Growing Up in Australia takes its first steps

Growing Up in Australia is the Longitudinal Study of Australian Children. As might be expected for the most complex and large-scale study of its kind undertaken in Australia, it has had a long gestation, but is now in the field.

Growing Up in Australia may be the most ambitious study of children’s development ever undertaken in Australia. Tracking 5000 infants and 5000 four-year-olds forward over at least eight years, it aims to provide a strong evidence base for policy development and service delivery on a wide range of issues relating to children’s development.

Many parties have played important roles in bringing this study into the world, watching over it, helping it take its first steps, and offering expert advice and assistance. In this paper we first provide a brief description of the study’s development process, using the rather appropriate analogy of a child’s birth. Then we briefly describe the data that will be available to researchers from the first survey wave, and offer some pointers to the sorts of questions which can be addressed using the dataset.

Conception

The Growing Up in Australia study is the Longitudinal Study of Australian Children (LSAC). Funding for LSAC was announced in the 2000-2001 budget, as part of the Australian Government’s Stronger Families and Communities Strategy. Recognising the critical importance of the early years of a child’s life for their later development, the study was intended to provide an authoritative evidence base to contribute to the development of policies and service provision around early childhood. The study was to be large in scope, involving a nationally representative sample of children, and to adopt an ecological view of child development. This involved consideration of the major developmental contexts which help to shape a child’s life (home, school, child care, community), and paying heed to all aspects of a child’s development (physical, emotional, cognitive and social).

The research objectives, conceptual framework and broad design for the study were developed by the Australian Government Department of Family and Community Services (FaCS) LSAC Project Team after wide consultation across Australia with government representatives, service providers and peak groups, and researchers. A set of broad research questions was developed relevant to policy development and analysis across government.

To design and implement a study of this breadth and scope clearly required a multidisciplinary research team. A consortium containing this expertise was formed, led by the Australian Institute of Family Studies (see Sanson 2003 for a detailed listing of consortium partners). Following the acceptance of the consortium’s proposal, a contract...
develop direct assessments of the physical and cognitive development of the children; develop a simple time use diary for parents to record children's activities over two 24-hour periods; and develop questionnaires for child carers and teachers. This large set of instruments underwent extensive testing in pretests and pilot tests, and expert feedback was sought on them through our various consultative mechanisms.

Simultaneously, we worked on a range of complex design issues, supported by the consortium's Sampling Design Team. Finding two nationally representative cohorts of children (5000 infants and 5000 four-year-olds) and their families was not a straightforward task. Decisions were needed on the exact age ranges for the two cohorts, whether children born in each month of the year should be included, and the period of time over which data collection should occur. From August 2002, when the Health Insurance Commission agreed to the use of the Medicare list as the sampling frame, we worked on a recruitment methodology which fitted both the Commission's needs and ours. For details about the decisions made about these and other sampling issues, see Soloff et al. (2003), available from the study's website at the Australian Institute of Family Studies.

At the same time, we also recruited a fieldwork agency to take responsibility for the data collection, including the interviews with the families in their homes (following our analogy, they are perhaps the “midwives”). Colmar Brunton Social Research, supported by I-View (formerly NCS Pearson), won the contract to undertake this task.

The “third trimester” involved recruitment of our first 526 families. An extensive public awareness exercise was conducted and we were heartened by the positive response we received from the parents, children and interviewers involved, who all regarded the interview process as enjoyable and interesting.

In a process perhaps most analogous to “labour”, we worked hard and fast to analyse the information from this early phase in order to finalise details for the main wave of data collection with FaCS. Valuable advice was received from the Australian Bureau of Statistics, and other government agencies who will use the LSAC data. In brief, the final design for Wave 1 involves:

- recruiting families with either an infant (5000 families) or a four-year-old child (5000 families) from about 300 postcodes across Australia;
- conducting a face-to-face interview with the parent who knows the child best about the child and their family;
- asking this parent and the other resident parent (if there is one) to complete a brief written questionnaire on themselves, their parenting roles and the child;
- taking some measures of the child’s physical development (such as height, weight);
- undertaking some assessments of four-year-olds’ language skills and school readiness;
- asking parents to complete a time use diary recording the child’s activities on two days;
- with parental permission, asking child care providers and preschool and primary school teachers to complete a brief questionnaire about their program and the child;
- seeking parental consent to link data to Medicare and Australian Childhood Immunisation Register records; and
- linking to the National Childcare Accreditation Council data on quality of long day care centres and family day care schemes.

The task of the “first trimester” was to set in place the organisational capacity to support the project. A core Project Operations Team1 was recruited by the Institute, a Consortium Advisory Group was formed, and five Design Teams were drawn together to help develop the various modules of the study. The Institute also invited national and international experts onto a Scientific and Policy Advisory Group, while FaCS continued to receive input from other Commonwealth departments, state and territory governments and other key agencies through its Steering Committee and State and Territory Advisory Group (see Sanson 2003 for further details).

The major undertaking of the “second trimester” was the development of efficient and high-quality instruments to collect the data on the many domains of interest to Growing Up in Australia, without imposing too much burden on our multiple respondents. The Institute worked with the Design Teams (and the FaCS LSAC Project Team) to develop draft instruments for the two cohorts. Our tasks were to: develop separate (although overlapping) instruments for the two age cohorts; collect data from parents using face-to-face interviews and self-completion questionnaires; select and/or
First steps

Even as the launch was occurring, some families were receiving letters from the Health Insurance Commission inviting them to take part in the study. Letters have been sent out in four phases from January to May 2004. Families are given the opportunity to choose not to take part at this stage, by phoning or mailing the Health Insurance Commission. After four weeks, contact details for families who have not opted out are passed on to the fieldwork agency, and contact is made by interviewers.

More than 130 interviewers are conducting the interviews. They each attended a four-day intensive, competency-based training course, held in various capital cities during February and March 2004. At the time of writing (in May 2004), more than 2000 interviews have already been completed.

Next steps

Data collection will continue through to September 2004. The data will be warehoused at the Institute. The data management principles which will be followed, and current proposals for dataset file structure, data confidentiality and access, data security, imputation, weighting and data linkage, are described in Johnstone et al. (2004, also available at www.aifs.gov.au/growingup/pubs). Data are to be released in April 2005, along with a report summarising findings pertinent to a number of policy-relevant questions.

Throughout the life of the study, the participating children and their families will continue to be its most precious resource. Once a longitudinal study of children commences, its developmental timetable is to some extent fixed. Regardless of researchers’ preferences, the children continue, relentlessly, to grow, and the time to collect data on their next developmental stage cannot be delayed. We intend to send a newsletter along with a brief questionnaire to families in early 2005. Wave 2 of the study will occur in 2006, Wave 3 in 2008, and Wave 4 in 2010. We will also be keeping in touch with the Growing Up in Australia families through newsletters that will inform them of the study’s progress and key findings, and through birthday and greeting cards.

Contributing to our knowledge about children

The experience of many past large-scale studies is that they have never been fully exploited or “mined” to address all the questions that could be asked of the data (Stanley; Sanson and McMichael 2002). This is a particular issue for longitudinal studies where the data continue to accumulate with each wave of data collection.

We are trying to avoid this outcome through a number of measures. Most importantly, the policy adopted by FaCS is to make the data very widely and easily available to researchers, while still ensuring the privacy of respondents and security of the data. Second, the extensive consultation with policy makers and researchers at every stage of the development of the study is aimed, among other things, to ensure that the data collected are of clear interest and relevance and are well understood. Third, we will be doing our best to make the data easy to use. A fourth mechanism is to encourage researchers to think about the data now, as it is being collected, and plan to exploit it quickly on its release. This section of the paper attempts to stimulate such thinking.

Growing Up in Australia will provide rich data on children and their families, as Table 1 indicates. Seven broad research questions and 14 more specific ones guided the development of the study (Grant and Wilson 2001; Sanson 2003; Sanson et al. 2002). Together, they provide useful starting points for policy-relevant issues to examine using

Table 1 provides a summary of measures to be collected in Wave 1. The list is by no means exhaustive but provides an indication of the breadth of data being collected.

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**Table 1** Summary of measures to be collected in Wave 1 of the Growing Up in Australia study

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| 1. Socio-demographics: family and social constructs | • Household and family  
• Parents’ paid work  
• Parents’ finances  
• Parents’ other human capital  
• Housing  
• Neighbourhood and community involvement  
• Use of family-related services |
| 2. Child development and functioning | • Behavioural functioning  
• Emotional functioning  
• Language development  
• Pretiteracy skills  
• Temperament  
• Readiness to learn  
• Motor/physical development  
• Social competence |
| 3. Family functioning | • Parenting practices  
• Contact and contributions from non-resident parents  
• Parenting stress  
• Couple relationships  
• Parent-child relationships (both parents and step-parents)  
• Family relationships (including extended family)  
• Work/family balance  
• Social support (informal and formal) |
| 4. Health | • Gestation and birth (child and mother)  
• General health of child (diet, exercise etc)  
• Chronic conditions/disabilities  
• Physical development (including height, weight, girth and head circumference)  
• Parental physical and mental health |
| 5. Child care | • Use of non-parental care – types, amount, changes, age at start  
• Quality of care – parent and carer report |
| 6. Education | • At home learning activities  
• Experience of and nature of preschool/kindergarten programs  
• Other out-of-home activities  
• Transition to school |
the Growing Up in Australia dataset. However, the dataset will allow exploration of a large number of other issues as well. The following expands upon these questions and discusses a small sample of the other important issues that could be examined.

Of course, the unique strength of a longitudinal study is its capacity to examine stability and change over time and temporal relationships among measures (for example, to identify early risk and protective factors, developmental pathways and transition points). These analyses must await later waves of Growing Up in Australia. However, given the breadth and size of the Wave 1 dataset, numerous questions can be addressed already, as has also been the experience with Wave 1 of the Household, Income and Labour Dynamics survey (HILDA Annual Report 2003).

Family structure and demographics

We will be able to map the diversity of household and family composition for children in the study. We will be able to identify the relationships of the child and both parents with all the usual members of the child’s household, along with other details such as country of birth and medical conditions. We can expect the full diversity of family types to be represented in the Growing Up in Australia sample – families with two parents and single parents, stepfamilies, blended families, families with same-sex parents, and various other combinations. Sometimes the study child will be an only child, and sometimes they will have one or more full, half and/or step siblings living in the same or another household, and they may be part of a multiple birth (for example, twins, triplets). Some families will be “nuclear” families, while others will have other family members or unrelated people living in the household.

Further, families will cover the continuum from socio-economic advantage to disadvantage. In some, two parents will be working for pay, while in others one parent will work, and in others again neither parent will be in paid work. They will come from urban, rural, regional and remote areas. A wide range of cultural backgrounds will be represented. Given the size of the sample, it will be possible to examine how these and other diverse characteristics are related to factors such as family functioning, child experiences and child developmental outcomes.

Following are some examples of specific questions.

- What roles do mothers and fathers play in the infant and four-year-old cohorts, and across different family types? How does children’s use of time differ across family types?
- What associations are there among financial hardship, parenting stress, parenting practices, parental relationship quality, and child outcomes? Do the data support the hypothesis that aspects of family functioning mediate some of the effects of financial and other stressors (Sanson and Lewis 2001)?
- How does the development of children vary according to the number, sex and ages of their siblings, and to what extent is this due to differences in parenting and parent-child relationships? Existing research on the impact of birth order, siblings and family size is somewhat inconsistent (Luoma et al. 1999; Furman and Lanthier 2002), and this continues to be an area of public and research interest. Even though not all the families in the study will be “completed” at Wave 1, the Growing Up in Australia data will provide a good test of various hypotheses that have been posited.
- What is the nature of non-resident parent involvement with infants and four-year-old children? The recent inquiry into child custody has highlighted the dearth of information about the patterns of contact between non-resident parents and their children, and the critical importance of such data, especially when it can be combined with evidence on the children’s wellbeing (Smyth 2002). Although it is not feasible to collect data directly from non-resident parents in this wave (we hope to be able to involve them directly in later waves), data will be available on the amount and nature of contact (day only, overnight, holidays), relationships between resident and non-resident parents, satisfaction with the amount and nature of contact, and payment of child support.

Parental relationships

The character of parent–child relationships, parenting practices and levels of inter-parent support and conflict, have all been found to impact on child outcomes (Bornstein 2002). Following are some specific questions in this area.

- What is the nature of parenting in Australian families? It will be possible to examine, across the two cohorts, a wide range of parenting variables – for example, the amount of warmth and involvement of parents, the discipline methods they use, their consistency in applying rules, the sorts of activities they provide for their children (such as reading and drawing, cultural and sporting activities, television and computer use). How do these vary across cohorts, across family types, and across various other demographic variables? Do parents who have attended parenting education programs differ from others on parenting or other characteristics?
- Sharing of parenting roles – what differences are there between the two cohorts in the way mothers and fathers share the parenting role? Recent studies (Bittman and Hoffman 2004) indicate that mothers are still spending much more time caring for children than fathers, although fathers’ involvement is increasing. How many “home Dads” are there, and who are they? What types of parenting activities do fathers engage in with infants and four-year-olds? What factors help explain different patterns of sharing? How is the pattern of sharing related to children’s development and wellbeing?
- What levels of confidence and stress do mothers and fathers experience in fulfilling their parenting role, and how do these relate to factors such as their own mental health, their relationship with the other parent, their partners’ satisfaction with the role each parent is playing, their access to various types of support, and their work status?
- How do factors such as relationship quality and length, number of marital transitions, and conflict between parents relate to child and parent wellbeing? To what extent is the impact of inter-parent relationships on
A substantial amount of health-related data is being collected in Growing Up in Australia, which will be particularly useful when considered in conjunction with the other data on the child’s experiences in their family and broader environment. There will be data on a wide range of child health conditions such as asthma, eczema, various disabilities, and sleeping, emotional and behavioural problems. There will also be information on the parents’ own physical health and psychosocial wellbeing.

A sampling of specific questions in this area include the following:

- Overweight and obesity – there is evidence that childhood overweight and obesity is increasing alarmingly in prevalence, and likely to have substantial adverse health consequences (Booth, Wake et al. 2001). Using the direct measures of children’s height and weight to determine overweight/obesity, it will be possible to investigate links with a number of child, family and broader environmental characteristics (for example, child temperament, activity levels, and diet; parental weight, diet, parenting characteristics, and stress; and socio-demographic, cultural and geographical factors).
- Because the birth dates of children in the sample will be spread from January to December, we will be able to examine “season of birth” effects. For example, some research suggests that season of birth may be associated with differences in motor development (Benson 1993), personality style (Chotai, Forsgren, Nilsson and Adolfsson 2001), and adjustment and learning difficulties (Chichlenko and Barbarash 2001).
- As well as providing data on the incidence of accidents, injuries and hospitalisations, it will also be possible to examine the relationships of these occurrences to family factors (such as parental education, mental health), community factors (such as neighbourhood safety, resources), and child-related factors (such as temperament and behaviour problems).
- What are the direct and indirect relationships between parents’ physical and mental health and children’s health and wellbeing?

**Health**

**Work and family**

Growing Up in Australia will provide a strong data source for investigating how workforce participation and conditions of work affect family functioning and child outcomes. Among the key areas being assessed are labour force status, access to family-friendly work conditions, and the “strains” and “gains” experienced by parents in balancing their family commitments and labour force participation. By having data from both parents on these issues, the study will be able to investigate the impacts of work at a family level.

Some of the specific questions which could be addressed are as follows.

- What is the nature and strength of associations between parental employment and child outcomes? It is often argued that work leads to reduced financial stress, social approval and improved parental mental health, which then have positive effects on children’s development. This question may be of particular interest in regard to single parents where argument continues about whether labour force participation impacts positively or negatively on parents’ capacity to nurture their children, given the concomitant increased income but decreased parenting time and increased time pressure (Bradbury 2003).
- Regarding the impact of long work hours on parents and children, recent analyses using the HILDA dataset have suggested that fathers’ long work hours per se have surprisingly small relationships with their wellbeing (Weston et al. in press). Does this hold for parents of young children, and for both mothers and fathers? How many parents would prefer to work shorter (or longer) hours? In a study of Canadian children, parents’ unsociable work schedules (that is, evening and weekend work) were associated with poorer child wellbeing, especially for preschool aged children (Strazdins, Korda, Lim, Broom and D’Souza, in press). Growing Up in Australia will also be able to shed light on the critical question of whether Australian parents’ long work hours impact on their children.
- How does access to family friendly work provisions such as flexible hours and parental leave relate to the strains and gains of working and parent wellbeing, as well as child outcomes? Does this differ across the two cohorts?

**Non-parental child care**

Child care for young children takes many forms – formal care (including long day care centres and family day care), and informal arrangements such as care by neighbours, relatives, nannies and babysitters. Recent figures from the Australian Bureau of Statistics (ABS 2003) indicate that the use of formal care by very young children is low (7 per cent of children under one year), but increases rapidly up to age four (83 per cent). While most children using child care attend for relatively few hours (45 per cent use it for less than ten hours per week and a further 27 per cent use it for 10-19 hours per week), a small proportion (6 per cent) attend for 45 hours or more per week.
Aspects of quality of care such as the qualifications and experience of child care workers, the continuity of caregivers, staff/child ratios and group sizes, have been found to be clearly related to child outcomes in the United States (NICHD 2000). In Australia, where staff qualifications and staff/child ratios achieve higher minimum standards than in the United States, experience of formal care has been associated with improved socioemotional and cognitive outcomes (Harrison and Ungerer 1997). Ongoing debate surrounds the impact on the child of the age of entry into child care, the stability of this care, and the number of hours per week in care (Wise, Ungerer and Sanson 2002). *Growing Up in Australia* will provide the most detailed description of the child care experiences of a large sample of children yet available in Australia.

The following are some specific questions.

- **Mapping the detail**: How much care is received by infants and four-year-olds, how often, for how long, and from what age? Who does the caring? What number of care arrangements do children experience, and how stable are these over time? How costly is care? What sorts of families use the various sorts of care?
- **Does this dataset support the findings of large overseas studies and smaller Australian studies about the relationship of the objective quality indices noted above (such as ratios) and children’s development and adjustment?**
- **By using child carers and teachers as informants, we have the advantage of more than one perspective on children’s development. The perspective of the carer/teacher who observes the child out of the home environment will supplement parents’ reports and the direct measurements of children’s development. While we can increase the reliability of information on children by combining different sources, the variation between informants is also often informative (Achenbach et al. 1987). How well do these different informants agree on a child’s development and well-being? What factors affect the level of agreement (for example, relationship between informants, child age and gender, role of the informants in the child’s life)?**
- **How does satisfaction with child care relate to work/family strains and gains, along with number of hours worked and income?**
- **Detailed information will be collected from carers and parents about the quality of the care environment. Australia is a world-first in having the comprehensive child care accreditation scheme run by the National Childcare Accreditation Council (NCAC 2001). By linking the study data to the Council’s detailed information on quality of long day care centres and family day care schemes, it will be possible to address a number of questions about how specific characteristics of the care setting link to particular aspects of children’s emotional, social, health and cognitive development (for example, pre-literacy programs with school readiness, cultural sensitivity with the adjustment of children from culturally diverse backgrounds).**

**Children’s transition and adjustment to school**

The nature of a child’s transition to school is affected by a number of risk and protective factors including the nature and quality of relationships within the family, their early experiences at home and child care, their own characteristics (such as task persistence and emotion regulation), relationships between home and school, school characteristics and teacher expectations (Goswani and Bryant 1991; Martin 1989; Sanson et al. 1996).

With the data from the time use diary, parent and carer reports, and direct measures of language development and preliteracy skills for four-year-olds, it will be possible to answer questions such as the following.

- **What sorts of cognitive stimulation do parents provide for their children?** For example, how much do family members read to children, encourage their involvement in sporting, music/drama/dance, religious and other activities, and take them on visits to such places as libraries and museums? How are these activities related to children’s readiness to learn? Do these relationships hold across all family types?
- **What are the relationships between such variables as amount of child care and preschool experience, television viewing, computer use, time spent on reading and drawing activities, and children’s preparedness for learning?**
- **How much do schools and preschools involve and communicate with parents?** How does this affect the child’s adjustment to school? How do child and family characteristics interact with school/preschool characteristics to determine a “good fit”? Can we identify features of programs which contribute to their “readiness for children”, facilitating children’s adjustment to (pre)school and their early literacy and numeracy skills development?

**Social resources**

The interest in social resources in early childhood stems from research suggesting that resources beyond those provided by the immediate family help shape children’s development (Waters et al. 1999). Relevant data in the *Growing Up in Australia* dataset include: relationships with extended family, friends and peers; parental use of services, support networks and formal agencies for practical, emotional, and financial support and information; perceived adequacy of the support available; and community safety. These data will allow an assessment of how social resources beyond the child’s family are spread across families with various characteristics (such as urban/rural, family types, income brackets), how important they are to the child’s development, and how they impact at varying times during childhood.

Possible areas for investigation include the following.

- **How connected are families to wider social networks and community level resources?** How does this differ across the cohorts, across family types and across differences in parental work status? How does this connectedness relate to child outcomes?
- **How do families perceive their neighbourhood, especially in terms of community connectedness, trust, crime and violence, and how does this relate to their parenting and to child outcomes?**

**Data warehousing**

As noted above, the *Growing Up in Australia* data will be made widely available to researchers. The datasets will be warehoused for FaCS at the Australian Institute of Family Studies and made available to approved researchers from April 2005. Given the longitudinal nature of the study, data will be presented in a way which will facilitate across-time analysis.

Two datasets will be created. The first dataset will be unconfidentialised, with only names and addresses...
removed. While it is unlikely that respondents could be identified in this dataset, a second, moderately confidentialized dataset, will include additional measures to protect anonymity, such as the removal of some variables, and “top-coding” and “bottom-coding” of other variables. This dataset will be available to most researchers. Requests to access the first, unconfidentialized, dataset will be more limited and will be considered on a case-by-case basis by FaCS. The *Growing Up in Australia* website will include an application form for those wishing to access the data, and a deed of confidentiality which will need to be signed by all users.

**User support**

Datasets supplied to users will be accompanied by a user manual including a description of how the study was conducted, details of weighting and imputation procedures, a variable listing with variable names, labels, and response categories, and examples of use of the datasets.

An online meta-database (or Data Dictionary) with a web-based front end is also being developed and will comprise:

- data items and their associated variable names;
- data items linked across successive waves;
- thematic groupings of constructs;
- rationale for each grouping – linked to the key research questions;
- the ability to search for items by question name/number, theme and variable name; and
- the ability to download material to assist in data analysis.

Following the public release of the dataset after Wave 1, user training sessions will be offered by the Institute to expand upon the information provided in the user manual.

**Conclusion**

This paper has outlined the developmental story on the “birth” of *Growing Up in Australia*. The development process has been fast in comparison to comparable international studies such as Canada’s National Longitudinal Survey of Children and Youth (Statistics Canada 1996) and the UK Millennium Cohort study (2002).

The speed with which the data will be processed and prepared for release will also be fast by comparison with most studies. We hope that uptake of the data will be equally speedy. A total of 194 applications for the use of the first wave of HILDA data were approved within 12 months of data release (HILDA 2003). We are confident that the *Growing Up in Australia* data will be of equivalent interest.

While *Growing Up in Australia* has been developed as a longitudinal study, allowing for the examination of developmental change and continuity over time, we would encourage researchers to use fully the comprehensive data available in Wave 1. The breadth and depth of the data, and the size and representativeness of the sample, will allow researchers to “drill down” into the data much further than would be possible in more contained studies. Children’s development is a complex process: as we more fully realise the interactions between physical, socio-emotional and cognitive domains of development, and between these and home, child care, school and community environments, so we come to rely more on datasets that capture this complexity and have sufficient power to allow investigation of complex direct and indirect interrelationships among factors.

The critical importance of the early years of a child’s life is now well recognised (Howard 2004; Swan 2004). The task of researchers is hence to provide policy makers with the best evidence on which to base policies and practices to optimise all children’s early development. We hope the research emanating from *Growing Up in Australia* will enhance the quality of that evidence. The aim of the many partners in the development and implementation of *Growing Up in Australia* is for the data to be justifiably viewed as an important national resource.

**Note**

1 The Project Operations Team currently has the following members: Associate Professor Ann Sanson (Project Director), Carol Soloff (Survey Manager), Grace Soriano (Senior Research Officer), Robert Johnstone (Data Manager), Sebastian Misson (Data Administrator), and Dr Katherine Wilson (Survey Officer). Christine Millward was the study’s Design Manager until March 2004.

**References**


HILDA Annual Report (2003), Melbourne Institute of Applied Economic and Social Research, University of Melbourne.


Laouma, J., Puura, K., Tamminen, T., Kaukonen, P., Pihl, J., Raascken, E., Kumpulainen, K., Moilanen, I., Koivisto, A. M., and Almqvist, F.
In the article "Family trends: Changing patterns of partnering", published in *Family Matters* no. 64 (Autumn 2003: 10-15), some figures in Table 1 on page 14 require correction.

The table reports the percentage of people in various age groups who were unpartnered at the time of the 1986, 1996 and 2001 census. The figures from the 1986 and 1996 censuses were based on those from Birrell and Rapson (1998). The 2001 figures were based on new analysis from the 2001 census.

Unfortunately, the definition of the population on which the 2001 figures were calculated varied from that on which the 1986 and 1996 figures were based. These differences in the specification of the populations in 2001 make it appear that the increase in the percentage of unpartnered individuals observed by Birrell and Rapson (1998) had stalled. However, when the same population specifications are used for 2001 as for 1986 and 1996 the increase in the unpartnered population for the 20-49 age group has continued on to 2001.

The table below produces the 1986, 1996 and 2001 figures using comparable population specifications in all three census years. These are the specifications employed by Birrell and Rapson (1998) and include domestic visitors and people in non-private dwellings where there are some difficulties in precisely estimating levels of non-partnering. Some other small adjustments are also made to minimise rounding errors.

The authors of the article, David de Vaus, Lixia Qu and Ruth Weston, thank Bob Birrell and Virginia Rapson for drawing their attention to this matter and for their permission to use their updated 2001 figures.

### Table 1

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## Fatherhood Research

The Engaging Fathers Project at the Family Action Centre has released its *Fatherhood Research in Australia Report* to make available a description of recent research (1997–2004) on fathers in Australian populations.

The report describes published research on fathers (male carers) across the life cycle, from family formation – fertility, contraceptive use, abortion, and decision to have a child – to the role of fathers in family dissolution, and fathers of young adults. Research on groups of fathers, a review of information available on fathers in large data sets, and papers from leading researchers in the field are included.

Support for the initiative was provided by the Australian Government Department of Family and Community Services, the Child Support Agency, and the Bernard van Leer Foundation. Copies are available from the Engaging Fathers Project at the Family Action Centre, the University of Newcastle. Phone (02) 4921 8640.