

The prevalence of potential family life difficulties in a national longitudinal general population sample of Australian children

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A large body of literature has linked family life difficulties with a range of mental health problems during childhood, adolescence and adulthood, including anxiety, depressive disorders, drug and alcohol misuse and psychosis, as well as other problems such as obesity (e.g., Green et al., 2010; Kessler, Davis, & Kendler, 1997; Read & Bentall, 2012; Schilling, Aseltine, & Gore, 2007; Zubrick, et al., 2005). These life difficulties have been variously referred to as adverse childhood experiences, life events and maladaptive family functioning. This does not, however, indicate the relevance or clinical significance of these experiences, which can only be determined with prevalence estimates in general population samples. Prevalence estimates provide an indication of the numbers and nature of these adverse experiences, and can also contribute to estimating their correlates and outcomes.

General population studies that examine the prevalence of family life difficulties collect data either retrospectively (e.g., Green et al., 2010; Kessler et al., 1997; Rosenman & Rodgers, 2004) or via a prospective or cross-sectional methodology (e.g., Department of Families, Housing, Community Services and Indigenous Affairs [FaHCSIA], 2009; Olesen, Macdonald, Raphael, & Butterworth, 2010; Zubrick et al., 2005). The retrospective method often measures exposure to a range of difficulties that occurred at any point throughout the whole of childhood, usually up to the age of 16 years. However, this does not provide detailed information on adverse exposures, such as the timing of events, which can be most accurately examined with prospective longitudinal cohort data. Further, retrospective reports rely on adults' recall of events that may have occurred several decades earlier, leaving them exposed to possible retrospective bias.

A number of prospective longitudinal cohort studies have been used to collect and explore data on exposures to family life difficulties. For example, data have been used from the Christchurch Health and Development Study (Boden, Horwood, & Fergusson, 2007), the Dunedin Multidisciplinary Health and

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Development Study (Melchior, Moffitt, Milne, Poulton, & Caspi, 2007), the Mater-University of Queensland Study of Pregnancy (Phillips, Hammen, Brennan, Najman, & Bor, 2005), and the Great Smoky Mountains Study (Copeland, Shanahan, Costello, & Angold, 2009). However, the samples in these studies are not drawn from representative samples of the entire country of their origin, and as such may under- or over-represent subpopulations. For example, the Dunedin sample under-represents Māori populations in relation to the entire national population of New Zealand, and the Western Australian Child Health Survey is only representative of children residing in a single Australian state (Silburn et al., 1996). And to date, only the 1958 National Child Development Study, the 1970 British Birth Cohort Study and the Millennium Cohort Study have provided longitudinal cohort studies representative of children in England, Scotland and Wales. The 1958 National Child Development Study has been particularly valuable in providing prevalence estimates and other information related to children's exposure to adversities (Clark, Caldwell, Power, & Stansfield, 2010).

Growing Up in Australia: The Longitudinal Study of Australian Children (LSAC) is Australia's first nationally representative longitudinal study of children in Australia, though it is not representative of those living in more remote regions. It aims to examine the effects of Australia's unique social, economic and cultural environment on the next generation of children (Sanson et al., 2002). LSAC employs a cross-sequential design, following two nationally representative cohorts of Australian children biennially since its inception in 2003. The third wave of data collection was completed in 2007–08, when the two cohorts were aged 4–5 years and 8–9 years. Information that has been collected on the study children about their life experiences, contexts and conditions can provide a measure of the children's exposures to a range of potential family life difficulties. These experiences are *potential* difficulties as they are not analysed in this study for associations with wellbeing measures. The aim of this study is to use the LSAC data to estimate the prevalence of potential life difficulties in a nationally representative general population sample of Australian children, which, to the authors' knowledge, has not been reported in any other study.

Table 1 Age and sample size of children in each cohort at each wave

	Wave 1 (2003–04)	Wave 2 (2005–06)	Wave 3 (2007–08)
Cohort 1 (infant)	0–1 years (n = 5107)	2–3 years (n = 4606)	4–5 years (n = 4386)
Cohort 2 (child)	4–5 years (n = 4983)	6–7 years (n = 4331)	8–9 years (n = 4331)

Method

Study design and sample

Data were drawn from the first, second and third waves of LSAC. Table 1 shows the sample size, year and age of the children in both cohorts at each wave of the study. LSAC employed a two-stage clustered sampling design. Initially, postcodes were sampled after stratifying for state or territory and then urban or rural status to ensure proportional geographic representation. The sampling frame for the second stage comprised all children with specified birth dates who were enrolled in the Health Insurance Commission's (now Medicare) database, which includes approximately 98% of all infants and children in Australia. Children were randomly selected within each postcode. Only one child was recruited from each family. The LSAC data is representative of the Australian population and matches Australian Bureau of Statistics (ABS) Census data on most characteristics (Australian Institute of Family Studies [AIFS], 2008).

At Wave 1 of LSAC, there were 5,107 children in the infant cohort ("B cohort") and 4,983 children in the child cohort ("K cohort"). The initial response rates were 64.2% for the B cohort and 57% for the K cohort. At the end of Wave 2, 97.9% of the recruited sample from both cohorts remained in the study. Non-response rates were higher among Indigenous families, single-parent families, families where parents spoke a language other than English (LOTE) at home, and families in which parents had not completed Year 12 at school (AIFS, 2008). At Wave 3, 86% of the originally recruited sample remained in the study. Families in which the primary caregiver's main language at home was not English, where the study child was Indigenous, and in which parental income was less than $1,000 per week were less likely to participate in the Wave 3 data collection. Responding primary caregivers in Wave 3 were also older on average than non-responding primary caregivers (AIFS, 2009). Survey weights were used in this study to adjust for non-response bias. Further details about the LSAC sampling design and its methodology can be found elsewhere (Soloff, Lawrence, & Johnstone, 2005).

Procedure

At Waves 1, 2 and 3, trained researchers administered face-to-face interviews in the



study children's homes with the parent who knew the child best (Parent 1 or primary caregiver), as well as brief direct assessments with the children. In addition, questionnaires were completed by the primary caregivers and their partners (Parent 2; most often the children's other biological parent) and, wherever possible, the children's primary school teacher or child care provider. In Waves 2 and 3, if a child had a parent living elsewhere, a questionnaire was also completed by this parent. Further information was collected regarding the interviewers' personal observations and from time use diaries that the interviewers left behind for the children's parents to complete. All persons gave informed consent prior to their inclusion in the study. The study was approved by the AIFS Ethics Committee. Data were accessed for the current analysis via a written application to FaHCSIA. Access to and analysis of the LSAC data for this project was approved by the University of Western Sydney Human Ethics Research Committee.

Measures

Initially, a literature review was completed that identified variables that in prior studies have been considered to be family life difficulties. This included variables that were described as childhood adversities, child life events and maladaptive family functioning variables. The LSAC data were then examined to identify if these variables had been measured. This resulted in a total of 14 family life difficulties that could be identified in both the B and K cohorts and an additional one in the K cohort only, to make a total of 15.

The majority of studies on family life difficulties investigate the frequency of the occurrences of adverse events across the whole of childhood, usually until 16 or 18 years of age. It is uncommon for the prevalence of family life difficulties to be reported over shorter discrete time intervals within childhood, such as within two-year periods. In some cases, the presence or absence of a single experience defines whether the family life difficulty was present (e.g., child is fostered or a ward of the state). Such statistics are widely available and provide the prevalence of such difficulties from a population perspective as well as across different groups in the population. For this study, family life difficulties were dummy coded such that where a family life difficulty was considered to be present it was scored "1", and where it was not considered to be present it was scored "0". The presence or absence of each of the family life difficulties (measured in both cohorts, except for bullying, at each wave of data collection), was defined according to the criteria discussed below.

Death in the family—Parent 1 reported on whether their partner or the parent or child of Parent 1 or their partner had died in the past 12 months. If Parent 1 responded affirmatively to this question, then from the perspective of the study child, one or more of their grandparents, parents or siblings may have died during the past 12 months.

Parent legal problems—This potential family life difficulty was considered to be present if Parent 1 reported that they or their partner had problems with the police or had a court appearance during the past 12 months.

Parent serious injury or assault—If Parent 1 reported that they or their partner suffered a serious injury or assault during the past 12 months, then this potential family life difficulty was considered to be present.

Family financial hardship—Parent 1 was asked: "In the last 12 months, have any of these happened to [you/members of this household] because [any of] you were short of money?" Parent 1 then responded either "Yes" or "No" to the following: "Could not pay gas, electricity or telephone bills on time", "Could not pay the mortgage or rent payments on time", "Went without meals", "Were unable to heat or cool your home", "Pawned or sold something because you needed cash", "Sought assistance from a welfare or community organisation". In line with prior research (Olesen et al., 2010), for the family life difficulty to be present, Parent 1 must have responded "Yes" to at least two of these statements. While additional statements relating to financial hardship were included in some waves of data collection (e.g. ,"Had financial limits on the type of food you could buy"), the statements above were included in

the questionnaires consistently across all three waves for both cohorts.

Study child frequently hurt, injured or in accidents—Parent 1 reported on the number of times the study child had been hurt, injured or had an accident where medical attention was needed from a doctor or hospital. For Waves 2 and 3 of the B cohort, and for Waves 1, 2 and 3 of the K cohort, parents were asked how many times this had happened in the last 12 months, whereas for Wave 1 of the B cohort, parents were asked how many times this had happened since the birth of the study child. A child was considered to have been frequently hurt, injured or in accidents if he or she had experienced these events at least three times in the last 12 months (or since birth for Wave 1 of the B cohort). Although the frequencies were quite low (Table 2, page 24), a conservative score of 3 was selected, as this variable may be under-reported by parents.

Household alcohol or drug problems—This potential family life difficulty was considered to be present if Parent 1 reported that someone in their household had an alcohol or drug problem during the last 12 months. While information is also collected on the actual consumption of standard alcoholic drinks by both of the child's parents, that measure was not used, as it does not necessarily indicate whether the alcohol consumption is problematic, and it excludes household members who may have a drug problem.

Single-parent household—A child was considered to have this potential family life difficulty if Parent 1 reported that he or she was not living with a partner, regardless of whether he or she was in a relationship.



Parent argumentative relationship—Parent 1 was asked to respond to the following questions with a response of "Never", "Rarely", "Sometimes", "Often" or "Always": "How often do you and your partner disagree about basic child-rearing issues?"; "How often is the conversation awkward or stressful?"; "How often do you argue?"; "How often is there anger or hostility between you?" If Parent 1's mean response to these questions was "Often" or "Always", then it was considered that the study child's parents had an argumentative relationship.

Parent violence—Both Parents 1 and 2 were asked: "How often do you have arguments with your partner that end up with people pushing hitting, kicking or shoving?", with possible responses being "Never", "Rarely", "Sometimes", "Often" or "Always". If there was violence in the relationship, it was not expected that there would be significant agreement between the reports given by Parent 1 and Parent 2, as the perpetrator of the abuse may have been more likely to under-report the frequency of its occurrence. As such, if either parent responded to this question with "Rarely", "Sometimes", "Often" or "Always", then it was considered that this family life difficulty was present.

Hostile parenting—Parent 1 reported on a scale of 1 to 10 the frequency with which he or she had been angry with the study child, had raised his or her voice at the study child, and had lost his or her temper with the study child during the last 6 months, with higher scores indicating higher hostility. This family life difficulty variable was highly positively skewed, which may be due to Parent 1 providing socially desirable responses. If Parent 1 scored an average of six or more for these questions, then it was considered that this family life difficulty was present.

Study child fostered—Parent 1 reported on whether the child was currently fostered or a ward of the state.

Child chronic health/developmental condition—The study child was considered to have this potential family life difficulty if Parent 1 reported that the study child had a condition that had lasted or was expected to last for at least 12 months and caused the child to use or need medicine prescribed by a doctor, other than vitamins, or to use or need more medical care, mental health or educational services than was usual for children of the same age.

Parent psychological distress—Parent 1 and Parent 2 were asked to complete the Kessler 6 (K6) measure of psychological distress. The

K6 provides a short measure of non-specific psychological distress over the past four weeks, producing a score ranging from 6 to 30. For the current analysis, where there were missing data for no more than one item per instrument, then the value was imputed as the mean of the remaining five items. Otherwise, the score was treated as missing. A score of 6–13 was considered to indicate high to very high psychological distress and a score of 14–30 was considered to indicate low or moderate psychological distress. If either Parent 1 or Parent 2 reported high or very high psychological distress then the family life difficulty was considered to be present.

Parents separated or divorced—For this family life difficulty to be present, Parent 1 must have reported that he or she was not living with the child's other parent because they had separated or divorced since the child's birth.

Bullied at school—This was only measured for children in the K cohort at Waves 2 and 3. Parent 1 was asked the question: "In the last 12 months, has [study child] been bullied at school?" For the family life difficulty to be present, Parent 1 must have responded "Yes".

Differences in prevalence between population subgroups were also investigated in this study. They were reported by the primary caregiver and included: the study child's sex, the country of the study child's birth, language spoken at home, if the study child was of Aboriginal or Torres Strait Islander origins, and the parents' levels of education (tertiary education or no tertiary education).

Statistical analyses

New dummy coded variables were created for all of the potential family life difficulties in line with the criteria described above. The variables created were examined against each cohort and wave to determine their prevalence. The prevalence of potential family life difficulties across any wave of data collection was also reported where data were present for a child at any wave (i.e., including cases which were followed up and those who discontinued their participation in the study), and in cases where data were present for a child at all waves (i.e., only including cases which were followed up across all three waves). The former was weighted in line with Wave 1 weightings, and the latter was weighted in line with Wave 3 weightings for both cohorts.[1]



Results

Table 2 (on page 24) shows the weighted proportion of potential family life difficulties in the B cohort and the K cohort. The most common potential family life difficulty experienced by the B cohort was a chronic health/developmental condition and the most common difficulty experienced by the K cohort was being bullied at school. In the case of almost all of the potential family life difficulties, the prevalence was greater in the K cohort (who are older by four years) than in the B cohort. The B cohort at Wave 3 were the same age as the K cohort at Wave 1; that is, between four and five years old. These data can thus be compared to examine possible generational differences, though it should be noted that some questions were asked differently in Wave 1 and so comparisons may not always be based on exactly the same data. Children in the K cohort at Wave 1 had a significantly higher prevalence of all of the measured potential family life difficulties, except for death in the family and child chronic condition, which were higher in the B cohort, Wave 3.

Tables 3 and 4 (starting on pages 25 and 27) show the prevalence of exposure to potential family life difficulties during childhood within population subgroups for the B cohort and K cohort respectively, for children for whom data were provided at every wave of data collection. Where there is no overlap in the 95% confidence intervals, a significant difference is present. In the B cohort there was a significantly higher prevalence of some potential family life difficulties for males and children of Indigenous background, compared to females and children of non-Indigenous background respectively. There were also significant differences in the prevalence of

Table 2 Weighted proportion of family life difficulties in B cohort and K cohort, Waves 1, 2, 3, any wave and all waves

Family life difficulty	B cohort					K cohort				
	Wave 1 (0–1 year) (*n* = 5,107)	Wave 2 (2–3 years) (*n* = 4,606)	Wave 3 (4–5 years) (*n* = 4,386)	Any wave [a] (*n* = 5,107)	All waves [b] (*n* = 4,253)	Wave 1 (4–5 years) (*n* = 4,983)	Wave 2 (6–7 years) (*n* = 4,464)	Wave 3 (8–9 years) (*n* = 4,331)	Any wave [a] (*n* = 4,983)	All waves [b] (*n* = 4,196)
	%					%				
Death in the family	2.1	2.6	3.5	7.2	7.1	2.7	3.1	3.3	8.7	8.0
Parent legal problems	1.6	1.0	1.8	3.7	3.4	1.9	1.1	1.9	4.4	3.5
Parent serious injury or assault	4.7	5.5	5.1	12.4	12.7	6.7	6.1	5.5	15.3	14.5
Family financial hardship	14.6	8.3	8.3	20.3	19.7	15.2	8.2	9.0	20.7	18.9
Study child frequently hurt, injured or in accidents	0.2	0.8	0.5	1.2	1.0	1.5	0.5	0.7	2.6	2.1
Household alcohol or drug problems	3.6	1.9	1.4	5.3	5.1	4.3	1.9	2.3	6.7	5.9
Single-parent household	10.6	6.8	11.4	16.6	16.0	15.1	9.1	14.5	22.2	20.3
Parent argumentative relationship	5.0	4.3	3.6	9.9	9.7	5.1	5.0	4.2	11.2	10.4
Parent violence	7.5	4.5	4.5	11.6	11.0	8.1	5.7	5.0	13.4	12.5
Hostile parenting	2.0	5.5	5.8	10.1	10.1	n/a [c]	5.6	5.8	9.3	8.5
Study child fostered	0.1	0.1	0.1	0.1	0.0	0.5	0.0	0.5	0.5	0.1
Child chronic health/developmental condition	6.1	11.2	14.8	20.4	21.2	13.4	14.4	16.3	25.8	24.5
Parent psychological distress	1.5	1.1	1.2	2.8	2.7	1.2	0.9	1.2	2.9	2.4
Parents separated or divorced	6.4	7.2	11.1	14.7	14.9	14.8	15.0	18.3	22.9	20.8
Bullied at school	n/a [c]	n/a [c]	n/a [c]	n/a [c]	n/a [c]	n/a [c]	32.2	34.1	48.5	47.3

Note: [a] The "Any wave" column denotes the presence of the family life difficulty at any wave of data collection within the cases in the sample where data was collected in Wave 1, Wave 2 or Wave 3 (i.e., including cases who discontinued participation in the LSAC study). [b] The "All waves" column denotes the presence of the family life difficulty at any wave of data collection within cases in the sample where data was collected across Wave 1, Wave 2 and Wave 3 (i.e., only including cases that were followed up across all waves). [c] This variable was not measured in this cohort wave.

Table 3 Prevalence of exposure to family life difficulties during childhood within subgroups in the B cohort, across all waves

Family life difficulty	Male % (95% CI)	Female % (95% CI)	Born in Australia % (95% CI)	Born elsewhere % (95% CI)	Not LOTE spoken at home (English only) % (95% CI)	LOTE spoken at home % (95% CI)	Child of Indigenous background % (95% CI)	Child non-Indigenous background % (95% CI)	Both parents highly educated % (95% CI)	Mother highly educated % (95% CI)	Father highly educated % (95% CI)	Neither parent highly educated % (95% CI)
Death in the family	8.3 (7.2; 9.7)	7.6 (6.4; 8.9)	7.9 (7.1; 8.9)	11.8 (2.8; 38.3)	7.5 (6.7; 8.4) *	11.0 (8.1; 14.9) *	8.9 (5.1; 15.2)	7.9 (7.1; 8.8)	8.0 (6.9; 9.2)	8.5 (6.6; 10.9)	7.3 (5.4; 9.8)	7.9 (5.6; 11.1)
Parent legal problems	4.2 (3.3; 5.4)	3.8 (3.0; 4.9)	4.0 (3.4; 4.8)	7.2 (1.0; 37.5)	4.2 (3.5; 5.1)	2.6 (1.4; 4.9)	14.2 (8.6; 22.0) ***	3.5 (2.9; 4.2) ***	2.7 (2.1; 3.5) ***	7.1 (5.2; 9.6) ***	3.1 (1.8; 5.2) ***	6.0 (4.0; 8.9) ***
Parent serious injury or assault	14.4 (12.9; 16.1)	13.2 (11.7; 14.8)	13.8 (12.7; 15.0)	8.2 (1.2; 40.7)	14.2 (13.0; 15.4)	11.1 (8.2; 15.0)	20.5 (14.2; 28.6) *	13.5 (12.4) *	14.0 (12.6; 15.5) *	17.1 (14.3; 20.3) *	11.1 (8.8; 14.1) *	11.2 (8.3; 14.9) *
Family financial hardship	20.8 (18.9; 22.9)	21.4 (19.4; 23.5)	21.1 (19.7; 22.6)	17.9 (4.5; 50.1)	21.1 (19.6; 22.7)	21.1 (16.9; 26.0)	46.1 (37.3; 55.2) ***	19.8 (18.4; 21.3) ***	14.0 (12.5; 15.7) ***	30.4 (26.7; 34.2) ***	20.8 (17.3; 24.7) ***	36.6 (31.6; 41.9) ***
Study child frequently hurt, injured or in accidents	1.9 (1.3; 2.6) *	0.9 (0.5; 1.4) *	1.4 (1.0; 1.8)	–	1.5 (1.1; 1.9)	0.8 (0.3; 2.3)	2.3 (0.7; 7.8)	1.3 (1.0; 1.8)	1.4 (1.0; 1.1) *	0.6 (0.3; 1.5) *	2.7 (1.6; 4.5) *	0.9 (0.3; 2.9) *
Household alcohol or drug problems	6.0 (5.0; 7.3)	5.7 (4.7; 6.9)	5.9 (5.1; 6.7)	–	6.2 (5.4; 7.1) *	3.2 (7.8; 5.8) *	13.0 (7.9; 20.5) **	5.5 (4.8; 6.3) **	4.4 (3.5; 5.4) ***	10.1 (8.0; 12.8) ***	5.2 (3.5; 7.8) ***	6.2 (4.3; 9.0) ***
Single-parent household	16.8 (15.0; 18.8)	17.9 (16.0; 20.0)	17.3 (16.0; 18.7)	21.3 (7.0; 49.5)	18.0 (16.5; 19.5) *	13.0 (9.6; 17.3) *	49.0 (40.1; 57.9) ***	15.8 (14.5; 17.1) ***	3.6 (2.8; 4.6) ***	48.4 (44.4; 52.3) ***	7.7 (5.6; 10.6) ***	38.5 (33.5; 43.8) ***
Parent argumentative relationship	10.5 (9.1, 12.0)	10.8 (9.4; 12.4)	10.6 (9.6; 11.7)	17.9 (4.5; 50.5)	10.5 (9.5; 11.6)	11.6 (8.6; 15.4)	15.7 (10.0; 23.7)	10.4 (9.4; 11.5)	9.4 (8.2; 10.8) *	13.1 (10.7; 16.0) *	12.1 (9.4; 15.3) *	10.3 (7.7; 11.7) *

Table 3 Prevalence of exposure to family life difficulties during childhood within subgroups in the B cohort, across all waves

Family life difficulty	Male % (95% CI)	Female % (95% CI)	Born in Australia % (95% CI)	Born elsewhere % (95% CI)	Not LOTE spoken at home (English only) % (95% CI)	LOTE spoken at home % (95% CI)	Child of Indigenous background % (95% CI)	Child non-Indigenous background % (95% CI)	Both parents highly educated % (95% CI)	Mother highly educated % (95% CI)	Father highly educated % (95% CI)	Neither parent highly educated % (95% CI)
Parent violence	12.5 (11.1; 14.1)	11.5 (10.2; 13.1)	12.0 (11.0; 13.1)	16.1 (3.8; 47.9)	11.2 (10.2; 12.3) **	17.6 (13.9; 21.9) **	7.6 (4.1; 13.7)	12.2 (11.2; 13.4)	12.7 (11.3; 14.2)	10.4 (8.3; 12.9)	14.0 (11.3; 17.3)	9.4 (6.8; 12.7)
Hostile parenting	10.6 (9.3; 12.1)	11.5 (10.1; 13.1)	11.0 (10.0; 12.1)	24.7 (8.2; 54.7)	11.5 (10.4; 12.6)	8.2 (5.7; 11.7)	11.0 (6.6; 17.9)	11.1 (10.1; 12.1)	10.0 (8.8; 11.3)	13.5 (11.0; 16.4)	12.4 (9.8; 15.5)	10.4 (7.7; 13.8)
Study child fostered	0.1 (0.0; 0.8)	–	0.1 (0.0; 0.4)	–	– **	0.5 (0.1; 3.1) **	1.2 (0.2; 8.1) ***	– ***	–	0.1 (0.0; 2.1)	–	–
Child chronic health/ developmental condition	25.7 (23.7; 27.8) ***	19.3 (17.5; 21.3) ***	22.6 (21.3; 24.1)	11.9 (1.7; 50.9)	22.5 (21.1; 24.0)	23.0 (18.8; 27.8)	24.5 (17.5; 33.2)	22.5 (21.1; 23.9)	20.6 (18.9; 22.4) *	26.3 (23.0; 30.0) *	22.0 (18.6; 25.8) *	25.8 (21.5; 30.7) *
Parent psychological distress	3.3 (2.5; 4.3)	3.3 (2.5; 4.4)	3.3 (2.7; 4.0)	–	3.1 (2.5; 3.9)	4.4 (2.6; 7.4)	8.6 (4.5; 15.6) **	3.0 (2.5; 3.8) **	2.4 (1.7; 3.2) ***	5.5 (3.8; 7.9) ***	1.6 (0.8; 3.0) ***	5.8 (3.7; 9.1) ***
Parents separated or divorced	16.2 (14.4; 18.2)	16.2 (14.4; 18.2)	16.2 (14.9; 17.6)	26.7 (10.1; 54.1)	17.0 (15.6; 18.5) **	10.6 (7.6; 14.6) **	43.1 (34.4; 52.3) ***	14.9 (13.6; 16.2) ***	3.2 (2.4; 4.2) ***	44.5 (40.5; 48.4) ***	9.2 (6.8; 12.3) ***	35.6 (30.6; 40.8) ***

Note: Includes only cases where data were collected across all waves (n = 4,253). Table represents row proportions. * $p < .05$,** $p < .01$,*** $p < .001$. χ^2-test was applied to test statistical significance.

Table 4 Prevalence of exposure to family life difficulties during childhood within subgroups in the K cohort, across all waves

Family life difficulty	Male % (95% CI)	Female % (95% CI)	Born in Australia % (95% CI)	Born elsewhere % (95% CI)	Not LOTE spoken at home (English only) % (95% CI)	LOTE spoken at home % (95% CI)	Child of Indigenous background % (95% CI)	Child non-Indigenous background % (95% CI)	Both parents highly educated % (95% CI)	Mother only highly educated % (95% CI)	Father only highly educated % (95% CI)	Neither highly educated % (95% CI)
Death in the family	8.7 (7.5; 10.0)	9.2 (7.9; 10.6)	8.8 (7.9; 9.8)	11.0 (6.6; 17.7)	9.0 (8.1; 10.1)	8.1 (5.7; 11.2)	6.7 (3.4; 12.7)	9.0 (8.1; 10.0)	8.2 (7.1; 9.4) *	9.3 (7.4; 11.6) *	7.4 (5.5; 9.7) *	12.3 (9.6; 15.6) *
Parent legal problems	4.1 (3.2; 5.2)	4.2 (3.3; 5.3)	4.3 (3.6; 5.1)	1.2 (0.3; 5.4)	4.4 (3.7; 5.2)	2.5 (1.3; 4.8)	10.7 (5.9; 18.5) **	3.9 (3.2; 4.6) **	1.9 (1.4; 2.7) ***	7.5 (5.7; 9.9) ***	3.4 (2.1; 5.4) ***	7.0 (4.9; 9.9) ***
Parent serious injury or assault	15.9 (14.3; 17.6)	15.5 (13.9; 17.2)	15.9 (14.8; 17.2)	10.0 (5.9; 16.2)	16.2 (15.0; 17.5) *	12.3 (9.5; 15.9) *	16.4 (11.0; 23.9)	15.6 (14.5; 16.9)	15.6 (14.1; 17.3)	16.9 (14.3; 19.9)	17.3 (14.4; 20.6)	12.4 (9.8; 15.5)
Family financial hardship	20.2 (18.3; 22.2)	20.5 (18.5; 22.6)	20.5 (19.1; 22.0)	16.7 (10.8; 24.9)	20.5 (19.0; 22.0)	19.2 (15.3; 23.8)	44.5 (34.9; 54.4) ***	19.4 (18.0; 20.8) ***	12.0 (10.5; 13.7) ***	31.8 (28.4; 35.4) ***	17.2 (14.3; 20.7) ***	33.4 (29.1; 38.1) ***
Study child frequently hurt, injured or in accidents	3.4 (2.6; 4.4) **	1.7 (1.2; 2.5) **	2.6 (2.1; 3.2)	1.6 (0.5; 5.2)	2.8 (2.3; 3.5) *	0.9 (0.3; 2.9) *	7.1 (3.2; 14.8) **	2.4 (1.9; 3.0) **	1.9 (1.3; 2.7)	3.2 (2.1; 4.9)	2.7 (1.6; 4.3)	3.6 (2.1; 5.9)
Household alcohol or drug problems	6.2 (5.2; 7.4)	7.1 (6.0; 8.5)	6.8 (6.0; 7.7)	3.5 (1.6; 7.5)	7.0 (6.1; 8.0)	4.6 (3.0; 7.0)	15.6 (9.8; 24.0) **	6.3 (5.6; 7.2) **	5.1 (4.2; 6.2) **	9.8 (7.8; 12.2) **	5.5 (3.9; 7.7) **	8.7 (6.4; 11.7) **
Single-parent household	20.9 (19.0; 22.9)	22.5 (20.5; 24.7)	22.1 (20.7; 23.7) **	11.2 (6.9; 17.6) **	22.6 (21.1; 24.2) **	15.6 (12.2; 19.8) **	42.3 (32.8; 52.4) ***	20.9 (19.5; 22.4) ***	4.6 (3.6; 5.8) ***	51.6 (48.0; 55.3) ***	12.9 (10.3; 16.1) ***	42.9 (38.3; 47.6) ***
Parent argumentative relationship	12.1 (10.7; 13.7)	10.6 (9.3; 12.1)	11.3 (10.3; 13.4)	13.9 (9.0; 20.9)	10.9 (9.8; 12.0) *	14.8 (11.6; 18.7) *	10.6 (6.1; 17.9)	11.4 (10.4; 12.5)	10.1 (8.8; 11.5) **	15.4 (13.0; 18.2) **	8.9 (6.8; 11.4) **	12.8 (10.0; 16.2) **

Table 4 Prevalence of exposure to family life difficulties during childhood within subgroups in the K cohort, across all waves

Family life difficulty	Male % (95% CI)	Female % (95% CI)	Born in Australia % (95% CI)	Born elsewhere % (95% CI)	Not LOTE spoken at home (English only) % (95% CI)	LOTE spoken at home % (95% CI)	Child of Indigenous background % (95% CI)	Child non-Indigenous background % (95% CI)	Both parents highly educated % (95% CI)	Mother only highly educated % (95% CI)	Father only highly educated % (95% CI)	Neither highly educated % (95% CI)
Parent violence	13.9 (12.4; 15.6)	13.2 (11.7; 14.9)	13.5 (12.4; 14.7)	14.4 (9.6; 20.9)	11.8 (10.8; 13.0) ***	24.5 (20.5; 29.1) ***	14.9 (9.3; 23.1)	13.5 (12.4; 14.7)	14.1 (12.6; 15.7)	11.8 (9.6; 14.3)	11.7 (9.3; 14.5)	16.5 (13.3; 20.3)
Hostile parenting	11.1 (9.7; 12.5) **	7.7 (6.5; 9.0) **	9.5 (8.6; 10.5)	7.4 (4.3; 12.5)	9.5 (8.5; 10.5)	9.1 (6.7; 12.4)	11.2 (6.2; 19.2)	9.3 (8.4; 10.3)	8.8 (7.6; 10.2)	9.9 (7.9; 12.3)	10.2 (8.0; 12.8)	9.8 (7.5; 12.7)
Study child fostered	0.0 (0.0; 0.3)	0.1 (0.0; 0.5)	0.5 (0.0; 0.2)	–	0.1 (0.0; 0.3)	–	0.5 (0.1; 3.9) *	0.0 (0.0; 0.3) *	–	0.1 (0.0; 0.6)	0.2 (0.0; 1.4)	–
Child chronic health/ developmental condition	30.7 (28.6; 32.9) ***	21.0 (19.1; 23.0) ***	26.2 (24.8; 27.8)	19.7 (14.1; 26.9)	26.8 (25.3; 28.4) **	20.4 (16.6; 24.8) **	17.4 (11.2; 26.1) *	26.3 (24.8; 27.8) *	24.6 (22.7; 26.5)	29.8 (26.5; 33.3)	25.4 (22.0; 29.2)	25.7 (21.8; 30.0)
Parent psychological distress	3.0 (2.3; 4.0)	2.8 (2.1; 3.8)	2.9 (2.4; 3.6)	2.5 (0.9; 6.7)	2.6 (2.1; 3.3) **	5.0 (3.2; 7.6) **	2.7 (0.7; 9.6)	2.9 (2.4; 3.6)	1.8 (1.3; 2.6) **	4.6 (3.2; 6.6) **	3.1 (1.9; 5.0) **	3.8 (2.3; 6.3) **
Parents separated or divorced	21.8 (19.9; 23.8)	22.7 (20.7; 2.9)	22.7 (21.3; 24.2) **	11.4 (6.8; 18.4) **	23.6 (22.0; 25.2) **	13.9 (10.6; 18.0) **	45.8 (36.1; 55.8) ***	21.3 (19.9; 22.8) ***	5.5 (4.4; 6.7) ***	51.9 (48.3; 55.6) ***	15.1 (12.2; 18.5) ***	41.1 (36.6; 45.8) ***
Bullied at school	52.7 (50.4; 55.0) ***	45.0 (42.7; 50.6) ***	49.6 (48.0; 31.3) **	33.3 (25.9; 41.7) **	50.2 (48.5; 51.9) **	41.1 (36.2; 46.1) **	58.6 (48.6; 67.9)	48.6 (46.9; 50.2)	47.4 (45.1; 49.7) *	53.8 (50.2; 57.4) *	46.3 (42.3; 50.4) *	50.0 (47.3; 50.6) *

Note: Includes only cases where data were collected across all waves ($n = 4,196$). Table represents row proportions. * $p < .05$, ** $p < .01$, *** $p < .001$. χ^2-test was applied to test statistical significance.

some potential family life difficulties in the B cohort depending on the language spoken at home and parents' level of education; however, the direction of these differences varied between individual difficulties. In the K cohort, there were significantly higher rates of some potential family life difficulties for males, children born in Australia and children of Indigenous background, compared to females, children not born in Australia and children of non-Indigenous background respectively. There were also significant differences in the prevalence of some potential family life difficulties in the K cohort, depending on the language spoken at home and parents' level of education; however, the direction of these differences varied between individual difficulties.

Discussion

The aim of this study was to estimate the prevalence of Australian children's exposure to potential family life difficulties. Notable strengths of this study are appropriate adjustment for sampling weights and the collection of data from multiple sources. The longitudinal nature of the data has also reduced retrospective bias, and has allowed the examination of the prevalence of family life difficulties during discrete periods of children's lives, rather than exclusively across the whole of childhood, which is the most commonly used method for reporting life difficulties.

This study was concerned only with the prevalence of *potential* childhood family life difficulties. It did not include the prevalence of abuses and neglect, as these variables were not measured in the LSAC data, though the important role that these play in contributing to children's outcomes is widely recognised. Although research has suggested that family life difficulties may cluster (Dong et al., 2004; Jacobs, Agho, Stevens, & Raphael, 2012; Ney, Fung, & Wickett, 1994; Rosenman & Rodgers, 2004), an examination of the co-occurrence or clustering of family life difficulties in LSAC is not the focus of the present paper. As the contribution of family life difficulties in predicting lifetime mental health and other problems is becoming increasingly recognised (Anda et al., 2007; Chapman et al., 2004; Felitti et al., 1998; Green et al., 2010; Read & Bentall, 2012; Zubrick et al., 2005), this is an area that can usefully be explored in the LSAC data in future analyses.

The results of this study suggest that the most common potential family life difficulty experienced by children in the B and K cohorts was a chronic health/developmental condition



(20% and 26% respectively). It is important to note that a chronic condition in this study includes physical health as well as other conditions such as mental health difficulties. However, this is still lower than the most common potential family life difficulty explored by this study—being bullied at school—which this study suggests may have been experienced by almost half of all Australian children at some time between the ages of five and nine. This is particularly concerning given that school bullying has been associated with decreased academic performance (Juvonen, Wang, & Espinoza, 2011), increased psychosomatic symptoms, and poor mental health (Forero, McLellan, Rissel, & Bauman, 1999), including self-harm, violent behaviour and psychotic symptoms (Arsenault, Bowes, & Shakoor, 2010).

A higher proportion of the K cohort children compared to the B cohort were reported to have experienced each of the potential family life difficulties (apart from hostile parenting). While this might suggest that exposures to potential family life difficulties may increase as children age, the differences were relatively small, so no clear conclusions can be drawn. Further, when comparing the prevalence of potential family life difficulties across each wave, there was no consistent pattern, with the prevalence of some potential difficulties decreasing, some increasing and some remaining relatively stable. This is consistent with other research that has found that the incidence of difficulties generally varies according to the specific difficulty examined (Pirkola et al., 2005; Rosenman & Rodgers, 2004).

Male children may be more likely than female children to experience some of the potential family life difficulties, including being more likely to be hurt, injured or in accidents, have a chronic health/developmental condition, experience hostile parenting and be bullied

The most common potential family life difficulty experienced by children in the B and K cohorts was a chronic health/developmental condition.

The disproportionately high prevalence of Indigenous children and their communities experiencing a large range of potential family life difficulties is an important issue that needs continuing attention at a research and policy level.

at school. Research has suggested that male children more commonly experience bullying at school than female children (Nansel et al., 2001; Spriggs, Iannotti, Nansel, & Haynie, 2007), although this may only refer to direct forms of bullying (i.e., face-to-face verbal and/or physical bullying; Putallaz et al., 2007).

A particularly notable result of this study was the number of significant differences in the prevalence of potential family life difficulties between children who were of Indigenous background and children who were of non-Indigenous background. Although there is limited overlap between the potential family life difficulties measured, and the age ranges of the children in the studies are not comparable, both the Western Australian Aboriginal Child Health Survey (Zubrick et al., 2005) and the Longitudinal Study of Indigenous Children (FaHCSIA, 2009) also recorded a high prevalence for Indigenous children's exposure to family life difficulties. The disproportionately high prevalence of Indigenous children and their communities experiencing a large range of potential family life difficulties is an important issue that needs continuing attention at a research and policy level.

The results for parents' level of education generally suggest that children with a mother who is educated to tertiary level may be more likely to report many of the individual family life difficulties than children who have a father or both parents educated to tertiary level. However, the "mother highly educated" group of children included those who had fathers who were not highly educated, as well as children who did not have fathers completing a questionnaire, most likely due to their absence from the home. As such, the higher prevalence of individual potential family life difficulties might suggest that it is due to a lack of father education, or a lack of having a father in the household. Alternatively, a differential between maternal and paternal education levels may be correlated with other life events, such as being in paid work, having a child, or experiencing separation or divorce. Or perhaps higher maternal education may be associated with choices that lead to more potential family life difficulties such as separation or divorce. As such, it is difficult to determine whether the increased prevalence of individual family life difficulties is due to a lack of father education or a lack of a father in the household. Generally, there was a lower prevalence of family life difficulties where children had both parents educated to tertiary level, compared to the remaining groups.

The results of this study need to be considered in the context of its limitations. First, this study did not examine an exhaustive list of potential family life difficulties. There are many difficulties a child may experience that were not included in this study. Similarly, data were not collected on all of the potential family life difficulties at all waves; for example, the first wave of the K cohort did not include data on parental hostility towards the child. Second, the reference points of the family life difficulties were not consistent across all of the variables; for example, while parent legal problems and household alcohol or drug problem referred to the past 12 months, parental hostility referred to the last 6 months, and parent violence referred to the present time. Third, some of the potential family life difficulties included were dependent on Parent 1 having a partner (e.g., parent argumentative relationship, parent violence). Fourth, some life events were asked about differently in Wave 1 compared to in Waves 2 and 3; for example, in Wave 1, some of the details were asked about only for the respondent, whereas in Waves 2 and 3 the respondent was asked if these happened to them or their partner. Lastly, LSAC had only conducted and released four waves of data by 2010–11, and this study only uses the data from the first three waves, so the results are restricted to children of a limited age range.

LSAC will continue to provide valuable data on the prevalence of potential childhood family life difficulties as the children in each cohort age. However, with data in the B cohort being collected from birth onwards, further research that can currently be undertaken could assess the effects of potential family life difficulties on various outcomes of children at school-entry age. Following this, future research could examine the influence of potential family life difficulties on a range of outcomes at key points in childhood, adolescence and into adulthood. Should LSAC continue until the study children reach age 18, other research using the LSAC data could follow the example set by those investigating the 1958 British Birth Cohort study (Clark et al., 2010) and the Christchurch Health and Development study (Fergusson, Lynskey et al., 1996; Fergusson, Horwood et al., 1996) and retrospectively assess the children's experiences of abuse and other severe family life difficulties when they reach this legally and ethically appropriate age. These data could then be examined alongside their prospectively reported family life difficulties, such as those reported in this study.



Conclusion

Knowledge of the proportion of children in the general population who experience potential family life difficulties is important in understanding the experience of childhood in Australia. This information provides a background against which the lifelong mental health, physical health and other outcomes of family life difficulties can be considered. The experience of potential childhood family life difficulties was common in this study, with a chronic health/developmental condition and school bullying being those most commonly experienced. Most notably, children who were of Indigenous background were more likely to have experienced many potential family life difficulties, and the absence of father education or of a father in the household was related to a higher likelihood of the experience of many potential family life difficulties.

Endnotes

1 All analyses were performed using Stata version 10.0. "Svy" commands were used to allow for adjustments for the cluster sampling design, sampling weights and the calculation of standard errors. The Taylor series linearization method was used in the surveys when estimating confidence intervals around prevalence estimates. A chi-squared test was used to test the significance of associations.

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