March–April 2008, approximately 160 interviewers were trained by staff from the Australian Bureau of Statistics and Australian Institute of Family Studies in preparation for the next fieldwork phase.

Interviewing of the main Wave 3 sample commenced in early April 2008. By the end of June 2008, almost 3,800 interviews were completed and a further 360 appointments made. Interviewing will continue throughout the rest of 2008. Feedback from interviewers suggests that the study continues to be well received, with many families and study children reported to be looking forward to taking part in the next home visit.

The principal data collection method is a face-to-face interview with the child's primary parent (Parent 1), with self-complete forms for the other parent living in the same house and for teachers, as in previous waves. Direct assessments of both cohorts of children are undertaken, as well as interviews with K cohort children. A computer-assisted telephone interview is conducted with parents who no longer live with the study child's primary parent.

Wave 4 (and beyond) development

During 2007, discussions were held on the future directions of the study, such as the domains of life that will become relevant as children move into adolescence, and methodological data collection options. Discussions on content and methodology specifically for Wave 4 commenced in late 2007, with this being the major focus of the Consortium Advisory Group meeting held in December 2007 (the Consortium Advisory Group provides ongoing advice on the development and implementation of the study). This was followed by extensive stakeholder consultations in the first part of 2008. A series of proposals regarding Wave 4 content domains and methodological options was presented at the Consortium Advisory Group meeting in May 2008. Further refinement and development of these options is underway.

Dissemination

The 2007–08 year has continued to see a steady release of papers and presentations using data from the *Growing Up in Australia* study (see pages 43–8). Numerous conference papers discussing study findings have been presented by Institute and Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA) researchers, Consortium Advisory Group members and other data users. The 79th edition of the Institute's journal *Family Matters*, released in June 2008, featured findings from the study. This is the second time that the *Family Matters* journal has dedicated an issue to

the study. This 2007–08 *Annual Report* includes articles that have been abridged from the longer versions published in the 79th edition of *Family Matters*.

Life at 3 documentary

The *Life at 3* television documentary series, produced by Screen Australia in conjunction with Heiress Films, draws upon the methodology and research findings of the *Growing Up in Australia* study. Eleven children and their families are being followed over time, with coverage of children's behaviour and milestones and the impact of factors such as parents' relationships, finances, work and health.

Two initial episodes of *Life at 1*, documenting the children's lives at around 12 months of age were produced and screened on ABC TV in October 2006. Two further episodes of *Life at 3* were screened in October 2008. The documentary explores the factors that help or hinder children to thrive, with information provided by the children's families and experts, including members of the Consortium Advisory Group, and analysis of data from the study.

It is very pleasing to see the successful progress of the study over 2007 and 2008. The first two waves of the study are completed, the third is underway, and preparations are well advanced for the fourth wave. We are seeing the benefits of these endeavours in the uptake of the data in policy arenas, the high level of interest from researchers both nationally and internationally, and the widespread community and media interest in the study's findings.

The outstanding progress of this landmark study is the result of the expertise, commitment and hard work of the Consortium Advisory Group, the team at the Australian Bureau of Statistics, the Institute's Project Operations Team and our colleagues at FaHCSIA. I especially acknowledge the efforts of Institute staff: Matthew Gray (Executive Project Director), Diana Smart, Carol Soloff, Linda Bencic, Sebastian Misson, Mark Sipthorp, and Siobhan O'Halloran. Ann Sanson (Principal Scientific Advisor) and Stephen Zubrick (Chair of the Consortium Advisory Group) are to be thanked for their leadership, which greatly facilitates the success of the study. I also gratefully acknowledge Andrew Whitecross and his colleagues at FaHCSIA for their continuing commitment to *Growing Up in Australia*, and their generous support and advice. Finally, my most sincere thanks go to the participating children and families for their ongoing support, without whom the study would not be possible.

Professor Alan Hayes
Director
Australian Institute of Family Studies

The *Growing Up in Australia* study aims to shed light on the development of the current generation of Australian children, and to investigate the contribution of the children's social, economic and cultural environments to their adjustment and wellbeing. More specifically, it seeks to improve understanding of the complex interplay of factors that foster or impede healthy early childhood development, to identify opportunities for early intervention and prevention in policy areas concerning children, and to inform the policy debate in general.

Multiple facets of children's development, health and wellbeing are examined, including physical health, social, cognitive and emotional development.

Multiple facets of children's development, health and wellbeing are examined, including physical health, social, cognitive and emotional development. The study collects information on children's attributes (such as their temperament) and the contexts in which they are raised, particularly their family, child care, school, neighbourhood and community experiences. The study also examines dynamics within these settings; for example, the parenting practices and the quality of co-parental relationships to which children are exposed, and the care received in differing types of non-parental care.

A set of 14 key research questions guides the study, clustered around the themes of child and family functioning, health, child care, and education. These are:

■ What are the impacts of family relationships, composition and dynamics on child outcomes and how do these change over time?

■ What can be detected of the impacts and influences of fathers on their children?

■ How are child outcomes affected by the characteristics of their parents' labour force participation, their educational attainment and family economic status, and how do these change over time?

■ Do beliefs and expectations of children (parental, personal and community, in particular parents' and child's expectations of the child's school success, parents' workforce participation, family formation and parenting) impact on child outcomes, and how do these change over time?

■ How important are broad neighbourhood characteristics for child outcomes? Does their importance vary across childhood? How do family circumstances interact with neighbourhood characteristics to affect child outcomes?

■ How important are family and child social connections to child outcomes? How do these connections change over time and according to the child's age? Does their importance vary across childhood?

■ What is the impact over time of early experience on health, including conditions affecting the children's physical development?

■ What is the impact on other aspects of health and other child outcomes of poor mental health, including infant mental health and early conduct disorder? How does the picture change over time?

- How do socio-economic and socio-cultural factors contribute over time to child health outcomes?

- What are the patterns of children's use of their time for activities such as outdoor activities, unstructured play, watching television, and reading; and how do these relate to child outcomes including family attachment, physical fitness level and obesity, social skills, and effectiveness over time?

- What is the impact of non-parental child care on the child's developmental outcomes over time, particularly those relating to social and cognitive competence, impulse control, control of attention and concentration, and emotional attachment between child and family?

- What early experiences support children's emerging literacy and numeracy?

- What factors over the span of the early childhood period ensure a positive "fit" between children and school, and promote a good start in learning literacy and numeracy skills in the first years of primary education?

- What are the interactions among factors in family functioning, health, non-parental care and education that affect child outcomes?

The study commenced in 2004 with the recruitment of two cohorts: about 5,000 families with infants aged 0–1 years (B cohort), and 5,000 families with 4–5 year olds (K cohort). The study is using an accelerated cross-sequential design in which the two cohorts of children are followed. This design will enable information on children's development over the first 10 or 11 years of life to be collected in 6 years. From Wave 3 onwards, the two cohorts will be able to be compared at overlapping ages (e.g., at 4–5 and 6–7 years), to gauge the effect of growing up in differing social conditions and policy settings (see Table 1).

The study commenced in 2004 with the recruitment of two cohorts: about 5,000 families with infants, and 5,000 families with 4–5 year olds.

Table 1	Age of cohorts, Waves 1–4			
Cohorts	Wave 1 (2004)	Wave 2 (2006)	Wave 3 (2008)	Wave 4 (2010)
B (infant)	0–1 years	2–3 years	4–5 years	6–7 years
K (child)	4–5 years	6–7 years	8–9 years	10–11 years

The sampling frame was the Medicare Australia enrolment database. A multi-stage selection process was used to recruit a representative sample residing in urban and rural areas of all states and territories of Australia. The fieldwork for Wave 1 was conducted by I-view, and for Waves 2–4 is being undertaken by the Australian Bureau of Statistics. Wave 2 of the study was conducted in 2006, with a response rate of 90%. The third wave of data is currently being collected. In addition, there have been two between-waves mail surveys of the sample in 2005 and 2007.

The study collects information on a wide range of topics. A summary of the topics covered and their scope is provided in Table 2.

Table 2	Topics covered by *Growing Up in Australia*, Waves 1, 2 and 3
Family demographics	Demographic information relating to the family, such as parental education attainment, occupation, ethnicity and religion.
Family finances	Financial information, such as income, financial hardship, receipt of government benefits.
Family relationships	Information on the quality of relationships; primarily focused on the relationship between parents, but also on broader family harmony.
Health behaviour and risk factors	Behaviours and risk factors that potentially impinge upon or promote the health of the study child or his/her family. Includes behaviours such as parental smoking and drinking, child physical activity and diet, as well as risk factors such as a parent experiencing diabetes during pregnancy.
Health status	Information about the physical and mental health status of the study child, such as body mass index, diagnosis with conditions and number of hospital stays. Information on parents' physical and mental health is also collected.
Home educational environment	Information on factors likely to promote or hinder the child's learning while at home, such as parental support for education, number of books in the home and TV use. Also contains information on parent interaction with teachers, such as parent–teacher interviews, with parents' and teachers' perspectives being obtained.
Housing	Information on housing, such as number of bedrooms, tenure type and payments.
Learning and cognitive outcomes	Information on the child's development in the areas of learning and cognition, including language, literacy and numeracy.
Learning environments	Characteristics of child care or school environment, such as practices employed by teachers and child care workers in their work, including time use, use of resources and general philosophies.
Parental employment	Information on work status, such as employment type, occupation and work/family interactions.
Parenting practices and style	Information on parenting styles and other aspects of parenting, such as self-efficacy.
Parents living apart from the child	Details of the child's other parent, such as the relationship to study child, interactions with resident parent and child support.
Program characteristics	Characteristics of the school, preschool or child care program, such as type of program, number of days or hours the child attends and staff satisfaction.
Social and emotional development	Information relevant to the social and emotional development of the child, such as temperament, behaviour, peer interactions and emotional states.
Social capital	Information on social capital, such as interactions with neighbours, neighbourhood characteristics and use of services.

With the release of data in August 2007 from the second wave of the study, Australia now has national longitudinal data on children's development. While there are questions that can be answered using cross-sectional surveys, there are many that can only be answered using longitudinal data, as they provide information about the dynamics of change at an individual or family level and insights into the effects of experiences earlier in life on outcomes later in life. *Growing Up in Australia* is now well on the way to achieving this aim.

Between-wave surveys provide a valuable opportunity to address issues in further depth or breadth than may be possible in the main waves, and to enhance participant engagement and retention. With these objectives in mind, a decision was taken in 2006 to include an additional wave of data collection in the form of a mail-out survey between Waves 2 and 3 of *Growing Up in Australia*.

The mail-out was conducted by the Australian Bureau of Statistics and took place on 20 August 2007. Questionnaires were posted to the entire retained sample for whom contact information was available (close to 9,600 families). Four weeks after the initial mail-out, all families were sent a thank you/ reminder card, and replacement forms were posted after a further three weeks if families had not returned forms. Finally, approximately 1,000 families who had not returned forms ten weeks after the initial mail out were contacted by phone to seek their participation.

The 8-page forms (slightly different for each cohort) included questions on children's engagement with media and technology, children's developmental progress, their child care experiences, family stressful life events, parents' employment status and work-related issues, and child support arrangements (for separated parents).

Around 6,500 forms were returned, 68% of those who received the mail-out. The response rate was highest for families who had been interviewed in Wave 2 (about 72%), although forms were also received from 20% of families who had not participated in Wave 2.

Sample characteristics

The final sample achieved from Wave 2.5, for analysis purposes, included 3,246 B cohort and 3,252 K cohort children. Table 3 provides a summary of the characteristics of the children and families who responded to Wave 2.5, as well as giving data on the sample distribution at each wave, which provides an indication of the representativeness of the sample.

Table 3 (on page 10) shows that the Wave 2.5 sample differed from the Wave 2 sample in similar ways to which the Wave 1.5 sample differed from the Wave 1 sample. Two-parent families, families in which mothers or fathers had completed Year 12 education, and families in which the study child had a sibling were over-represented in the two between-waves samples for both cohorts. Families of Aboriginal or Torres Strait Islander children and families where the mother spoke a language other than English were under-represented for both cohorts.

These differences should be taken into account when interpreting findings from the Wave 2.5 data.

Between-wave surveys provide a valuable opportunity to address issues in further depth and to enhance participant engagement and retention.

The final sample achieved from Wave 2.5 included 3,246 B cohort and 3,252 K cohort children.

Table 3	Composition of the sample at each wave, B and K cohorts (percentage)							
	B cohort				K cohort			
	W1	W1.5	W2	W2.5	W1	W1.5	W2	W2.5
Study child gender								
Male	51.2	51.8	51.1	50.9	50.9	51.4	51.0	51.0
Female	48.8	48.3	48.9	49.1	49.1	48.6	49.0	49.1
Family type*								
Two resident parents/guardians	90.7	93.5	89.0	91.9	86.0	89.3	85.2	88.8
One resident parent/guardian	9.3	6.5	11.0	8.1	14.0	10.7	14.8	11.2
Siblings*								
Only child	39.5	40.1	19.3	18.7	11.5	10.6	9.1	8.3
One sibling	36.8	38.3	49.1	51.5	48.4	51.4	45.2	47.7
Two or more siblings	23.7	21.6	31.6	29.7	40.1	38.0	45.7	44.0
Ethnicity								
Aboriginal or Torres Strait Islander	4.5	2.6	3.9	2.3	3.8	2.5	3.4	2.3
Mother speaks a language other than English at home*	14.5	12.4	13.4	11.0	15.7	13.9	14.7	13.2
Work status*								
Both parents or lone parent work	47.9	51.8	56.9	59.6	55.5	59.1	65.4	69.1
One parent works (in couple family)	40.8	40.7	33.8	34.1	32.8	32.9	26.1	25.3
No parent works	11.3	7.5	9.3	6.3	11.6	8.0	8.6	5.6
Educational status*								
Mother completed Year 12	66.9	73.5	69.0	74.7	58.6	63.1	60.1	64.3
Father completed Year 12	58.5	61.4	59.7	63.1	52.7	55.8	53.2	56.5
State								
New South Wales	31.6	30.7	31.1	30.1	31.6	31.2	31.4	31.5
Victoria	24.5	25.4	24.3	25.0	25.0	25.3	23.8	24.3
Queensland	20.6	20.2	21.5	21.2	19.8	19.8	20.6	20.3
South Australia	6.8	7.3	6.7	7.0	6.8	6.7	6.9	7.1
Western Australia	10.4	10.4	10.6	10.4	10.2	10.4	10.6	10.2
Tasmania	2.2	2.3	2.3	2.5	2.7	2.9	2.9	2.9
Northern Territory	1.7	1.3	1.4	1.4	1.7	1.5	1.5	1.2
Australian Capital Territory	2.1	2.6	2.3	2.5	2.3	2.2	2.3	2.5
Region								
Capital city statistical division	62.5	63.8	61.9	61.9	62.1	62.3	61.6	62.7
Balance of state	37.5	36.2	38.1	38.1	37.9	37.7	38.4	37.3
Number of observations	**5,107**	**3,573**	**4,606**	**3,246**	**4,983**	**3,594**	**4,464**	**3,252**

Note: Where information on a particular sample characteristic was available from the between-wave survey, all families who responded to the between-wave survey were included in the data for that characteristic. However, on characteristics for which data were not available at the between-wave survey (denoted by *), data was provided from the previous main wave. For these characteristics, Wave 2.5 responding families were not included if they did not respond to Wave 2. So, for example, family type indicates the proportion of Wave 2.5 respondents who also responded to Wave 2 and contained two resident parents at the time of interview in Wave 2. Percentages may not total 100% due to rounding.

The following findings on the use of electronic media and technology are derived from the Wave 2.5 data collection.
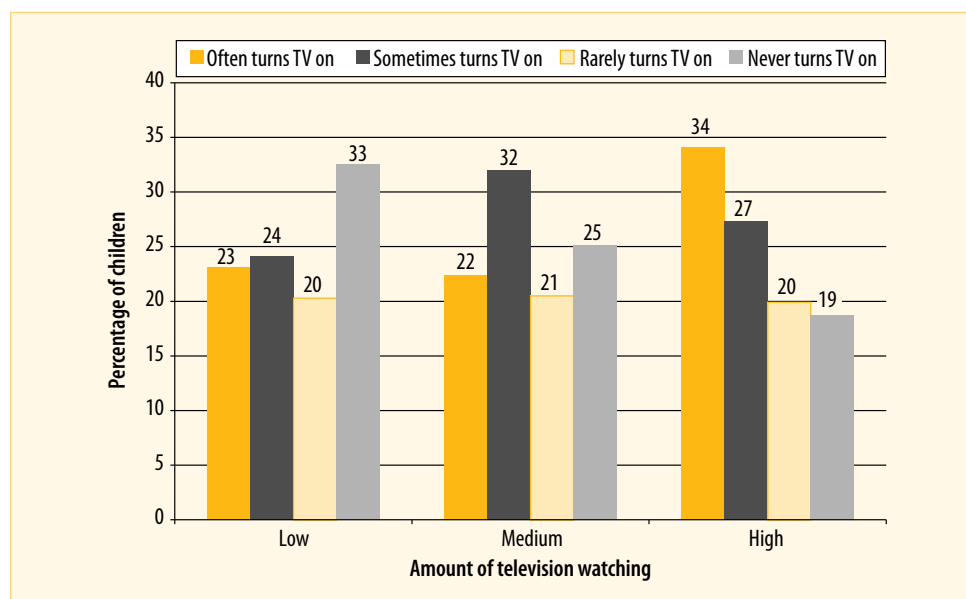
Watching television (B cohort)

The amount of time 3–4 year old children were reported to watch television was categorised as: *low* if children watched less than 280 minutes per week (this equates to approximately four and a half hours); *medium* if children watched between 281 and 570 minutes a week (between four and a half and nine and a half hours); and *high* if children watched more than 570 minutes per week (more than nine and a half hours). Approximately a third of the sample fell into each of these categories.

One in three children with high levels of television watching often turned the television on themselves, compared with one in five children with medium or low levels of television viewing (see Figure 1). A higher proportion of children with low levels of television watching never turned the television on themselves (32%) compared with children with high levels of television watching (19%).

One in three children with high levels of television watching often turned the television on themselves.

| Figure 1 | Amount of time spent watching television, by frequency of child turning television on themselves, B cohort |

Parents' views regarding the amount of children's media and technology use

Most parents[1] of the children aged 3–4 years (68%) were happy with the level of television and DVD/video watching or computer game playing of their children. However, about one-quarter (27%) wished their child spent less time watching television and DVDs/

[1] Of the B cohort respondents, 96% were the children's mothers.

videos or playing computer games. A small proportion (4%) weren't bothered if their child spent more time on these.

Rules about and managing children's television watching

Parents were asked how easy they found managing their 3–4 year old child's TV watching, including videos and DVDs. Most parents reported that it was very easy (36%) or fairly easy (54%) to manage, but about 9% found it fairly difficult and a very small number (1%) found it very difficult.

The ease of managing a child's television and DVD/video watching did not appear to be affected greatly by whether the family had rules for the type of programs and amount of television the child could watch, as shown in Figure 2.

Figure 2 Ease of managing child's television watching, by rules about programs and hours of television watched, B cohort
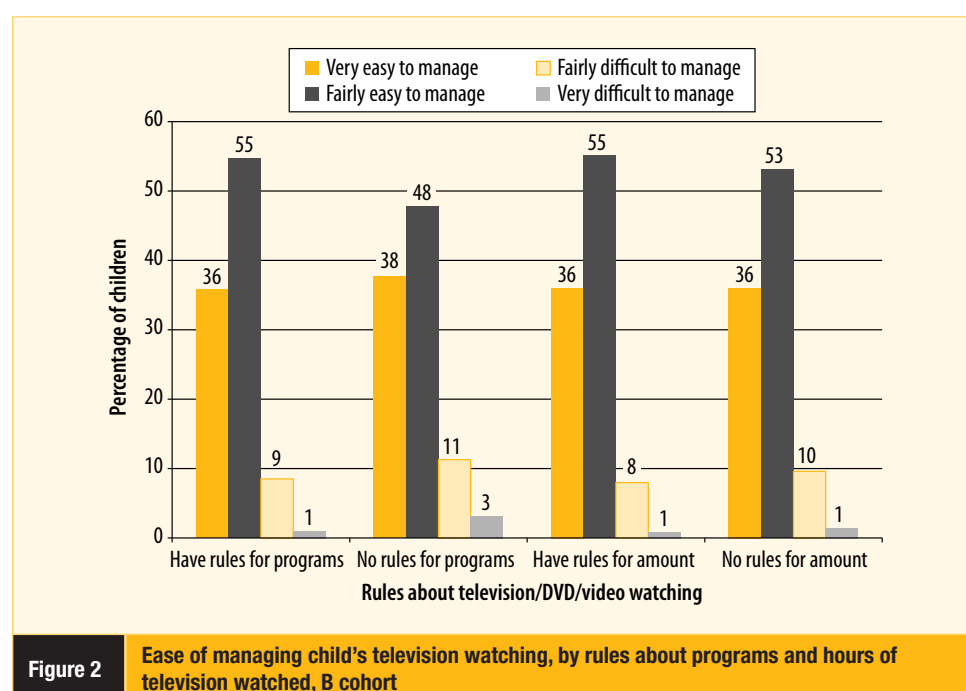
Use of computers (K cohort)

Over nine in ten children aged 7–8 years had a computer at home, and almost one in ten had a computer in their bedroom. As might be expected, the use of the computer, for any purpose, was generally more frequent among children who had a computer in their bedroom (see Figures 3 to 5).

Playing DVDs/CDs

As shown in Figure 3, children with computers in their bedroom were more likely to use the computer to play DVDs/CDs for entertainment than children who only had computers elsewhere in the home (69% compared with 55%).
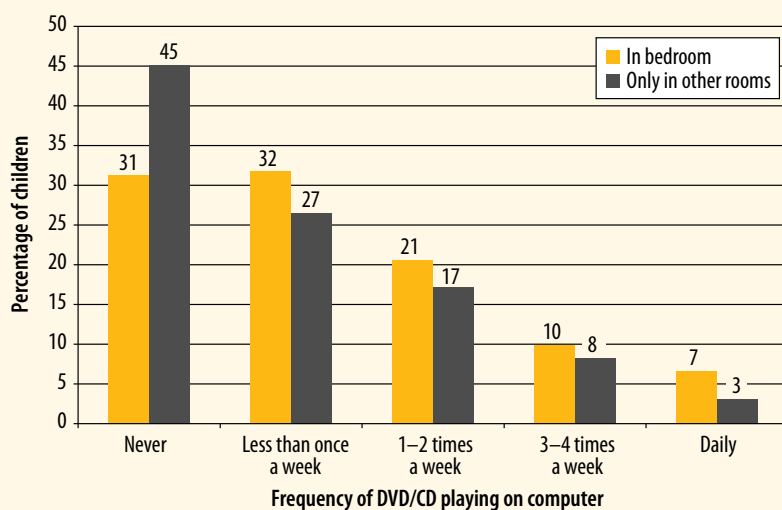
Figure 3 Children with computer at home: Frequency of using computers to play DVDs and CDs, K cohort

Use of computers at home for work for school

Children with computers in their bedroom were only slightly more likely to use computers to do work for school than children who only had computers elsewhere in the home (80% compared with 74%), as shown in Figure 4.
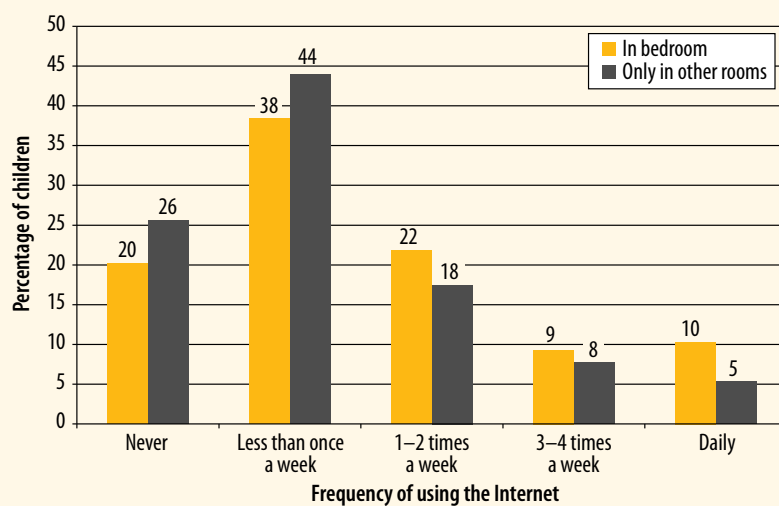
Figure 4 Children with computer at home: Frequency of using computers to do work for school, K cohort

Playing games on the computer

Almost all children with a computer in the home used this to play games, as shown in Figure 5. Children with computers in their bedroom were slightly more likely to do so than children who only had computers elsewhere in the home (97% compared with 93%).
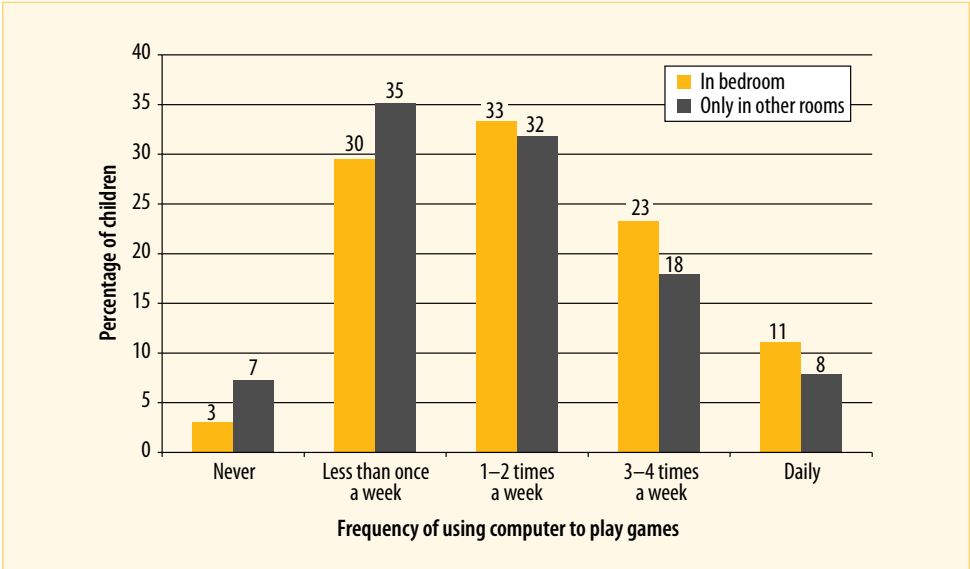
Figure 5   Children with computer at home: Frequency of using computers to play games, K cohort

Child care trends over time were reported using information from all four waves of the *Growing Up in Australia* study (Waves 1, 1.5, 2 and 2.5). At each wave, information was obtained on the types of non-parental child care the child was attending, and how many hours in total the child attended per week.

B cohort

Figure 6 presents the use of child care by type of child care and age. From the figure, the changing pattern of child care use for the B cohort can be observed. The biggest change came between 0–1 year and 1–2 years, when the number of children using child care almost doubled. There was also a large change from age 2–3 years to 3–4 years, which corresponds with the start of preschool/kindergarten. Half of the children were attending preschool in Wave 2.5.
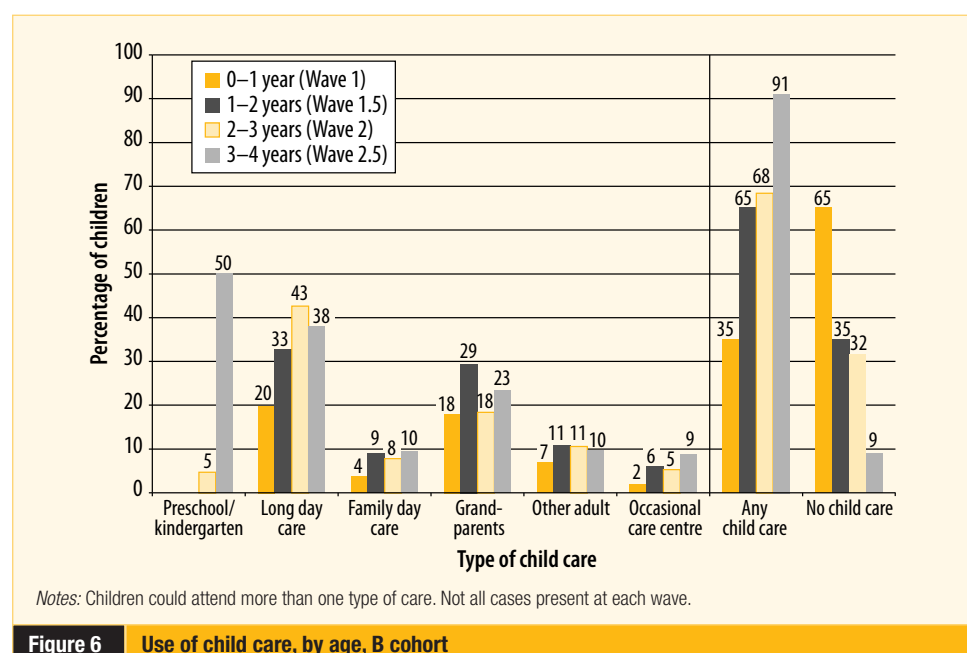
Figure 6 Use of child care, by age, B cohort

Almost four in ten children were in long day care when aged 3–4 years—slightly less than when aged 2–3 years (43%). Proportions in family day care increased between the ages of 0–1 year and 1–2 years and then remained around 8–10% up to when the children were aged 3–4 years.

Grandparent care remained fairly stable over time, with more than one in five children being looked after by their grandparents on a regular basis when aged 3–4 years. The highest rate of grandparent care occurred when children were 1–2 years (29%).

Nine per cent of children aged 3–4 years did not attend any type of regular child care or preschool, as shown in Figure 6, falling considerably from the 32% of children aged 2–3 years who did not attend any type of child care.

Grandparent care remained fairly stable over time, with more than one in five children being looked after by their grandparents on a regular basis when aged 3–4 years.

Over time, the length of time spent in child care increased (Figure 7), although the proportion in full-term care (30 hours or more) remained low at 14% when the children were aged 3–4 years.

Note: Not all cases present at each wave.
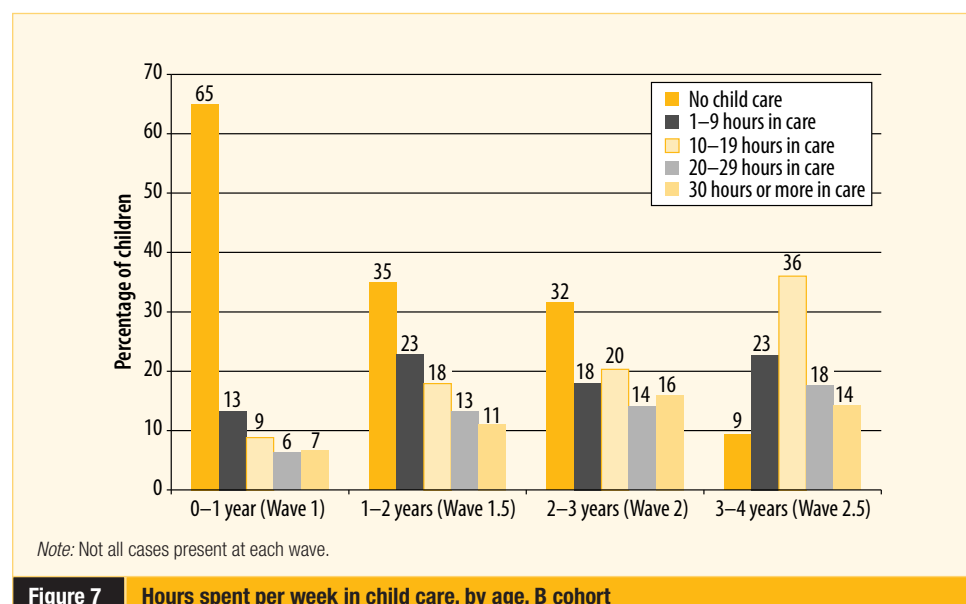
Figure 7 Hours spent per week in child care, by age, B cohort

K cohort

At Wave 2.5, 70% of the 7–8 year old children did not attend any regular care outside of school hours (Figure 8). Of those who did, the most common care was provided at a school (15% of all children), followed by home-based care by a relative, friend or nanny (14%). This pattern was a change from when the children were aged 6–7 years, with double the proportion of children using care at a school once they were aged 7–8 years.

Figure 9 shows the average hours of care[2] outside school or preschool that children were reported to have received at the four points of data collection. Children gradually attended less care as they grew older, due to their movement into school.

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[2] Hours attending a day care centre with a preschool program were included for Wave 1.
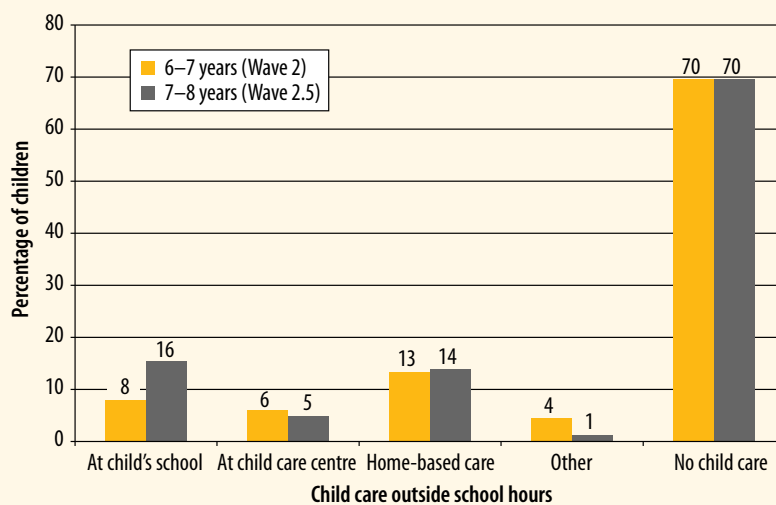
Notes: Children can attend more than one type of care. Not all cases present at each wave.

Figure 8   Use of care before or after school, by age, K cohort
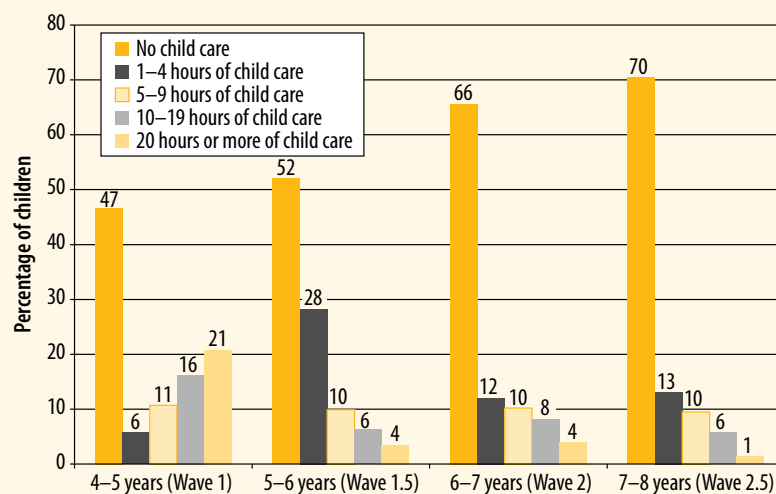
Note: Not all cases present at each wave.

Figure 9   Hours spent per week in child care outside of school or preschool, by age, K cohort

Participation in employment

Mothers with children aged 7–8 years are highly likely to be employed.

Wave 2.5 results indicate that mothers[3] with children aged 7–8 years are highly likely to be employed (73%). The age of the youngest child in the family was a critical factor, with mothers' participation in paid work becoming increasingly likely as their youngest child aged. For mothers whose study child was the youngest child in the family, the employment rate increased from 66% when the child was aged 4–5 years (Wave 1) to 80% three years later, when the child was aged 7–8 years (Wave 2.5).

However, the number of hours worked did not increase dramatically as the youngest child increased in age from 4–5 years to 7–8 years. The average hours worked was 28 hours per week for mothers whose youngest child was aged 7–8 years compared to 26 hours per week for those whose youngest child was aged 4–5 years.

While more than half (52%) of all working mothers whose youngest child was aged 7–8 years were satisfied with the hours they were working, 9% wanted to increase their hours and 38% indicated they would prefer to work less.

Attitudes toward employment

Seventy per cent of all mothers agreed that having a job makes mothers a good role model for their children.

In Wave 2.5, all mothers were asked to indicate their attitudes toward a range of aspects of employment on a five-point scale ranging from "strongly agree" to "strongly disagree".

Attitudes towards employment were similar for mothers in both the B and K cohorts. Seventy per cent of all mothers agreed that having a job makes mothers a good role model for their children and another 65% believed that they would enjoy working regardless of money. While most mothers attached great value to paid work, a substantial proportion of mothers (67%) supported the opinion that mothers should be home outside school hours to care for their children.

About one-third of all mothers reported their job as being a stay-at-home parent (32%), and did not agree that it was important for them to have a paying job to be happy in life (35%).

Effects of employment

In Wave 2.5, employed mothers were asked to indicate on a five-point scale the extent to which they agreed or disagreed with a number of statements relating to the perceived effects of employment on four domains: self, parenting, family, and child's schooling. Although the description focuses only on mothers in the K cohort, results relating to both cohorts are shown in Figure 10. Note that 60% of mothers with children aged 3–4 years (B cohort) were employed.

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[3] Although the respondent to the Wave 2.5 questionnaire could have been either parent, because the respondents were predominantly mothers (96% B cohort and 94% K cohort), these findings use the term "mother" throughout.
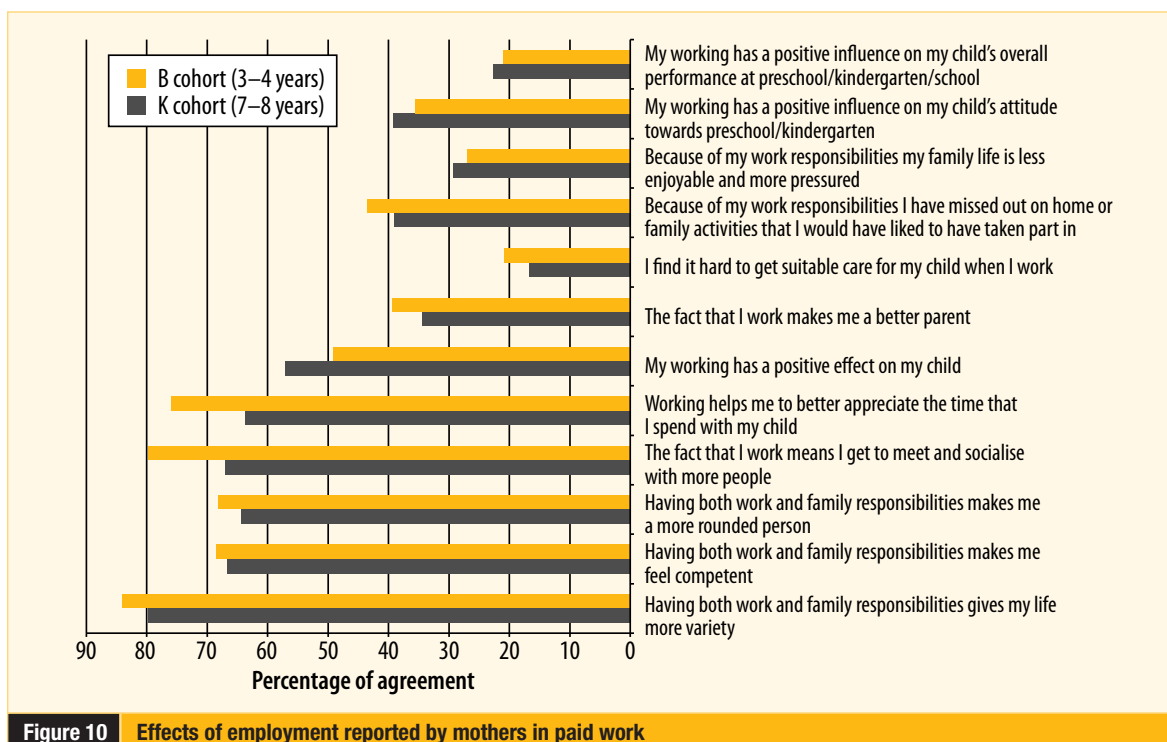
Figure 10 Effects of employment reported by mothers in paid work

For the effect of employment on self, most working mothers agreed that having work and family responsibilities gave their life more variety (80%), improved their competency (67%), and made them a more well-rounded person (64%). Two-thirds also agreed that the advantage of having a job was the opportunity to network and socialise with more people.

Most working mothers agreed that working helped them to appreciate the time that they spent with their children (64%) and that working had a positive effect on their children (57%). However, only one in three mothers (34%) agreed with the statement that working made them a better parent.

Some mothers indicated difficulties in finding child care, with 17% agreeing that organising suitable care for their child was difficult.

While most working mothers were positive about the impact of their work on self-development and parenting, there were concerns by some about the effect of employment on family life. Thirty-nine per cent of all working mothers agreed that they had missed out on home or family activities in which they would have liked to have taken part, and 29% perceived that their family time was less enjoyable and more pressured due to their work responsibilities.

Regarding the perceived effect of employment on children's schooling, 39% of all working mothers agreed with the statement that "my working has a positive influence on my child's attitude toward school", while 23% agreed that their work had a positive influence on their child's overall performance at school.

Only one in three mothers (34%) agreed with the statement that working made them a better parent.

Employed mothers in the K cohort were also asked to rate on a five-point scale, ranging from "never" to "always", the extent to which their work stopped them from participating in activities relating to the school community. Nearly two-thirds of all working mothers indicated that their work sometimes or more often prevented them from volunteering for (63%) and visiting (61%) their child's class activities.

Concerns around involvement with the school community also emerged. Mothers indicated that their employment stopped them (sometimes or more often) from attending a school event where their child participated (50%), communicating with other mothers (49%), taking their child to out-of-school activities (36%), and contacting class teachers about their child (26%).

Reasons for not working

In Wave 2.5, mothers in the B cohort who were not working were asked to indicate the reasons for not being in employment.

One of the reasons that 33% of mothers with no employment were not working was the high cost of child care.

A vast majority of mothers with no employment reported they were not working because they were taking care of their children (82%). Forty-two per cent of these not-employed mothers reported they were not working because their partner had sufficient earnings.

The financial return from work emerged as an issue for choosing not to work. One of the reasons that 33% of mothers with no employment were not working was the high cost of child care. Other important reasons were having another baby (30%) and a lack of flexible working arrangements (15%).

Plans about paid work and further study/training

In Wave 2.5, mothers in the B cohort who were not working were asked questions about their current and future plans for paid work, and all mothers were asked about further study/training.

When asked about plans for paid work, a minority of the mothers not in paid work reported that they wanted to work now (5%). Twenty-six per cent of mothers not already working wanted to work when their youngest child reached preschool, another 41% preferred to work when their youngest child reached primary school age, and 20% had no definite plans about being in paid work. These responses indicated that the reason the vast majority of mothers preferred not to work now may be attributed in part to concerns about caring responsibilities and balancing work and family.

A minority of the mothers not in paid work reported that they wanted to work now.

With respect to current activities outside the home, 10% of all mothers in the B cohort were undertaking study or training leading to a trade certificate, diploma, degree or other educational qualification, 3% were undertaking study or training not leading to a trade certificate and 16% were undertaking voluntary or community work.

Regarding plans about further study or training, 9% of all mothers in the B cohort indicated they would undertake further study in the next year, and another 17% within the next two or three years. The remaining three-quarters (74%) had no definite plans for furthering their education.

Recent reforms to the family law system and Child Support Scheme reflect and promote a major cultural change in relation to parenting after separation. Key themes of the reform package focus on the indissolubility of parenthood and emphasise:

■ joint financial responsibility for children after separation;

■ children spending substantial time with each parent where possible;

■ shared decision-making by parents; and

■ assisting separated parents to improve their communication about childrearing and to reduce conflict.

This article describes the distribution of separated families from *Growing Up in Australia*[4] on each of these four themes, followed by an analysis of the extent of change experienced by families within the period of two years, as well as using cross-sectional data from each wave. These analyses show that the arrangements of separated families is not static. There is a high level of instability over time in the arrangement of separated families for each of the four themes.

Joint financial responsibility

The theme of joint financial responsibility is captured by examining whether non-resident parents had paid their child support in the last month. The proportion of non-resident parents paying child support was approximately the same in 2004 (Wave 1) and 2006 (Wave 2), with over 60% of resident parents reporting that they received the full child support amount, and one-quarter reporting not receiving any of the expected child support amount in the month preceding the survey (see Figure 11).

However, analysis of individual cases found that only two-thirds of cases remained in the same compliance category (full, partial, no compliance) over the two-year period. The most stable group appeared to be the group with full compliance in Wave 1, with 74% remaining fully compliant and 14% moving to partial compliance in Wave 2 (see Table 4). Of the partial compliance cases in Wave 1, more than half (53%) moved to full compliance in Wave 2. The trend among null compliance cases in Wave 1 was not so positive, with the majority (56%) remaining in the null compliance category two years later.

The proportion of non-resident parents paying child support was approximately the same in 2004 and 2006.

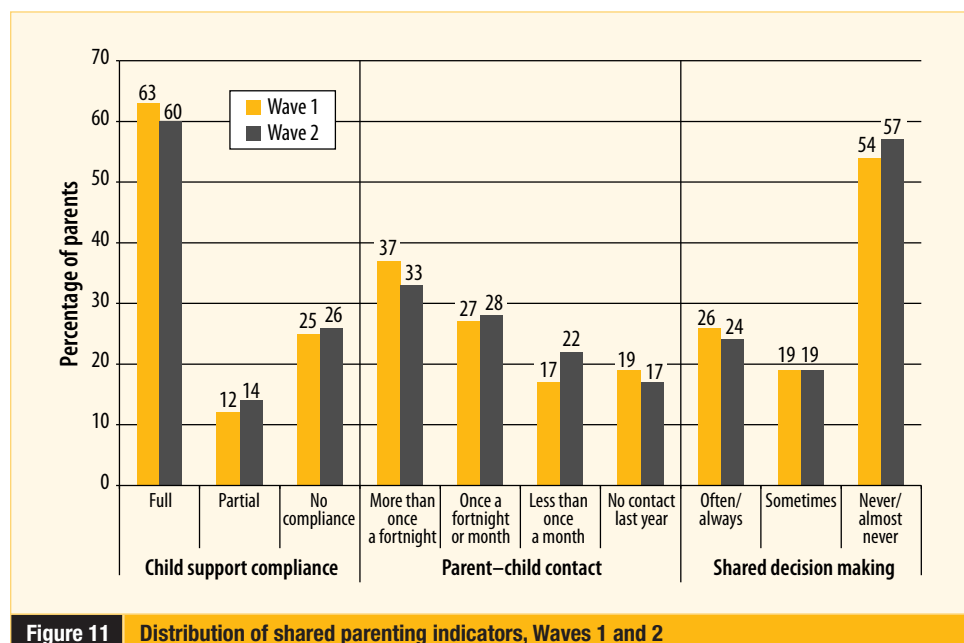| Table 4	Distribution of Wave 1 child support compliance in Wave 2			
Wave 1	**Wave 2**			**Total % (*n* = 589)**
	Full (%)	**Partial (%)**	**No compliance (%)**	
Full	74.3	13.5	12.2	100.0
Partial	52.7	27.0	20.3	100.0
No compliance	38.7	5.3	56.1	100.0

Note: Components may not total 100% due to rounding.
Source: LSAC, Wave 1 (2004) and Wave 2 (2006)

[4] The sample included those children (K cohort at Wave 1) who had one of their parents living elsewhere in both waves (*n* = 523 families).

Figure 11 Distribution of shared parenting indicators, Waves 1 and 2

Parent–child contact

In terms of parent–child contact over the preceding 12 months, approximately one-third of children saw their non-resident parent more than once a fortnight (37% in Wave 1 and 33% in Wave 2). Another quarter of the children (27% in Wave 1 and 28% in Wave 2) saw their non-resident parent once a fortnight or a month, while in both waves just under 20% of children had not seen their non-resident parent in the last 12 months (see Figure 11).

For two-thirds of children, the frequency of contact did not change from Wave 1 to 2.

For two-thirds of children, the frequency of contact did not change from Wave 1 to 2. For those children experiencing a change in the frequency of visits, a higher proportion (20%) reported a decline in visits compared to those reporting an increase (14%). This less frequent contact was not balanced by longer visits, as average contact hours within each category changed very little between the waves, indicating a decline in the extent of contact with non-resident parent over the two years.

Shared decision making

Along with joint financial responsibility and contact with both parents, the *Family Law Amendment Act 2006* encourages shared parental responsibility and requires that parents consult with one another before making decisions about major issues in their child's life. In our sample, in both waves, about one-quarter of resident parents reported often or always asking the child's other parent for his/her views when making major decisions about the child, while more than half of parents reported never or almost never asking the other parent's view (see Figure 11).

For 67% of parents, the level of consultation about major decisions remained the same over both waves. The most stable group appeared to be those parents who never or rarely involved the non-resident parent in their decision making in Wave 1, with 81% also not involving the other parent in Wave 2 (see Table 5). Conversely, the group that reported high consultation with the other parent in Wave 1 did not remain so stable. Only 51% reported the same level of consultation in Wave 2, and 40% dropped from often/always to never/rarely involving the other parent.

Table 5	Distribution of Wave 1 child support compliance in Wave 2			
Wave 1	**Wave 2**			
	Never/rarely (%)	**Sometimes (%)**	**Often/always (%)**	**Total % ($n = 589$)**
Never/rarely	81.1	6.7	12.2	100.0
Sometimes	53.6	11.9	34.5	100.0
Often/always	39.6	9.9	50.5	100.0

Source: LSAC, Wave 1 (2004) and Wave 2 (2006)

Parental conflict

Another closely related factor that influences parent–child contact is parental conflict. Consistent with earlier findings, the level of parental conflict[5] reported by the resident parent in the study fell between the two waves. Of those resident parents who had contact with the other parent, the proportion reporting medium or high conflict decreased from 40% and 16% respectively in Wave 1 to 38% and 14% in Wave 2. Conversely, the proportion of parents reporting low conflict increased from 44% in Wave 1 to 49% in Wave 2.

The level of parental conflict reported by the resident parent in the study fell between the two waves.

However, reduced conflict is not always evidence of an improved relationship between parents. It may indicate lack of contact. This research found an increase in the level of disengagement between separated parents over the two years, particularly among parents with high conflict. Nearly 10% of resident parents reported that they ceased contact with the other parent between waves, while less than 4% reported that contact resumed in the same period. In terms of the composition of parents moving to no contact, high-conflict parents in Wave 1 (12%) were twice as likely as low-conflict parents (6%) to cease contact with the other parent by Wave 2 (see Table 6).

Table 6	Distribution of Wave 1 parental conflict in Wave 2				
Wave 1	**Wave 2**				
	No contact (%)	**Low (%)**	**Medium (%)**	**High (%)**	**Total % ($n = 361$)**
No contact	76.4	14.3	5.1	4.2	100.0
Low	5.7	65.0	25.5	3.8	100.0
Medium	11.8	34.6	41.2	12.4	100.0
High	12.4	11.3	41.8	34.5	100.0

Source: LSAC, Wave 1 (2004) and Wave 2 (2006)

[5] A composite measure of parental conflict (if parents had any contact in the last 12 months) was constructed from the three variables of: how well parents get along with each other, how often they disagree about basic childrearing issues, and how often there is anger between them. The Cronbach's α value of .78 indicated an adequate degree of internal consistency for this scale.

This section examines the nature of parental involvement in children's education in the early years of school, using Wave 2 data for the K cohort from *Growing Up in Australia*. At the time of the Wave 2 data collection in 2006, these children were in either Year 1 or 2 at school. The analyses consider the expectations that parents hold for their children's education, the level of responsiveness that parents believe schools and teachers have for their needs, the level of involvement of parents in the education of their children as perceived by teachers, and the nature and level of contact that parents have with their child's school and teachers in the early years of school. The analyses were restricted to families for whom there were teacher data available (*n* = 3,380).

Engaging families in the education of their children at home and at school is increasingly viewed as an important means to support better learning outcomes for children. When schools and families work together, children have higher achievement in school and stay in school longer. Although there is considerable research on how parents influence children's development, less is known about the specific ways in which parents socialise their children in terms of school-related behaviours. While extensive research indicates there are important links between parenting and children's academic and behavioural competence at school, there is less research on "academic socialisation", which is conceptualised as the variety of parental beliefs and behaviours that influence children's school-related development.

Engaging families in the education of their children at home and at school is increasingly viewed as an important means to support better learning outcomes for children.

What expectations do parents hold for their children's future education?

The primary parents (97% of whom were mothers) were asked a single question on how far they would like their child to go in their education. This has proved to be an important predictor of children's achievement over time. Parents responded to the question: "Looking ahead, how far do you think [child] will go in his/her education?" The response options for this question were: obtain postgraduate qualifications at a university, go to university and complete a degree, complete a trade or vocational training course, complete secondary school, and leave school before finishing secondary school.

About four in five parents expected that their children would obtain some form of post-secondary qualification.

Most parents (95%) expected their child would complete their secondary schooling and 79% of parents expected that their children would obtain some form of post-secondary qualification (e.g., university degree or vocational course). The responses on this question are represented in Figure 12.
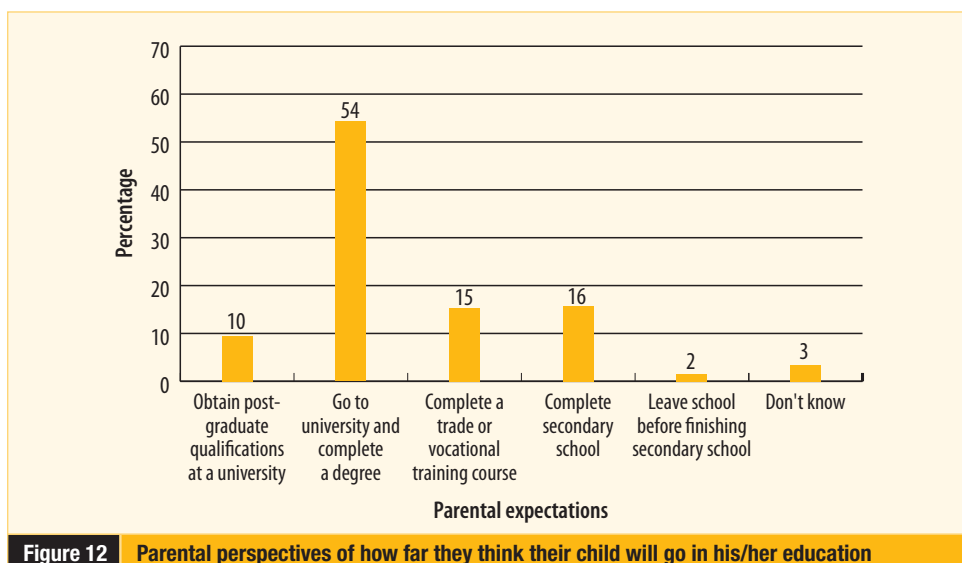
Figure 12   Parental perspectives of how far they think their child will go in his/her education

How do parents perceive the responsiveness of schools to their needs?

Parents responded to five questions on a scale rating the responsiveness of schools to their needs. The items are rated on a 4-point scale (very well, well, just okay, not done at all). The percentage responses for each item are presented in Figure 13. Parents thought schools were doing well or very well at making them aware of chances to be involved and take part in school activities (87%), as well as letting them know about their child's progress in class (77%).

Parents thought schools were doing well or very well at making them aware of chances to be involved in school activities.
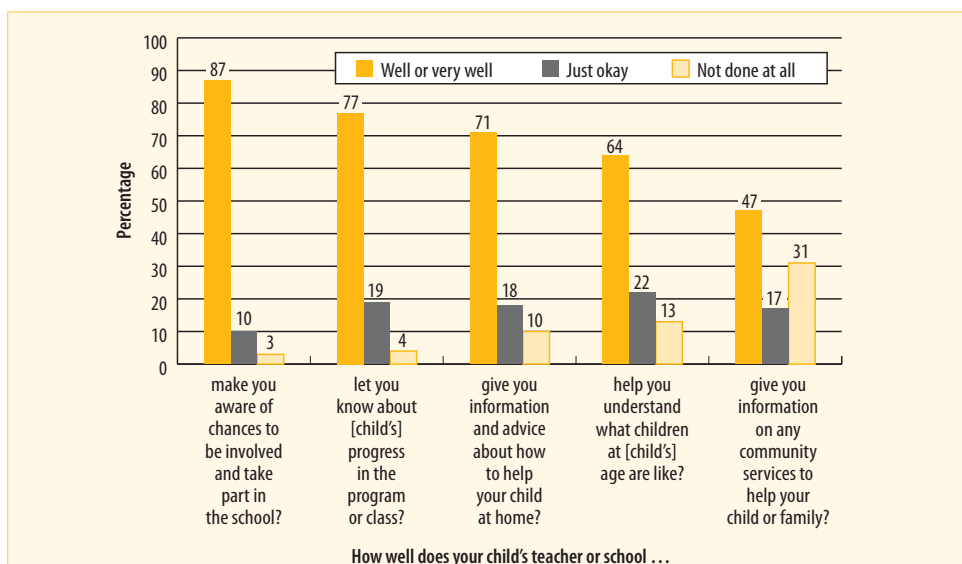
Figure 13   Parental reports of the responsiveness of schools to their needs

How involved are parents in their child's education as perceived by teachers?

Teachers responded to a question that asked for their global judgement on the question: "In your opinion, how involved are this child's parents in her/his learning and education?" Response options were: very involved, somewhat involved, and not involved. Teachers reported that 60% of parents were very involved in their children's education and 37% of parents were somewhat involved. Only 3% of parents were reported as not being involved.

What is the nature of the contact with the child's teacher and school that parents report?

Five items were used to assess parents' contact with their child's school program. A number of activities in which parents may have participated at their child's school were identified to which parents could give a yes/no response: "During this school term, have you: contacted child's teacher, visited child's class, talked to parents of other children at the school, attended a school event in which your child participated, volunteered in the classroom or helped with a class excursion". Engagement in three or more activities was indicated by 76% of parents. Percentages for these various activities are shown in Figure 14. Parents were most likely to have talked with other parents at the school (92%) or visited the child's classroom (87%) and least likely to have volunteered in the classroom or helped with a class excursion (48%).

Figure 14   **Parental reports of their involvement in their child's school program**
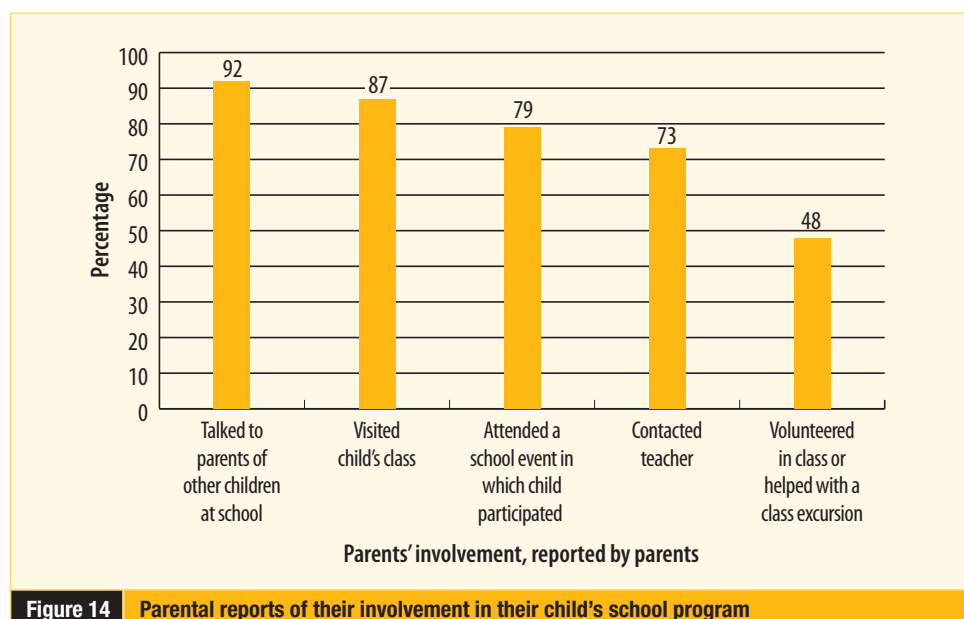
Summary

The findings of these analyses into parental involvement in their children's education indicate relatively high levels of parental engagement. This was evident by parental self-report and teacher report. In a global rating of engagement, teachers indicated that almost two-thirds of the parents were very involved in their children's education, although this still leaves a substantial proportion of parents who were not seen by teachers to be highly involved. Most parents also expected that their child would complete school, and four in five expected their child would complete post-secondary study (either a university degree or a vocational course).

Parents reported that schools were relatively responsive to family needs and supportive of family involvement. Schools were viewed by parents as doing very well in making them aware of opportunities to be involved in their child's schooling. The level of engagement in particular school-related activities, as reported by parents, indicated that parents most frequently talked with other parents at the school or visited the child's classroom.

It is early days in the school careers of these study children and it will be important to continue to track the level and nature of parental involvement with children's schooling over time. In the early years of school, there is likely to be higher involvement by parents. Much of the current research focuses on parental school involvement when children are in primary school. Parent involvement is known to decrease in secondary school, which may not necessarily reflect parents' wishes but may be influenced by changed structures in the delivery of secondary school programs, or that parents may believe that they cannot assist with more challenging secondary school subjects. However, it is unlikely that parents stop caring about or monitoring the academic progress of their children throughout their schooling. Thus, it remains important that *Growing Up in Australia* continues to track the impact of parent involvement on children's school achievement and adjustment.

Questions about the possible associations between young children's experience of non-parental child care and their socio-emotional development have intrigued researchers, parents and policy makers for decades. *Growing Up in Australia* is examining key factors in the home and external environment that influence children's socio-emotional development over the early years. Non-parental child care is a key environment for the vast majority of study children and their families.

In this report, Wave 2 data are used to investigate relationships between 2–3 year old children's attendance at child care and aspects of their socio-emotional development are examined for different types of child care and for care of differing levels of quality.

Experiences of non-parental child care

Just over 70% of 2–3 year old children were reported to be attending child care.

Just over 70% of 2–3 year old children were reported to be attending child care and the remaining 30% did not receive any regular non-parental child care. The most frequent child care situation for children was attendance at long day care centres or family day care homes, that is, settings that are classified as formal, government-accredited and/or regulated types of care (41%). A smaller number of children received care only from relatives, friends, sitters or a nanny (15%), which are classified as informal, non-accredited, unregulated types of care. Additionally, 13% attended a mix of formal and informal care settings each week.

Quality of care

Quality is conceptualised in the literature as encompassing the features of child care that are beneficial to children's wellbeing, learning and development. Broadly, these cover the structural features of the program (aspects that are partially governed by regulations, such as caregiver qualifications, group size and ratios of children to adults) and processes (the recurring patterns and interactions that occur between children, staff and parents). Structural features are seen as providing the underlying conditions to support process components of good quality, which include positive care-giving behaviour and child–caregiver interactions, as well as management features that affect staff commitment, satisfaction and stability.

Information on quality was collected at the level of the room or group where the study child spent most time. Mail-back questionnaires were completed by 1,676 caregivers, of whom 68% worked in centre-based child care settings, 12% were family day care providers, and 19% provided care in informal home-based settings. The majority of the informal caregivers were grandparents of the study children (14% of all caregivers in the sample).

Structural features of the program were described by demographic characteristics of the child's caregiver, including age, years of experience and level of educational achievement or qualification. Field of study was also collected for caregivers with post-

secondary qualifications. Group size was used as an indicator of quality. Smaller groups are felt to be particularly important for younger children, who need greater support from caregivers to manage their emotions and learn to use prosocial behaviour with peers.

Practice features of the program were described by two factors: *active engagement in play*, which included four items assessing carers' involvement with children in play, direct teaching and focused interaction; and *organisational focus*, which consisted of four items relating to routine care and organisational features of caregivers' work.

Socio-emotional development was measured via parents' and caregivers' ratings on a scale that assesses social competence and behaviour problems.

Comparisons of children receiving and not receiving regular non-parental child care

Initial analyses compared parent-reported social competence and behaviour problems for children attending or not attending regular non-parental child care. Results showed small but significant differences in ratings for the two groups. Children receiving regular child care were rated by their parents as being more socially competent and having fewer behaviour problems than children not receiving child care.

Further analyses compared four groups of children, according to the type of care received: formal care (long day care and family day care), informal care (relatives, nanny and friends), mixed formal and informal care, and not attending care. For social competence, higher ratings were reported for children receiving regular child care in mixed formal and informal settings compared to children who were not in child care. Fewer behaviour problems were reported for children receiving regular child care in informal settings or mixed formal and informal care settings than for children who did not attend child care. A further difference was noted within the group of children receiving regular child care: behaviour problems were higher for children attending formal care settings and lower for children attending mixed formal and informal care.

Children receiving regular child care were rated by their parents as being more socially competent and having fewer behaviour problems.

Group size

Analysis showed that carer ratings of social competence were higher when children were cared for in smaller groups. Carer-rated behaviour problems did not appear to be related to group size. Parent-rated behaviour problems differed across the categories of group size, but did not show significant between-group differences in post hoc analyses.

Caregiver practices

Carer ratings of their own practices (active engagement in play, organisational focus) provided a further indicator of child care quality. As carers reported spending more time in active engagement with the children, both parent-rated scores and carer-rated scores for social competence increased.

Carer ratings of social competence were higher when children were cared for in smaller groups.

In contrast, but also supporting the importance of quality for positive socio-emotional development, when carers reported spending more time on the organisational aspects of their work, ratings of behaviour problems increased. Parent ratings of the child's behaviour problems or competence were not associated with this aspect of care quality.

Summary

Results for the *Growing Up in Australia* children as a whole showed minimal differences in socio-emotional development between the groups of children receiving and not receiving child care. Although achieving significance, effect sizes were very small. Nonetheless, the direction of the findings suggest that child care had a positive rather than a negative effect on children's social and emotional wellbeing. Children who attended child care were rated by their parents as being more socially competent and having fewer behaviour problems than children who did not attend regular child care.

Within the overall category of "receiving regular non-parental child care", the more optimal ratings were received by the group of children receiving a mixture of formal and informal care. In relation to behaviour problems, lower scores were noted for children in informal or mixed formal/informal arrangements, suggesting that one-to-one or family care from a close relative or familiar adult may be protective against problems of emotional dysregulation, anxiety and aggression.

Reports by parents and carers linked more child-focused practice by carers with higher ratings for social relatedness and overall social competence. Additionally, and for carers' ratings only, social competence was higher when group size was smaller, and behaviour problems were higher when carers were more involved with the organisational aspects of providing care.

These findings are in keeping with reports from a growing field of international research studies linking higher quality care with more positive socio-emotional outcomes for children. What is different, however, in the present study is the reliance on caregiver self-report for computing an estimate of quality. By asking caregivers to estimate the proportional amounts of time they spend in various activities during their child care day, *Growing Up in Australia* gives emphasis to what carers do rather than using external criteria to assess levels of quality.

In summary, accumulated evidence from international studies, and now from Australia, underlines the key role that child care quality plays in ensuring young children's positive socio-emotional development. Findings from this study show the importance of what caregivers do in explaining the links between child care quality and enhanced positive as well as reduced negative behaviours in a large sample of 2–3 year old children. Clearly, quality is a feature of child care that cannot be underestimated or remain unquestioned when child care providers seek to elucidate and act on research in their practice. Attention must be given to the time that caregivers are actively engaged with the children in their care, and the ways that services can value and support this critical aspect to ensure that quality care is provided.

Findings suggest that child care had a positive rather than a negative effect on children's social and emotional wellbeing.

Growing Up in Australia *gives emphasis to what carers do rather than using external criteria to assess levels of quality.*

Long work hours and fathering

This paper uses the Wave 1 (2004) data from *Growing Up in Australia* for the 4–5 year old children to examine whether fathers who work longer hours are less involved as parents, either when measured as a) being involved with their child's activities, or b) having a cooperative relationship with the child's mother. Couple families only are considered, where the mother and father (not necessarily biological) are the primary carers of the child.

To analyse the effects of working long hours, employed fathers' usual work hours were categorised as 1–34 hours, 35–44 hours, 45–54 hours and 55 hours or more. In the majority (87%) of couple families with a 4–5 year old, the father was employed full-time (35 hours per week or more). A considerable proportion of these fathers (24%) worked 55 hours or more per week. Just 7% of fathers were not employed and 6% were employed part-time.

The full paper considers other aspects of fathering, notably that of being a "breadwinner" and income earner.

Fathers' activities with children

Fathers' involvement in children's activities was analysed by looking at how often they reported doing the following activities with their child: reading to the child from a book, playing with toys or games indoors (like board or card games) and playing a game outdoors or exercising together (like walking, swimming or cycling). It also includes fathers' involvement with children in everyday activities at home (such as cooking or pet care). Fathers were asked on how many days, over the previous week, they had undertaken these activities with their child. Possible responses were none, 1–2 days, 3–5 days and 6–7 days, and averages were calculated using the mid-points of these response categories.

Figure 15 shows that the majority of fathers, at some time in the week, were involved in reading to their child, playing indoor or outdoor games with them and involving them in daily activities. However, they were most likely to do this on only one or two days a week, with a substantial minority (14–24%) not doing these activities with their child at all. Only 6–12% undertook these activities on 6 or 7 days a week.

Averaging these data, fathers who worked 55 hours or more per week spent the least amount of time playing indoor games, playing outdoor games and involving children in everyday activities (Figure 16). They spent less time than other full-time employed fathers reading to their child. There was virtually no difference between fathers working 35–44 hours and those working 45–54 hours in the frequency of participation in any of the activities. On average, fathers who were not employed spent more time in all activities investigated except reading from a book.

While Figure 16 shows some lower involvement of fathers who work longer hours, the differences by hours were not considerable. For example, the average number of days

The majority of fathers were involved in reading to their child, playing indoor or outdoor games with them and involving them in daily activities.

There was some lower involvement of fathers who work longer hours, but the differences by hours were not considerable.

that fathers were involved with their children in everyday activities varied from 2.5 days a week for those working 35–44 hours per week, to 2.3 days a week for those working 55 hours or more. There was a small difference in the distribution as well: among fathers working 35–44 hours per week, 20% reported no involvement with children in everyday activities at all (compared to 25% of fathers working 55 hours or more), and 12% were involved in activities with their child on 6 or 7 days per week (compared with 10% of those working 55 hours or more).

Figure 15 Fathers' involvement with children's activities over a one-week period, couple families with 4–5 year old children

Note: Bars indicate 95% confidence intervals.

Figure 16 Average frequency of father-child activities, by fathers' working hours, couple families with 4–5 year old children
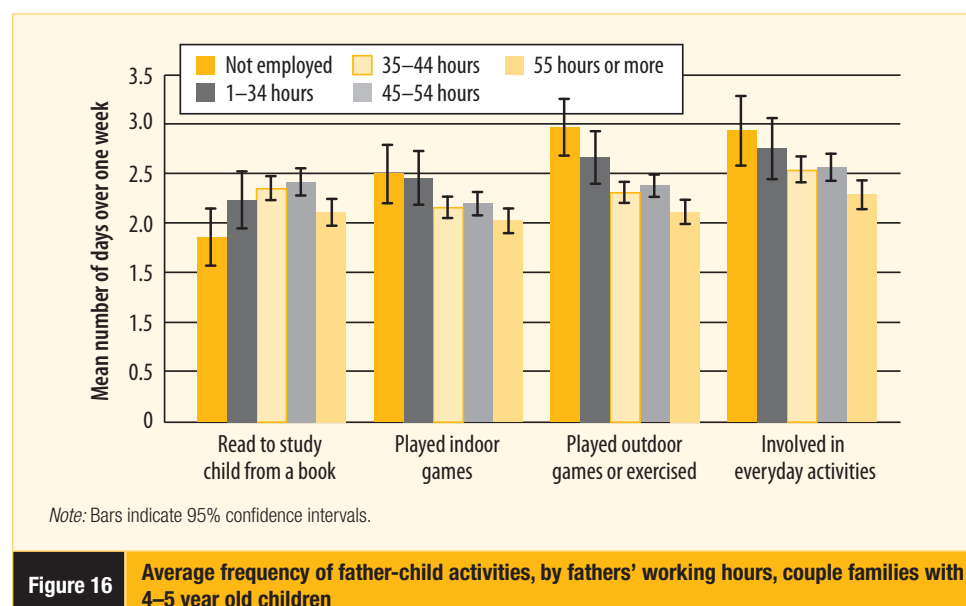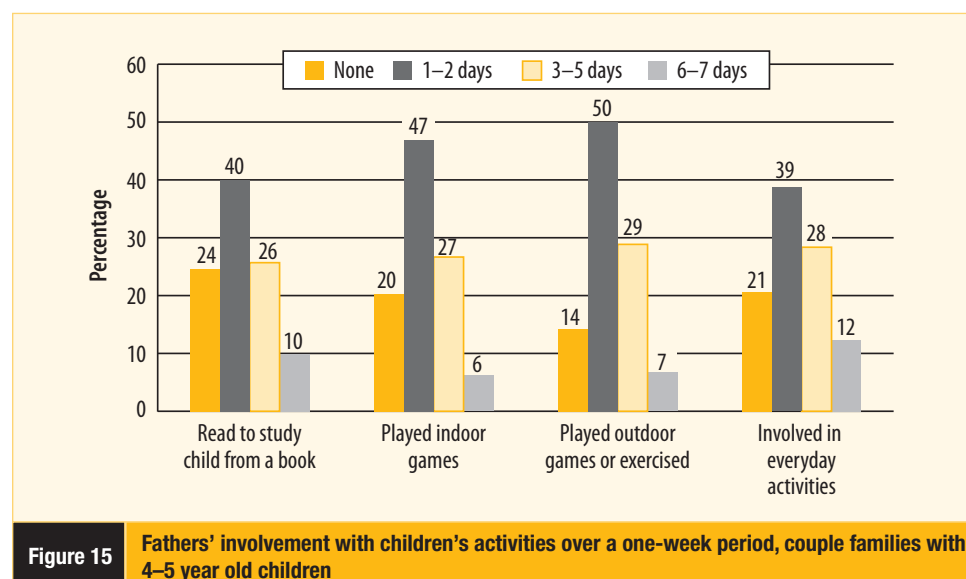
Thus, even among fathers working shorter full-time hours, some are not regularly involved with their child's activities; and among those working longer full-time hours, some fathers have relatively high levels of involvement. Other characteristics of fathers are likely to explain some of this variation.

Providing support to mothers

Relationships between fathers and their children do not exist in isolation from relationships with other family members, especially mothers. The extent to which mothers and fathers encourage and support each other as parents is an important aspect of parenting. The support that either parent gives to the other could include providing emotional support, having a greater involvement in or taking more responsibility for child care tasks, or providing financial support. What form this support takes within families may differ for mothers and fathers, and for families with different employment arrangements.

Two related questions were asked of mothers and fathers: "How often are *you* a resource or support to your partner in raising your children?" and "How often is *your partner* a resource or support to you in raising your children?" Responses to these questions are compared and shown in Table 7. First, looking at the extent to which fathers were a support to mothers in childrearing (the second and third columns), fathers were less positive about the support they provided than mothers were about the support they received. Just 35% of fathers thought they were always a support to the mother in childrearing, while 59% of mothers thought the father was always a support. Looking then at how mothers supported the fathers (the final two columns), mothers and fathers had similar perceptions of the degree to which mothers were a resource or support—some 78% of mothers and fathers said that the mother was always a support to the father in childrearing.

Fathers were less positive about the support they provided than mothers were about the support they received.

Table 7	Frequency of being a resource or support to partner in childrearing, couple families with 4–5 year old children			
	Father is a resource to mother		Mother is a resource to father	
	Father's response (%)	Mother's response (%)	Mother's response (%)	Father's response (%)
Never	0.2	0.6	0.4	0.2
Rarely	2.0	2.0	0.5	0.5
Sometimes	18.9	10.4	2.5	2.7
Often	43.9	28.0	19.1	18.2
Always	35.0	59.1	77.6	78.4
No. of observations	**3,506**	**3,508**	**3,228**	**3,234**

Note: Percentages may not total 100% due to rounding.

Time use studies consistently show that mothers do more household and childrearing work than do fathers, regardless of either parent's employment status. While this dataset did not collect information on the actual amount of childrearing done by either parent, it did ask both parents whether they believed that they did more or less than their fair share—"Do you think that you do your fair share of the childrearing tasks (both physical and emotional care)?". This measure alone is not likely to reflect the

relative amounts of actual time spent doing childrearing tasks, as men's and women's responses to questions of fairness tend to be answered in contexts of different gender role attitudes.
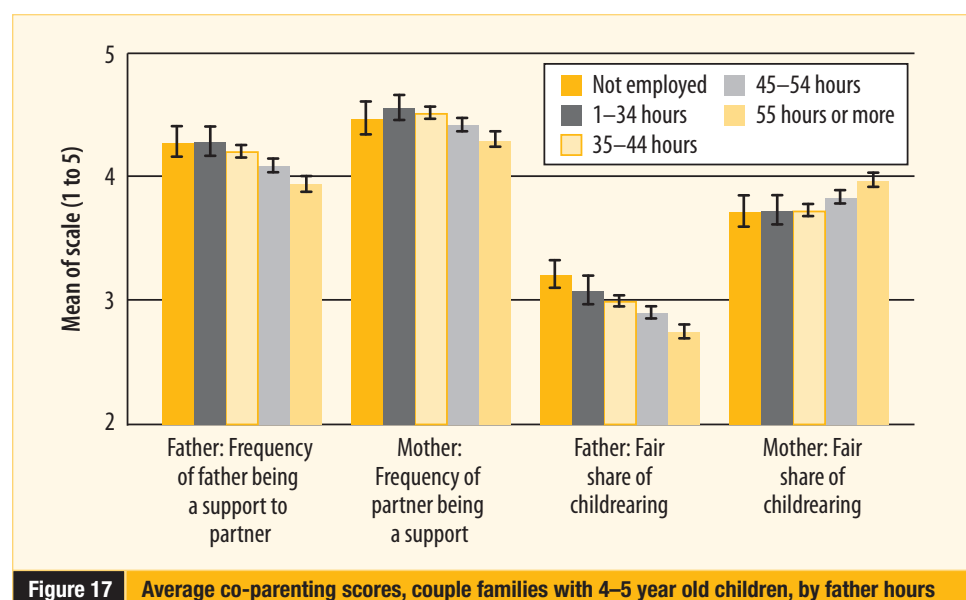
Mothers were more likely than fathers to say they did at least their fair share of childrearing, with 60% of mothers and 12% of fathers saying they did more or much more than their fair share (Table 8). Fathers, on the other hand, were more likely than mothers to say they did less or much less than their fair share (20% compared to 1%), although two-thirds of fathers thought they did their fair share.

Table 8	Perceived fairness of share of childrearing tasks, couple families with 4–5 year old children	
	Father's response (%)	Mother's response (%)
I do much less than my fair share	1.5	0.3
I do less than my fair share	19.6	0.4
I do my fair share	66.4	39.7
I do more than my fair share	9.6	37.0
I do much more than my fair share	2.8	22.6
No. of observations	**3,232**	**3,512**

Note: Percentages may not total 100% due to rounding.

To look at relationships between fathers' working hours and co-parenting, responses to four questions were analysed: perceived level of support they give to their partner and the perceived fairness of childrearing tasks, as reported by fathers and mothers. For perceived support, a rating of 1 indicated low support and a rating of 5 high support, and for fairness of child-rearing tasks, 1 indicated much less than fair share and 5 indicated much more. The average rating was then calculated for each working hours category.

| Figure 17 | Average co-parenting scores, couple families with 4–5 year old children, by father hours |

The more hours fathers worked, the less childrearing support they gave to their partner (Figure 17), according to both fathers' and mothers' reports. Also, fathers who worked longer hours were more likely to report doing less than their fair share of childrearing tasks. Conversely, mothers reported doing more than their fair share of childrearing when fathers worked longer hours. Again, though, the differences were not large, with a difference of less than half a point between the average score of those working standard (35–44) hours and those working longer hours (55 hours or more).

While there were some differences in these co-parenting measures according to fathers' work hours, as with the fathers' involvement in activities, there was also considerable variation within each of the groups. Even among those working the longest hours, there were fathers who rated themselves (and were rated by the mother) highly on the support given to the mother. According to the fathers, of those working 55 hours or more, 27% were always a support to the mother, and according to the mothers, 51% were always a support. About two-thirds of these men also thought that they did at least their share of the childrearing. The mothers were somewhat less likely to agree, with 70% saying they did more than their fair share of the childrearing, but this left 30% who thought the sharing of childrearing tasks was fair.

Summary

In summary, small but significant associations were found between fathers working longer hours and both their involvement with children and co-parenting. Working longer hours reduced fathers' involvement with their children, and reduced the provision of support to their partner and the sharing of childrearing responsibilities.

Despite the significant effects, the differences among full-time employed fathers were quite small. Even among those working fairly standard hours, there were some fathers who were less involved in their children's activities and less supportive as a co-parent. Further, among those who had more employment-related constraints on their time, there were fathers who were heavily involved in their children's activities and supportive as a co-parent. It appears that some fathers ensured their family time was not compromised by their work demands, even if those work demands were significant.

There are clearly other factors that differentiate fathers according to the amount of time they spend with their children, what they do with that time, and to what extent they share in the parenting tasks and responsibilities. In addition to those differences relating to skills, motivations and supports, differences are also likely to exist within different cultural and social groups. Other aspects of employment, in addition to hours worked, might also have an association with father involvement. For example, fathers in jobs that are more stressful might have reduced father involvement. Fathering is, however, complex and multifaceted and there may be aspects of fathering other than those covered here that are more affected by working longer hours.

Even among those working the longest hours, there were fathers who rated themselves (and were rated by the mother) highly on the support given to the mother.

It appears that some fathers ensured their family time was not compromised by their work demands, even if those work demands were significant.

The inaugural *Growing Up in Australia:* The Longitudinal Study of Australian Children Research Conference was held in Melbourne on 3–4 December 2007. The aim of the conference was to highlight the potential of the data and provide a forum for the discussion of research emanating from the first two waves of data.

The longitudinal study of Australian children

The conference featured two keynote addresses: the first from Lyndall Strazdins, titled "Can we make jobs really family friendly?" (co-authored with Megan Shipley); and the second from Stephen Zubrick, titled "Parenting quality and the developmental status of young Australian children: Contexts and pathways" (co-authored with Ann Sanson, Jan Nicholson and Grant Smith).

More than 30 papers, covering a wide range of themes, were presented over the two days of the conference. There were presentations on:

- *children's health outcomes*, such as obesity, sleep problems;
- *children's development and adjustment*, such as temperament style, behaviour problems;
- *learning and school progress*, such as literacy and numeracy skills;
- *family dynamics*, such as parenting style, marital relationships;
- *family separation and child support*, such as non-resident parents' contact with children, child support arrangements;
- *family income and employment*, such as maternity leave, family financial wellbeing;
- *child care*, such as types, quantity and quality; and
- *broader environmental influences*, such as neighbourhoods.

The conference concluded with a panel discussion on future directions for the study.

The conference enjoyed extensive media coverage, before, during and following the event and feedback from delegates was universally positive.

A data training workshop was held on the day following the conference. The focus of the training was to assist users of the study data, those considering becoming users, or those who wished to learn more about the data to gain confidence in understanding and navigating the datasets. The training covered a range of topics designed to give a comprehensive overview of the conduct of the study, its datasets and supporting documentation.

The full conference program and many of the papers are available for download at www.aifs.gov.au/growingup/conf/conference2007-program.pdf

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At the end of June 2008, there were 124 registered users of Wave 2 data, and the total number of LSAC data users had reached 236.

Thirty-one per cent of the users are in Victoria and 28% are from the Australian Capital Territory. A further 22% are from New South Wales, with small numbers from Queensland, South Australia and Western Australia.

An analysis of the research topics proposed by the data users indicates a predominance of health-related matters, particularly obesity, followed by work and family issues. However, the research interests do cover all of the other domains that the study was established to address, including parenting, child care, disadvantage, family functioning, cognitive and behavioural development, and social capital.

Growing Up in Australia website

The *Growing Up in Australia* website was established in March 2002. There has been a considerable increase in the number of site visits during the last three years (Table 9). This table also shows the number of publications downloaded from the website. There is continued strong interest in the Discussion Paper series and quarterly newsletters.

Subscriber numbers to the *Growing Up in Australia* email alert group (*growingup-refgroup*) totalled 412 at 30 June 2008, an increase of 12% over the year.

Table 9	Website visits				
	Release date	**2004–05**	**2005–06**	**2006–07**	**2007–08**
Total site visits		57,227	85,966	107,890	155,144
All publications		14,860	19,664	37,387	51,501
2004 Annual Report	24 May 2005	501	10,831	9,024	5,183
2005–06 Annual Report	11 December 2006			8,026	4,817
2006–07 Annual Report	19 June 2008				2,938
Discussion Paper 1	27 March 2002	3,002	17,844	15,198	4,927
Discussion Paper 2	22 September 2003	1,483	1,721	2,987	2,830
Discussion Paper 3	3 May 2004	10,317	10,389	9,471	9,104
Discussion Paper 5	28 June 2007			196	2,182
Technical Paper 1	26 September 2005		2,521	3,401	4,702
Technical Paper 2	11 January 2006		2,322	1,960	1,945
Technical Paper 3	25 May 2006		103	1,351	1,188
Technical Paper 4	July 2007				1,896
Technical Paper 5	October 2007				671
Newsletters		7,928	8,257	12,431	18,589
Data dictionary	30 May 2005	150	2,237	2,625	1,931

Publications

Baxter, J. (2008). When dad works long hours: How work hours are associated with fathering 4–5-year-old children. *Family Matters*, *77*, 60–69.

Baxter, J., & Alexander, M. (2008). Mother's work-to-family strain in single and couple parent families: The role of job characteristics and supports. *Australian Journal of Social Issues*, *43*(2), 195–214.

Baxter, J., Gray, M., Alexander, M., Strazdins, L., & Bittman, M. (2007). *Mothers and fathers with young children: Paid employment, caring and wellbeing* (Social Policy Research Paper No. 30). Canberra: Department of Families, Community Services and Indigenous Affairs.

Baxter, J., & Hayes, A. (2007). How four year olds spend their day: Insights into the caring contexts of young children. *Family Matters*, *76*, 34–43.

Berthelsen, D., & Walker, S. (2008). Parents' involvement in their children's education. *Family Matters*, *79*, 34–41.

Cooklin, A. R., Donath, S. M., & Amir, L. H. (2008). Maternal employment & breastfeeding: Results from the Longitudinal Study of Australian Children. *Acta Paediatrica*, *97*(5), 620–623.

Donath, S. M., & Amir, L. (2008). Maternal obesity and initiation and duration of breastfeeding: Data from the Longitudinal Study of Australian Children. *Maternal & Child Nutrition*, *4*, 163–170.

Emerson, E., & Llewellyn, G. (2008). The mental health of Australian mothers and fathers of young children at risk of disability. *Australian & New Zealand Journal of Public Health*, *32*(1), 53–59.

Gray, M., Baxter, J., & Alexander, M. (2008). Parent-only care: A child care choice for working couple families? *Family Matters*, *79*, 42–49.

Gray, M., & Smart, D. (2008). *Growing Up in Australia:* The Longitudinal Study of Australian Children is now walking and talking. *Family Matters*, *79*, 5–13.

Harrison, L. (2008). Does child care quality matter? Associations between social-emotional development and non-parental child care in a representative sample of Australian children. *Family Matters*, *79*, 14–25.

Leigh, A., & Gong, X. (2008). *Estimating cognitive gaps between Indigenous & non-Indigenous Australians* (CEPR Discussion Papers No. 578). Canberra: Centre for Economic Policy Research, Australian National University.

Losoncz, I. (2008). Shared parental responsibility: Stability of arrangements among separated Australian families of young children across two years. *Family Matters*, *79*, 26–33.

Smart, D., & Sanson, A. (2008). Do Australian children have more problems today than twenty years ago? *Family Matters*, *79*, 50–57.

Soloff, C., Sanson, A., Wake, M., & Harrison, L. (2007). Enhancing longitudinal studies by linkage to national databases: *Growing Up in Australia:* The Longitudinal Study of Australian Children. *International Journal of Social Research Methodology*, *10*(5), 349–363.

Strazdins, L., Shipley, M., & Broom, D. (2007). What does family-friendly really mean? Wellbeing, time, and the quality of parents' jobs. *Australian Bulletin of Labour*, *33*(2), 202–225.

Wake, M., Nicholson, J. M., Hardy, P., & Smith, K. (2007). Preschooler obesity and parenting styles of mothers and fathers: National population study. *Pediatrics*, *120*(6), 1520–1527.

Whitehouse, G., Baird, M., & Charlesworth, S. (2008). *Submission to the Productivity Commission Inquiry into Paid Maternity, Paternity and Parental Leave*.

Whitehouse, G., Baird, M., Diamond, C., & Soloff, C. (2007). Parental leave in Australia: Beyond the statistical gap. *Journal of Industrial Relations*, *49*(1), 103–112.

Whitehouse, G., Diamond, C., & Baird, M. (2007). Fatherhood and the use of leave in Australia. *Community, Work & Family*, *10*(4), 387–407.

Zubrick, S., Smith, G. J., Nicholson, J. M., Sanson, A. V., & Jackiewicz, T. A. (2008). *Parenting and families in Australia* (Social Policy Research Paper No. 34). Canberra: Department of Families, Housing, Community Services and Indigenous Affairs.

Technical papers

Baxter, J. (2007). *Children's time use in the Longitudinal Study of Australian Children: Data quality and analytical issues in the 4-year cohort* (Technical Paper No. 4). Melbourne: Australian Institute of Family Studies

Baxter, J., Gray, M., Alexander, M., Strazdins, L., & Bittman, M. (2007). *Mothers and fathers with young children: Paid employment, caring and wellbeing* (Social Policy Research Paper No. 30). Canberra: Department of Families, Community Services and Indigenous Affairs.

Misson, S., & Sipthorpe, M. (2007). *Wave 2 weighting and non-response* (Technical Paper No. 5). Melbourne: Australian Institute of Family Studies.

Conference presentations

Baxter, J., & Alexander, M. (2007, July). *Mothers' work–family strain in single and couple parent families: The role of job characteristics and supports*. Paper presented at the 10th Australian Social Policy Conference, Sydney.

Baxter, J., & Gray, M. (2008, June). *Parents who don't use child care: Who provides the care in working couple families with infants?* Paper presented at the 17th annual conference of the International Association for Feminist Economics, Torino, Italy.

Baxter, J., Gray, M., & Alexander, M. (2007, December). *Working families' use of child care*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Baxter, J., & Hayes, A. (2007, July). *Days of their lives: Developmental implications and correlates of how four year olds spend their time*. Paper presented at the Australasian Human Development Association conference, University of New South Wales, Sydney.

Baxter, J., Qu, L., & Weston, R. (2007, December). *Family structure, quality of the co-parental relationship, post-separation parenting and children's socio-emotional wellbeing*. Paper

presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Berthelsen, D., & Walker, S. (2007, December). *Parent involvement and children's early learning competence in literacy and mathematical understanding and approaches to learning*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Bittman, M., & Brown, J. (2007, December). *Hyper-parenting? How scheduled activities affect children's language acquisition, schooling and mental health*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Bittman, M., & Brown, J. (2007, July). *New light on the overscheduled child controversy: Evidence on children's activities and children's outcomes from the Longitudinal Study of Australian Children*. Paper presented at the 10th Australian Social Policy Conference, Sydney.

Blakemore, T. (2007, December). *Profiling child care arrangements and outcomes over time: Analysis of three waves of data from "Growing Up in Australia" LSAC*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Bradbury, B. (2007, December). *Why do the children of young parents have poorer outcomes?* Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Bradbury, B. (2007, July). *Child outcomes and family socio-economic characteristics*. Presentation at the Social Policy Research Centre for the Department of Families, Community Services and Indigenous Affairs.

Brinkman, S., & Silburn, S. (2007, December). *AEDI concurrent and predictive validity*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Brown, J. (2007, July). *The influence of parental employment on how children spend their day*. Paper presented at the 10th Australian Social Policy Conference, Sydney.

Brown, J., Bittman, M., & Hine, D. (2007, December). *Time and money: Parental employment, income and developmental outcomes in four to five year old children*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Caldwell, T., Hutchison, D., & Rodgers, B. (2007, December). *Prevalence of alcohol misuse amongst parents of infants and young children*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Chen, J., & Qu, L. (2007, December). *Clusters of injuries and chronic health conditions and their changes between baseline and follow-up of the kindergarten cohort*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Chen, J., Ou, L., & Hillman, K. (2008, April). *Disentangling the complex causal pathways of health service utilizations between Indigenous and non-Indigenous infants in a large Australian representative cohort: From the 1M model to the 5M model*. Paper presented at the 2nd CRIAH Aboriginal Health Research Conference, "Strong Foundations, Strong Future", Sydney.

Craike, M. (2007, July). *The buffering effect of enjoyment and participation in leisure-time physical activity on the depression of mothers of infants*. Paper presented at the Leisure Studies Association Conference, Eastbourne, UK.

Donath, S., & Amir, L. (2007, December). *Maternal alcohol consumption and diet, and initiation and duration of breastfeeding*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Edwards, B., & Bromfield, L. (2007, July). *Neighbourhood influences on young children's emotional and behavioural problems and prosocial behavior: Evidence from an Australian national sample*. Paper presented at the 10th Australian Social Policy Conference, Sydney.

Edwards, B., Sawyer, M., & Pfeiffer, S. (2007, December). *Pathways of neighbourhood influences through the family: How do neighbourhood social processes influence young children's emotional and behavioural problems?* Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Emerson, E., Llewellyn, G., McCulloch, A., Hatton, C., Blacher, J., & Graham, H. (2007, December). *Child disability & parental well-being*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne, Australia.

Fiorini, M. (2007, December). *The effect of home computer use on children's cognitive and non-cognitive skills*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Gray, M., & Baxter, J. (2007, December). *The financial consequences of relationship breakdown and repartnering among families with young children*. Paper presented at the inaugural Longitudinal Survey of Australian Children Conference, Melbourne.

Gray, M., & Baxter, J. (2007, December). *The labour market and financial consequences of relationship breakdown and re-partnering for mothers with young children*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Gray, M., & Smart, D. (2007, December). *Overview of LSAC*. Paper presented at the inaugural Longitudinal Survey of Australian Children Conference, Melbourne.

Harrison, L., & McLeod, S. (2007, December). *Risk factors associated with speech and language impairment at 4–5 years of age*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Harrison, L. (2007, December). *The child care question: Is social-emotional development at age 2–3 years affected by children's experience of non-parental child care?* Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Hawkins, M., Sanson, A., & LSAC Outcome Index Working Group. (2007, December). *The structure and validation of an index of child development*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Hay, D. (2007, December). *One child in 33 is a twin or higher multiple: Using the LSAC data to identify the needs of multiple birth families*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Hiscock, H., Canterford, L., & Wake, M. (2007, December). *Infant sleep problems: Natural history and predictors*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Katz, I., & Redmond, G. (2007, December). *Why do rich children have better outcomes? An analysis of the LSAC "K" cohort.* Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Losoncz, I., & Talevich, C. (2007, December). *Factors influencing compliance with child support obligation.* Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Nicholson, J., Zubrick, S., Smith, G., & Sanson, A. (2007, December). *The role of non-resident parents in the lives of their infants and 4-year old children: Contact, contributions, conflict and children's outcomes.* Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Ou, L., Chen, J., & Hillman, K. (2008, April). *The comparison of health service utilisations between Indigenous and non-Indigenous infants in a large Australian representative cohort.* Paper presented at the 2nd CRIAH Aboriginal Health Research Conference, "Strong Foundations, Strong Future", Sydney.

Rothman, S., Ainley, J., & Hillman, K. (2007, December). *The measurement of determinants of growth in receptive vocabulary.* Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Shields, M., Johnston, D., & Shah, M. (2007, December). *Nature's experiment? Handedness, child time use and early childhood development.* Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Smart, D., & Sanson, A. (2007, December). *Do today's Australian children have more problems than they did twenty years ago?* Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Smith, J., & Baxter, J. (2007, December). *Breastfeeding, infants' and mothers' time use: A comparison of the Longitudinal Study of Australian Children (LSAC) and Time Use Survey of New Mothers (TUSNM).* Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Smith, K., Wake, M., & Nicholson, J. (2007, December). *Do parenting styles of mothers and fathers influence prevalence and progression of obesity from the preschool to school years?* Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Soloff, C. (2007, July). *The Longitudinal Study of Australian Children: Latest information.* Paper presented at the 10th Australian Social Policy Conference, Sydney.

Soloff, C. (2007, October). *Breastfeeding and children's outcomes.* Paper presented to the Child, Adolescent and Family Health Conference, Noosa, Australia.

Soloff, C. (2007, July). *An update on* Growing Up in Australia: *The Longitudinal Study of Australian Children.* Paper presented at the 15th Biennial Conference of the Australasian Human Development Conference, Sydney.

Strazdins, L. (2007, December). *Can we make jobs really family friendly?* Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Ungerer, J., & Harrison, L. (2007, July). *Findings on child care choices from the Longitudinal Study of Australian Children.* Paper presented at the 15th Biennial Conference of the Australasian Human Development Conference, Sydney.

Walker, S., & Berthelsen, D. (2007, December). *Exploring gender differences in literacy and mathematical understandings in the early years of school: Can differences be explained by behaviours in the classroom?* Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Whitehouse, G. (2007, October). *Maternity/parental leave duration in Australia: Perspectives on optimality*. Paper presented at the 4th Annual conference of the International Network on Leave Politics and Research, Budapest.

Whitehouse, G., Hosking, A., & Baird, M. (2007, December). *Investigating the optimal duration of maternity leave: Evidence from the Parental Leave in Australia Survey*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Yu, M., Ziviani, J. Baxter, J., & Haynes, M. (2007, December). *Conduct disorder in young children: The impact of parenting style, time use and social context*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Zimmer-Gembeck, M., & Waters, A. (2007, December). *The interrelationships of parenting and children's temperament: Implications for emotional and social problems*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Zubrick, S. (2007, December). *Parenting quality and the developmental status of young Australian children: Contexts and pathways*. Paper presented at the inaugural Longitudinal Study of Australian Children Conference, Melbourne.

Other, non-conference presentations

Smart, D. (2007, October). *Children's development in the context of their families*. Presentation to the Parenting and Maternal and Child Health Lines National Meeting, Melbourne.

Soloff, C. (2007, July). *The Longitudinal Study of Australian Children: Study methodology*. Presentation to the Statistical Society of Australia (Victorian branch) meeting, Melbourne.

Data access

Data from *Growing Up in Australia* is warehoused at the Australian Institute of Family Studies and is available to researchers approved by the Australian Government Department of Families, Housing, Community Services and Indigenous Affairs. Prospective users must abide by strict security and confidentiality protocols and are required to complete a dataset application and read and sign a deed of license.

Data from Waves 1, 1.5, 2 and 2.5 are now available. Application forms and deeds of licence are available on the study's website: www.aifs.gov.au/growingup. A nominal fee is charged to cover the administrative costs of delivering datasets ($77 for Australian users, $132 for overseas users).

The Institute provides user support services. Datasets are accompanied by a user manual that includes a description of the sample design, how the study was conducted, details of weighting procedures and item derivations, and a listing of variable names, labels and response categories. Information on the Institute's website is regularly updated and data user group teleconferences are held. User training sessions are conducted by the Institute to expand upon the information provided in the user manual. Please contact Sebastian Misson if interested in attending a data user training session.

For data requests, contact:

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More information on *Growing Up in Australia* can be found on the Institute's website: www.aifs.gov.au/growingup. People with an interest in the study can join the email alert group to receive regular information on the study.

To join, send the following email:

To: majordomo@aifs.gov.au
Subject: (leave blank)
In the body of the email, type: subscribe growingup-refgroup

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