Growing Up in Australia:
The Longitudinal Study of Australian Children (LSAC)
LSAC Technical Paper No. 22

The longitudinal study of Australian children

Parent Living Elsewhere data

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April 2018

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1.   Introduction

This technical report provides information about the 'Parent living elsewhere' data in the Longitudinal Study of Australian Children (LSAC), including descriptions of new data items that can help users to analyse these data.

Two key terms referred to throughout this technical report are 'primary carer' and 'parent living elsewhere'.

- The 'primary carer' is defined in LSAC as the parent who knew the most about the child at Wave 1, as reported by parents themselves. The primary carer is the one who is interviewed on behalf of the family and the child. In this report, 'primary carer' and 'parent one (P1)' are used interchangeably. Which parent is the primary carer only changes from wave to wave in very rare cases, such as when the original primary carer no longer lives with the study child. The term 'primary carer household' refers to the household where the main LSAC interview occurs.

- The 'parent living elsewhere' (PLE) is the parent who is identified by the primary carer as being the child's other parent, who is living in a different household from the primary carer.

The PLE data allow researchers to consider how the characteristics of both parents matter to the wellbeing of children, when children have parents who live apart. There is a rich set of data collected about the PLE (from the primary carer) and also collected from the PLE. However, using these data can be challenging, because it is not always straightforward to derive items that require users to manage across-wave question changes, or to access multiple data sources, including previous waves' data and data on the household file. Providing some useful data items about the parent living elsewhere should make these data more accessible to data users.

Some other background information about the derivations and analysis presented here:

- Because of complexities of families and relationships when a parent living elsewhere is not a biological parent, the derived items focus only on *biological parents* of the study child. That is, if the relationship between the study child and the PLE is adoptive, foster, step or something other than biological, the derived items are not applied to them.[1] The vast majority of PLEs in LSAC are biological parents of the study child.

- The parents living elsewhere are included here regardless of their reasons for living elsewhere. The available data (which are not complete) suggest that the majority are living apart because parents are no longer, or have never been, in a couple relationship. A smaller number of parents live elsewhere due to other reasons, including job-related reasons, ill health or being in prison.

- Parents who are only temporarily absent are not included as parents living elsewhere.

A set of new data items accompanies this technical report. These new derived items are listed in Table 1.

The report is structured as follows. 2 provides an overview of the LSAC data and the data sources used in this report. 0 presents information about how users can identify children with parents living elsewhere and how those parents and the primary carers are related to the study child. 0 examines which primary carers answered questions about the parent living elsewhere and presents new derived items that capture the reasons parents live apart and the relationship history of children's biological parents. 0 discusses the recruitment of children's parents living elsewhere to the study and how the response rates varied over the waves. Responses of both the primary carers and the parents living elsewhere are referred to in 0, which focuses on children's care time arrangements as reported by each of these parents.

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[1]   Some parents who are not biological parents may report being biological parents because this is how they see themselves.

Table 1:   New derived variables for PLE analyses

Variable	Label	Categories
#ple2fd1	Has parent living elsewhere	0. No parent living elsewhere 1. One or more parent living elsewhere -9. Missing
#ple2fd2	PLE–child relationship	1. Biological Mother 2. Biological Father 3. Other relationship 9. Unknown -9. Missing
#ple2fd3	Biological parent presence in P1 household (all children)	1. Biological mother and biological father 2. Biological mother but not biological father 3. Biological father but not biological mother 4. No biological parent -9. Missing
#ple2fd4	Complex and incomplete categories	1. One Biological PLE but no Biological parent in P1 household 2. Biological PLE deceased 3. Does not have a biological PLE but only one biological parent in P1 household 4. Has a PLE but not biological, or same sex as biological parent in P1 household 5. Has two biological PLEs 6. Missing information about PLE -1. Not applicable
#ple2fd5	Biological parents' marital history	1. Biological parents were married 2. Biological parents were not married but cohabited 3. Biological parents never lived together -9. Missing -1. Not applicable (no PLE)
#ple2fd6	Child's history of biological parents' co-residence	1. Lived with biological parents who had been married 2. Lived with biological parents who had cohabited but not married 3. Never lived with both biological parents -9. Missing -1. Not applicable (no PLE)
#ple2fd7	Time since children lived with both biological parents	1–186. Months since biological parents' separation 999. Never lived with both biological parents -9. Missing -1. Not applicable (no PLE)
#ple2fd8	Age in months at biological parents' separation	0. Never lived with both biological parents 1–186. Age in months at biological parents' separation -9. Missing -1. Not applicable (no PLE)
#ple2fd9	PLE respondent category	1. PLE questions not asked of P1 2. PLE contact consent not sought (infrequent or no contact) 3. PLE contact consent refused (this information not available Wave 4) 4. PLE non-respondent (refusal and non-contact) 5. PLE survey respondent -1. Not applicable (no PLE)

Variable	Label	Categories
#ple2fd10	Nights with parent living elsewhere (P1 report)	1. Less often than monthly contact or none 2. Day only up to monthly contact 3. Stay with PLE 1 night/fortnight 4. Stay with PLE 2–4 nights/fortnight 5. Stay with PLE 5–9 nights/fortnight 6. Stay with PLE 10–14 nights/fortnight -9. Missing -1. Not applicable (no PLE)
#ple2fd11	Nights with parent living elsewhere (PLE report)	1. Less often than monthly contact or none 2. Day only up to monthly contact 3. Stay with PLE 1 night/fortnight 4. Stay with PLE 2–4 nights/fortnight 5. Stay with PLE 5–9 nights/fortnight 6. Stay with PLE 10–14 nights/fortnight -9. Missing -1. Not applicable (no PLE)
#ple2fd12	Nights with PLE or P1 biological father	1. Less often than monthly contact or none 2. Day only up to monthly contact 3. Stay with biological father 1 night/fortnight 4. Stay with biological father 2–4 nights/fortnight 5. Stay with biological father 5–9 nights/fortnight 6. Stay with biological father 10–14 nights/fortnight -9. Missing -1. Not applicable (no PLE)

2.   Data

LSAC follows two cohorts of children selected from across Australia, with children in the B cohort born between March 2003 and February 2004 and children in the K cohort born between March 1999 and February 2000. Data from the first six main waves of the study have been used in this technical report.

The LSAC data are released in a number of datasets.[2] Those that contain information about the PLE are:

- *LSAC main datasets*. For each wave and cohort, the main LSAC data are made available to users in a separate file that includes one record for each study child who had a primary carer respondent (e.g. in lsacgrb0.dta for the confidentialised data relating to the B cohort at Wave 1). This one record includes all the responses of the primary carer, the second parent if there is one, the parent living elsewhere if there is one, and the study child. It includes some derived information from the completion of the household file, and various other study data and linked data.

- *LSAC primary household composition dataset*. Another file (per cohort, hhgrk.dta and hhgrb.dta) is released each wave that contains detailed information about every member of the household in which the study child and primary carer live. The household dataset is updated every wave, providing these data from all waves in one record per study child. This dataset also includes ex-household members (with a variable indicating that they are no longer resident), such as parents living elsewhere who were resident at a previous wave. Further, some of the parents living elsewhere who have not been resident at any of the waves are listed on this household dataset (also with the variable indicating that they are not resident). It does not, however, include all of these parents living elsewhere.

- *LSAC PLE household composition dataset*. From Wave 4 for each wave and cohort, PLE household data are made available to users in a separate file (e.g. plehhgrb10.dta for B cohort and plehhgrk14.dta for K cohort at Wave 6) containing detailed information about every member of the household in which the parent living elsewhere lives.

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2   See the LSAC User Guide and Data Dictionary for more information about LSAC data and the variable naming conventions.

In this technical paper, the main datasets across all waves are used. The primary household datasets released at Wave 6 are used, with these datasets also containing all previous waves' household data. The PLE household datasets have not been used. The data sources are summarised in and referenced throughout this report.

This technical report covers data collected in LSAC from the primary carer and, at Waves 2 to 6, the parent living elsewhere respondents. To derive new PLE variables, most information was sourced from the main wave files. Other information was merged from the household file.

Detail of the LSAC data used in this report is presented in Appendix 1, in which each of the variables used is listed in Table A1.

Throughout this technical report, if specific variable names are referred to, the format #variable-name or #variable-name* (e.g., #pe04 or #pe02*) is used, where # is the prefix of 'a' to 'h' that indicates for which child-age the data were collected, and * indicates different suffixes, often capturing variations in questions across waves, or a set of items belonging to one question.

Unless specified, the data presented throughout this report are unweighted. Where reference is made herein to a 'case' in the data, it refers to data pertaining to a study child at a particular wave.

Table 2:   Sources of information about the parent living elsewhere

Source	Waves	What used for
P1 interview (attached to the child record in the main data files, one file per cohort and wave)	1 to 6	Used for P1-reported information about the PLE (and care arrangements and other related issues). Some information was 'rolled forward' from P1 interviews at previous waves, and some was derived from information provided by P1 during the household file updates (see 'household file' in this table).
PLE interview (in main data files)	2 to 6	This is used for all PLE-respondent data. These data are available in the main datasets.
Household file (in separate files, one per cohort)	Wave 1 to 6	The household file is a very comprehensive file cataloguing everyone who has been in the household of the study child at any of the LSAC waves. As household members move in and out, this household file tracks these movements. Quite detailed information about each household member is collected. The file is structured differently to the main survey data, with one new household file for the B cohort and one for the K cohort released after each main wave, with the file containing the current household information as well as the household information from past waves. All household data for one study child are provided in one record (that is, in 'wide' format), with an important reference being the member number of each household member, allowing residency of specific household members to be tracked across waves.
		If a household member leaves the primary LSAC household, their details still remain on the household file, but with a code indicating that they live elsewhere, with information collected on when and why they left. Some of the PLEs who have not been resident at any wave are included on the household file, but some of these PLEs do not have any information on the household file.
		Some variables are already derived for users from this information, but the derivations done here also sometimes refer to this information to fill in missing details, such as the PLE–child relationship and the gender of the PLE.
		In the rare case that the child moves to another household, and the original P1 is no longer able to report about the study child, the household file will also move to the new household, such that all original household members except for the study child (and siblings or others who also move) would appear as leaving the study child's household, and members of the new household would appear as joining the study child's household. In this situation, also, this might mean that the PLE becomes P1, and the P1 becomes the PLE.
PLE household (in separate files, one per cohort and per wave)	4, 5 and 6	Like the primary LSAC household file, this PLE household file contains information about the members of the PLE household. It has been available since Wave 4. This dataset was not used in the derived items presented here, but users may wish to use this to derive information about children's PLE household.

3.   Identification of parents living elsewhere

3.1   Introduction

This section explores methods by which users can identify whether the child has a parent living elsewhere, and what relationship that parent has to the study child. Two items are derived:

1.   an item that summarises the parent–child relationship, with a focus on whether that parent is a biological mother or father

2.   an item that describes which biological parents are present in the primary carer household.

This section also discusses how the incidence of having a parent living elsewhere changes across the waves.

3.2   Derivation of a parent living elsewhere indicator

The existence of a parent or parents living elsewhere can be derived from the variables *#pe02**, which identify the existence of parents living elsewhere (see Appendix 1, Table A1). These variables are sourced from P1 reports, either through direct responses to questions in the main interview (in Waves 1 and 2) or derived from questions asked while updating the household form. The updates to the household form include asking questions about people who have left the household, why they left and when they left.

From these variables, a new derived item presented here simply indicates whether or not the child has a parent or parents living elsewhere (see Box 1). There is little missing data for this variable. See Table 3 for this variable tabulated by cohort and wave.

> **Box 1:** New variable: Has parent living elsewhere
>
> 0. NO PARENT LIVING ELSEWHERE
>
> 1. ONE OR MORE PARENT LIVING ELSEWHERE
>
> -9. MISSING

Table 3:   Child has PLE, by cohort and wave

| | Non-missing (0 or 1) | | | | |
Cohort and wave	No PLE (0)	Has PLE (1)	Total	Missing (-9)	Total
B cohort					
Wave 1	4,619	488	5,107	0	5,107
Wave 2	4,074	513	4,587	19	4,606
Wave 3	3,795	576	4,371	15	4,386
Wave 4	3,563	679	4,242	0	4,242
Wave 5	3,307	778	4,085	0	4,085
Wave 6	2,977	787	3,764	0	3,764
K cohort					
Wave 1	4,179	804	4,983	0	4,983
Wave 2	3,680	748	4,428	36	4,464
Wave 3	3,472	832	4,304	27	4,331
Wave 4	3,273	891	4,164	5	4,169
Wave 5	3,036	920	3,956	0	3,956
Wave 6	2,692	842	3,534	3	3,537
Total	**42,667**	**8,858**	**51,525**	**105**	**51,630**

Users can refer to #pe02b for more detail, including (1) whether the other parent is deceased, and (2) the number of parents living elsewhere. The variable #pe02a in Wave 1 also provides this information. These details are used later in this section when reconciling information about biological parents living elsewhere and/or living in the primary carer's household.

Users may also find the PLE member number useful. In LSAC, the member number is a unique number for each person in the primary carer (P1) household. If a person leaves or re-enters the household, they are still assigned that member number. If a new person enters the household, they are assigned a new number.

- At Waves 1 and 2, there is no member number for parents living elsewhere.
- At Wave 3, the dataset contains the variable #plemn. If the PLE was a previous resident in the P1 household, this variable contains the member number from earlier waves, allowing users to find information about that same person at Wave 1 and 2. A missing (-1) value is assigned to those who were not resident in the P1 household in Waves 1 or 2.
- At Wave 4, #plemn is likewise available for those who were previously resident in the P1 household.
- At Waves 5 and 6, #plemn is available as above, but now all PLEs are assigned a member number, even those who had not lived in the P1 household. That is, when the completion of the household grid identifies that the child has a PLE, this assigns a member number to that PLE if they had not previously been assigned one. This allows better tracking of possible changes in PLE in these and future waves.

Children with a parent living elsewhere – a longitudinal view

The sample of children with a parent living elsewhere changes across waves, both increasing and decreasing. Increases primarily occur because of parents' relationship breakdown,[3] while decreases primarily occur because of attrition. Changes across waves can be detected by users comparing the PLE information at one wave to that of the previous wave or waves, or by comparing information on who is resident in the primary carer household from one Wave to the next. For example, the variable #prel contains information on who is in this household, so comparisons across waves can capture changes in parental presence.

Table 4:   Across-wave changes in parent living elsewhere sample Waves 2–6

Cohort and wave	Total has PLE this wave	PLE both this and last wave	PLE INCREASE		PLE DECREASE	
			PLE this wave (not last wave)	PLE this wave (non-response last wave)	PLE last wave, with both parents this wave	PLE last wave, non-response this wave
B cohort						
Wave 1	488	N/A	N/A	N/A	N/A	N/A
Wave 2	513	301	212	N/A	70	117
Wave 3	576	371	167	38	43	99
Wave 4	679	476	157	46	22	78
Wave 5	778	573	145	60	22	84
Wave 6	787	635	120	32	16	127
K cohort					0	
Wave 1	804	N/A	N/A	N/A	N/A	N/A
Wave 2	748	573	175	N/A	47	184
Wave 3	832	638	148	46	20	90
Wave 4	891	712	130	49	11	109
Wave 5	920	771	106	43	24	96
Wave 6	842	722	91	29	21	177

Table 4 shows that the sample of children with a parent living elsewhere changes from wave to wave, through the addition of new children and the loss of others (especially to non-response). For example, there were 488 children at Wave 1 of the B cohort who had a parent living elsewhere. Of these children, only 301 had a parent

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3   Reasons for parents living apart are not available at all waves. From the information (in the household form) on reasons for PLEs leaving the primary household, around 95% who left between LSAC waves reported that it was because of 'relationship breakdown including trial separation'.

living elsewhere at Wave 2, with 70 of the original number living with both parents at Wave 2 (reconciliations) and 117 non-respondents at Wave 2. The 513 children with a parent living elsewhere at Wave 2, therefore, included the 301 from Wave 1 plus another 212 who had not had a PLE at Wave 1 (that is, separations). Similar changes in the composition of the parent living elsewhere sample occurred across other waves.

While survey weights adjust for higher rates of attrition within subgroups of the population, data users need to consider that the weights may not fully account for any bias that is introduced if certain single parent families are more likely to drop out of the survey than others.

Relationship of parent living elsewhere to study child

For analysis that uses parent living elsewhere information, it may be important to understand who this parent is, that is, how they are related to the study child. A derived item has been created that identifies whether a PLE is the biological mother or the biological father or had another type of relationship, or 'unknown' if that relationship could not be identified. As discussed in 0, 'biological' is strictly used for those who reported having a biological relationship. For example, adoptive or step-parents living elsewhere are coded to 'other' (see Box 2). This information is derived from variables capturing the gender of the PLE and the PLE's relationship to the study child.

> ### Box 2: New variable: PLE–child relationship
>
> 1. BIOLOGICAL MOTHER
>
> 2. BIOLOGICAL FATHER
>
> 3. OTHER RELATIONSHIP
>
> 9. UNKNOWN
>
> -1. Not applicable (no PLE)

It is worth noting that, while a very small number of children are reported to have more than one PLE, the information on gender of the PLE and relationship between PLE and child is only reported for one PLE. If there are two PLEs at the time of data collection, respondents are instructed to report on the most involved PLE.

For many of the parents living elsewhere, across waves and cohorts in LSAC, the gender of the PLE is available (#pe03a), either having been sourced from a direct question asked of P1, in Wave 1 and 2, or derived and rolled forward from the household data. There is very little missing data.

In many cases, a variable (#pe04) captures the relationship of the PLE to the study child, indicating whether the parent living elsewhere was a biological parent, adoptive parent, step-parent, foster parent or otherwise related. Across waves, there were some differences in data collection and derivation.

- In Waves 1 and Wave 2, P1 was asked: '*How is the parent living elsewhere related to the child?*', and this is the source of this information in these waves. From user documentation, it is not apparent that Wave 1 information was rolled forward to Wave 2, but this may have been done.

- For Wave 3, if the PLE had been a resident in the primary LSAC household in the previous wave, the parent–child relationship in #pe04 was sourced from the previous wave's household file. If the PLE was a PLE in Wave 2, the parent–child relationship was rolled forward from Wave 2. For other situations, P1 was asked about the relationship directly. PLE–child relationship is provided in the derived variable #pe04 that is comparable to the Waves 1 and 2 data.

- In Wave 4, the variable #pe04 was not on the dataset. A variable #f08dple is provided, which appears to be a variable derived from the household file (and which has a more detailed coding frame than #pe04). This was missing for many of the PLEs.

- In Waves 5 and 6, information about the PLE is updated during fieldwork while updating the household form, and so is rolled forward from previous waves if unchanged or if the PLE was a previous P1 household member. P1 is asked the PLE–child relationship question if the PLE is new, using a detailed coding framework (available to users in #pe04a). The variable #pe04 is provided, which comprises the information derived from the household data as well as the P1-reported data for new PLEs.

The derived PLE–child relationship variable presented here drew on information from #pe03a, #pe04 and, for Wave 4, #f08dple. Across all waves, there was some missing data when these variables were used, especially in Wave 4. To complete any missing relationship data, the relationship of the PLE to the child was derived

separately, using the household data file, and then matched to the main dataset (drawing mainly on the variable #f21am*, which allowed PLEs to be identified, and #f08m*, which is the relationship of each person to the study child). Also, some data gaps were filled by rolling forward relationship information from earlier waves.

The final numbers for the derived PLE–child relationship variable are shown in Table 5.

Table 5:   Who is the parent living elsewhere, by cohort and wave

Cohort and wave	Biological mother	Biological father	Other	Unknown	Number with PLE
B cohort					
Wave 1	8	477	2	1	488
Wave 2	20	486	7	0	513
Wave 3	20	548	8	0	576
Wave 4	27	609	5	38	679
Wave 5	45	722	3	8	778
Wave 6	45	730	3	9	787
K cohort					
Wave 1	45	751	7	1	804
Wave 2	49	693	6	0	748
Wave 3	59	758	15	0	832
Wave 4	71	777	11	32	891
Wave 5	91	807	11	11	920
Wave 6	91	737	7	7	842
Total	**571**	**8,095**	**85**	**107**	**8,858**

Figure 1:   Sequence plots of whichparent is the PLE – children with a PLE at one or more wave
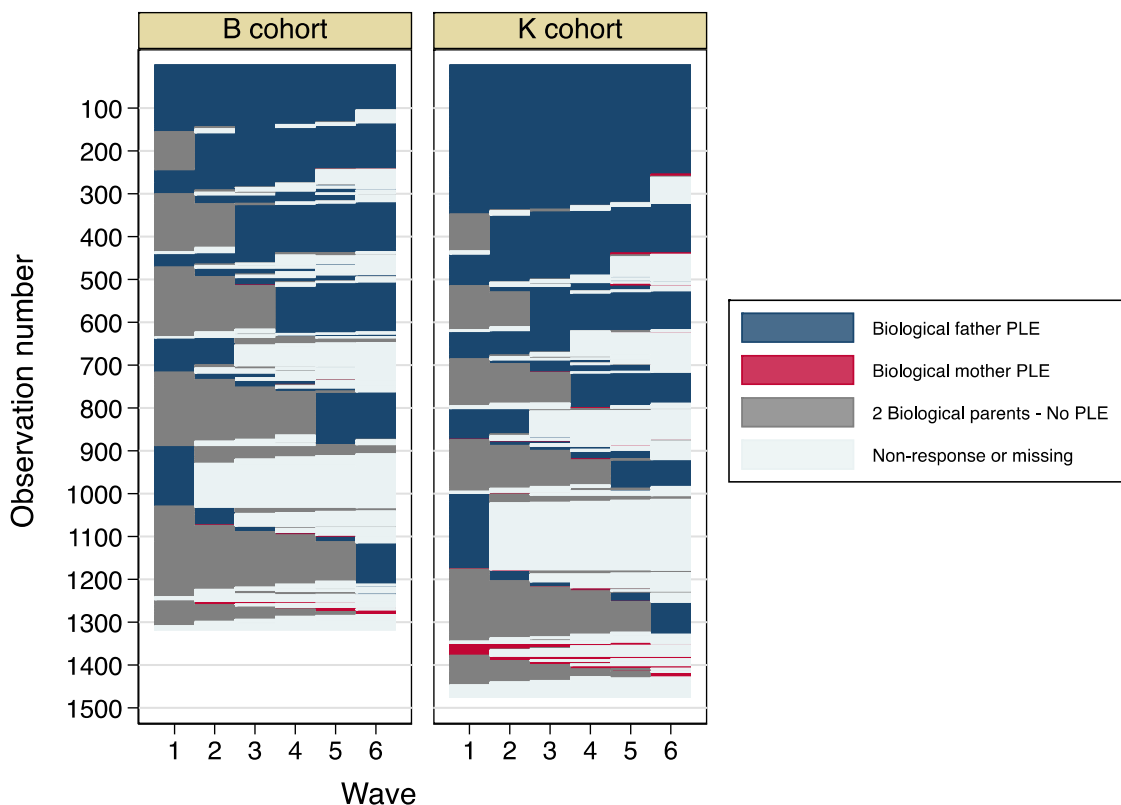
Note: In these sequence plots, one LSAC study child is represented by one row of data. These plots include all children who were in LSAC at Wave 1 who, at some stage from Wave 1 to Wave 6, had a parent living elsewhere.

The PLE and primary carer can swap positions in the study, such that the parent who is the primary carer may become the parent living elsewhere, and vice versa. This could occur if the study child moves from his or her initial LSAC primary household, to live primarily (or solely) in the home of his or her other parent, and the initial primary carer requests that the study move to that other household. This actually does not happen very often. Across the six waves of the study, in the B cohort, there are 24 children whose biological mother was the PLE at one or more wave and their biological father a PLE at different waves. For the K cohort, the number was 69 children. Most commonly, these swaps involved the PLE changing from being their father to being their mother.

We can track information on who is the PLE across waves for individual children using sequence plots, as shown in Figure 1. Children are shown in this figure if they had a parent living elsewhere in at least one wave of LSAC. Consistent with Table 5, most parents living elsewhere are fathers, whether children had a parent living elsewhere from the beginning of the study or transitioned into this situation, typically through parents' relationship breakdown.

Presence of biological parents in primary LSAC household

Users may also find that they need another variable to describe which biological parents are in the primary LSAC household. This variable is derived for children with no PLE as well as for children with a PLE. This variable, combined with the PLE relationship variable, uncovered some inconsistencies and complexities that led to certain situations being classified as too complex or incomplete for accurate derivation of some derived items (further discussed in the next section).

This derived variable captures information about the presence or otherwise of biological parents in the primary household. Box 3 shows that children are classified as living with: both biological mother and father; only their biological mother; only their biological father; neither biological parent; or missing. In any of the categories, others may also be present, including step-parents. For example, many children living with only their biological mother will also have a co-resident stepfather. It is not the purpose of this paper, or these derived items, to capture these other relationships.

This variable was derived initially from the two variables capturing P1 relationship with study child (#f08#p1) and P2 relationship with study child (#f08#p2), as well as gender of each parent (zf02p1 and zf02p2). In some rare cases, biological mothers and fathers are not P1 or P2, and so the derived LSAC variables '#bmoth' and '#bfath', which indicate presence of biological mother and biological father respectively, were also referenced.

This variable is shown by cohort and wave in Table 6.

Box 3: New variable: Biological parent presence in P1 household

1. BIOLOGICAL MOTHER AND BIOLOGICAL FATHER

2. BIOLOGICAL MOTHER BUT NOT FATHER

3. BIOLOGICAL FATHER BUT NOT MOTHER

4. NO BIOLOGICAL PARENT

-9. MISSING

Table 6:   Which biological parents are present in the primary household, by cohort and wave

Cohort and wave	Biological mother and biological father	Biological mother but not father	Biological father but not mother	No biological parent	Missing	Total
B cohort						
Wave 1	4,600	491	4	12	0	**5,107**
Wave 2	4,056	523	14	13	0	**4,606**
Wave 3	3,772	585	18	11	0	**4,386**
Wave 4	3,516	682	32	8	4	**4,242**
Wave 5	3,248	770	47	12	8	**4,085**
Wave 6	2,917	785	45	12	5	**3,764**

Cohort and wave	Biological mother and biological father	Biological mother but not father	Biological father but not mother	No biological parent	Missing	Total
K cohort						
Wave 1	4,130	784	43	26	0	**4,983**
Wave 2	3,631	762	46	25	0	**4,464**
Wave 3	3,418	830	58	25	0	**4,331**
Wave 4	3,181	870	72	27	19	**4,169**
Wave 5	2,929	895	101	27	4	**3,956**
Wave 6	2,570	821	111	24	11	**3,537**
Total	**41,968**	**8,798**	**591**	**222**	**51**	**51,630**

Identifying complex and incomplete cases

Combining information on the PLE–child relationship and the presence of biological parents in the primary household revealed some combinations that led to challenges in sorting out the nature of parental relationships. This occurred, for example, when children were living with only one biological parent, but the other was not mentioned at all. This may indicate the complete absence of the other parent from the child's (and reporting parent's) life, but the available information did not allow this to be confirmed.

To derive some of the additional information relating to the PLE, cases that were particularly complex, or with incomplete or otherwise irreconcilable data, were not included. For some, their situation meant that certain PLE items were not applicable (such as if the other parent was deceased), while, for others, the missing or complex relationships created significant challenges that would only be resolved through manual processing of individual cases. Such cases are identified here as being 'complex or incomplete'.

Figure 2 shows the decision tree used to determine whether cases were considered 'complex or incomplete'. A derived item classifies the complex and incomplete cases, using the pathways shown in this figure (see Box 4).

As shown in Table 7, when data from the two cohorts were pooled across the six waves of LSAC, there were 1,183 cases (each of these uniquely representing a study child at a particular wave) considered complex or incomplete. This left 41,967 cases in which children were living with two biological parents and 8,480 in which children were living with a biological parent and had a biological parent living elsewhere. Figure 2 shows that the most common reasons data were classified as complex or incomplete were that the child's other biological parent was deceased (462 cases) or the child was reported to have no biological PLE yet only lived with one (or no) biological parent (238 cases). This derived item is tabulated by cohort and wave in Table A 2.

The 1,183 complex and incomplete cases came from a total of 490 children, with 223 children in the 'complex and incomplete' category at just one wave, 52 at two waves, 38 at three waves, 49 at four waves and 38 at six waves.

Box 4: New variable: Complex and incomplete categories

1. ONE BIOLOGICAL PLE BUT NO BIOLOGICAL PARENT IN P1 HOUSEHOLD

2. BIOLOGICAL PLE DECEASED

3. DOES NOT HAVE A BIOLOGICAL PLE BUT ONLY ONE BIOLOGICAL PARENT IN P1 HOUSEHOLD

4. HAS A PLE BUT NOT BIOLOGICAL, OR SAME SEX AS BIOLOGICAL PARENT IN P1 HOUSEHOLD

5. HAS TWO BIOLOGICAL PLES

6. MISSING INFORMATION ABOUT PLE

-9. NOT APPLICABLE (IN-SCOPE)

Figure 2: Identifying complex and incomplete records for biological PLE variable coding
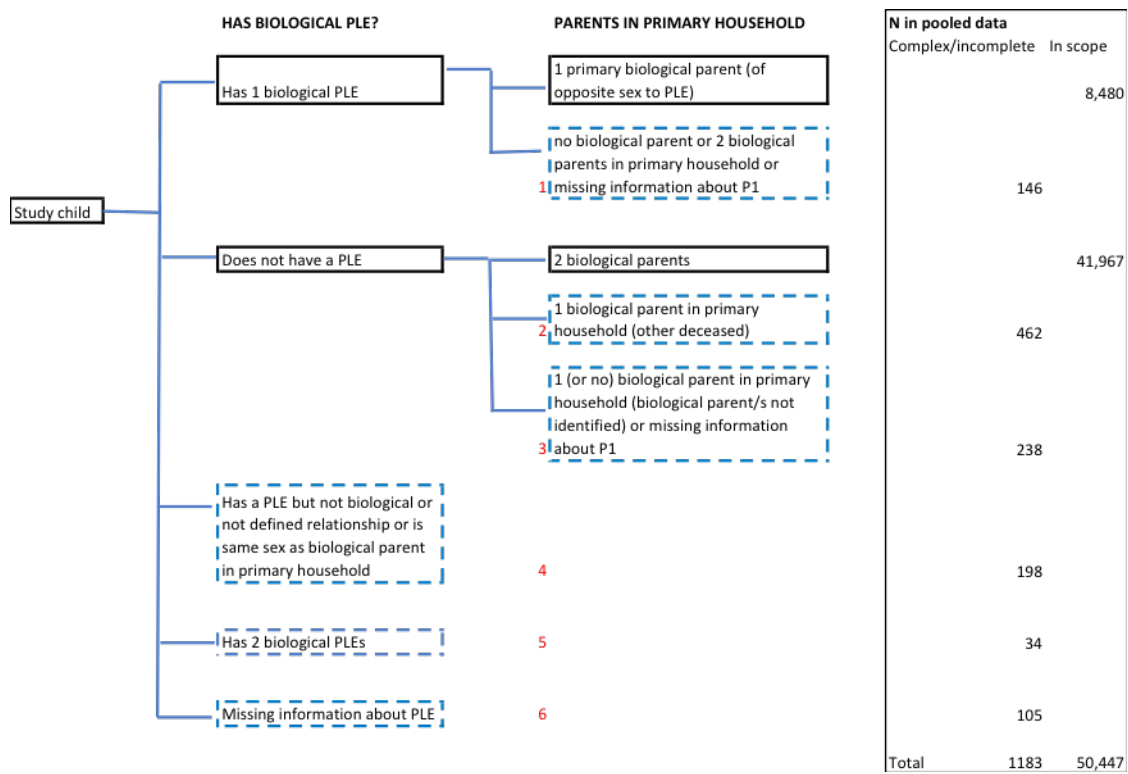
Table 7: In-scope records and complex and incomplete records

| Cohort and wave | Child has no PLE | | Child has PLE | | |
	In-scope (Child lives with two biological parents)	Complex and incomplete	In-scope (Child lives with one biological parent)	Complex and incomplete	Total
B cohort					
Wave 1	4,600	19	479	9	**5,107**
Wave 2	4,055	19	496	17	**4,606**
Wave 3	3,772	23	561	15	**4,386**
Wave 4	3,516	47	626	53	**4,242**
Wave 5	3,248	59	759	19	**4,085**
Wave 6	2,917	60	766	21	**3,764**
K cohort					
Wave 1	4,130	49	774	30	**4,983**
Wave 2	3,631	49	726	22	**4,464**
Wave 3	3,418	54	797	35	**4,331**
Wave 4	3,181	92	813	78	**4,169**
Wave 5	2,929	107	874	46	**3,956**
Wave 6	2,570	122	809	33	**3,537**
Total	**41,967**	**700**	**8,480**	**378**	**51,630**

Note: 105 cases had missing data on whether the child had a PLE. These cases are included in the total column.

4.   Primary carer reporting about PLE

4.1   Primary carer response and non-response

This section begins by describing for which families there is information about the PLE, and what factors lead to the non-response at different waves. The section then presents information that users may need in analysis using the PLE data, focusing on information on the history of the relationship between P1 and the PLE.

Much of the information about the parent living elsewhere comes from P1 answers to questions. Some of this is done in the first component of the study—the household form. Other questions are asked later in the interview.

When the PLE questions are asked later in the interview, there are some opportunities for respondents to skip those questions. Specifically, at Waves 3, 5 and 6, there is some missing data from primary carers about parents living elsewhere because they opted out of answering these questions. The extent of overall missing data, by cohort and wave, is shown in Table 8.

- In Wave 3, parents were explicitly asked whether they were prepared to answer questions about the PLE, leading to a relatively high non-response (see #id45).
- In Wave 4, this question was removed, to avoid the high non-response that was experienced in Wave 3.
- In Waves 5 and 6, questions about the PLE were skipped if the primary carer expressed unwillingness to answer these questions after an introductory statement. Interviewers were instructed to take this action only in extreme circumstances. Those who refused are flagged in #pe23a1. These respondents were asked why they preferred not to answer these questions, and responses indicated that a majority had no contact at all with the PLE, although some reasons suggested more complex or sensitive situations. (The variable containing respondents' reasons – #pe23a2 – is available on the B cohort general release dataset, but only on the In Confidence dataset for the K cohort).

Table 8:   Response and non-response by primary carers when children have a parent living elsewhere

Cohort and wave	P1 answers questions about PLE	Missing P1 reports about PLE	Total Child has a PLE
B cohort			
Wave 1	488	0	488
Wave 2	513	0	513
Wave 3	472	104 (18%)	576
Wave 4	679	0	679
Wave 5	730	48 (6%)	778
Wave 6	744	43 (5%)	787
K cohort			
Wave 1	804	0	804
Wave 2	748	0	748
Wave 3	700	132 (16%)	832
Wave 4	891	0	891
Wave 5	871	49 (5%)	920
Wave 6	802	40 (5%)	842
Total	**8,442**	**416**	**8,858**

Note: Complex and incomplete cases are included in this table.

Analysis of the non-response to questions about the PLE confirms that this was more common within certain groups of families than others. Table A 3 shows that P1 is less likely to answer the PLE questions when the child had never lived with that parent, when P1 has no contact with the PLE and the child rarely or never stays with the PLE. See also Baxter, Edwards, and Maguire (2012) for analysis of this P1 non-response.

This missing data did not affect the ability to identify there being a PLE, and the relationship of the PLE to the child, as this information was largely sourced from the household forms at Waves 3 onward. For other P1-reported variables described here, the derived items were set to missing if P1 did not respond.

4.2   Relationship history of biological parents

The degree to which the biological PLE is involved in the study child's life, and remains in contact with the primary carer, is expected to be somewhat related to the nature of biological parents' relationship with each other prior to the separation. From the perspective of children, it may be especially relevant to consider when the separation occurred, for those whose parents had previously lived together. From the perspective of parents, another factor may be whether parents had ever been married and, if not, whether they had ever cohabited. This section presents four new derived variables that capture this information in varied ways, as in previous sections, focusing on the biological parents of the study child. The four new data items are:

- Biological parents' marital history (see Box 5)
- Child's history of biological parents' co-residency (see Box 6)
- Time since child lived with both biological parents (see Box 7)
- Child's age at biological parents' separation (see Box 8).

The derivation of these variables is described below.

Biological parents' marital history (Box 5) refers to the biological parent primary carer's past relationship with the other biological parent who is living elsewhere. This does *not* reflect the primary carer's current relationship status.

Box 5: New variable: Biological parents' marital history

1. BIOLOGICAL PARENTS WERE MARRIED

2. BIOLOGICAL PARENTS WERE NOT MARRIED BUT COHABITED

3. BIOLOGICAL PARENTS NEVER LIVED TOGETHER

-9. MISSING

-1. NOT APPLICABLE (NO PLE)

This data item was derived as follows:

- At Wave 1, P1 was asked whether they and the PLE had been married (#pe01a) and, if not, whether they had cohabited (#pe01b). Across later waves, for as long as P1 continued to report living apart from the Wave 1 PLE, this information as reported at Wave 1 was carried forward.
- For parents living together, marital status is collected at each wave (#f07#p1), allowing the classification of couples as cohabiting or married. For the purposes of this derived item, this was only used if both parents were biological parents, since the intent was to capture the relationship history of the child's birth parents. To derive this new variable, this information is rolled forward for parents who separate at later waves. That is, if parents separated between two waves of LSAC, the relationship status at the wave prior to the separation is carried forward to later waves for as long as the parents are living apart, such that it captures historical relationship status. In the case of those who live apart at one wave, live together subsequently, then live apart again, the marital history is updated across waves to reflect such changes.
- Parents classified as complex and incomplete are included in the missing category, along with others for whom relationship information was missing.

The sample distribution by cohort and wave for children with a PLE is shown in Table 9.

Table 9:   Biological parents' marital history by cohort and wave

Cohort and wave	Biological parents never lived together	Biological parents were married	Biological parents were not married but cohabited	Missing	Total
B cohort					
Wave 1	201	161	117	9	**488**
Wave 2	123	187	185	18	**513**
Wave 3	98	267	195	16	**576**
Wave 4	84	335	206	54	**679**
Wave 5	64	438	255	21	**778**
Wave 6	54	481	231	21	**787**
K cohort					
Wave 1	117	365	290	32	**804**
Wave 2	71	390	261	26	**748**
Wave 3	69	463	263	37	**832**
Wave 4	59	514	238	80	**891**
Wave 5	50	569	254	47	**920**
Wave 6	32	548	228	34	**842**
Total	**1,022**	**4,718**	**2,723**	**395**	**8,858**

Note: Excludes those with no PLE. Complex and incomplete cases are coded to missing.

Child's history of biological parents' co-residence (Box 6) is similar to the above, but it may be that parents were married or cohabiting prior to the child's birth, but not after, such that children had never co-resided with both parents. The focus is, therefore, on whether children had previously lived with both (married or cohabiting) biological parents. This information is derived from the same data as described above, with additional reference to information collected from P1 on the timing of when the PLE stopped living with the study child (#pe01c). The distribution of this variable by cohort and wave is given in Table 10.

Box 6: New variable: Child's history of biological parents' co-residence

1. LIVED WITH BIOLOGICAL PARENTS WHO HAD BEEN MARRIED

2. LIVED WITH BIOLOGICAL PARENTS WHO HAD COHABITED BUT NOT MARRIED

3. NEVER LIVED WITH BOTH BIOLOGICAL PARENTS

-9. MISSING

-1. NOT APPLICABLE (NO PLE)

From Table 9 and Table 10, it is apparent that the number of children who had never lived with both parents declines across waves of LSAC, while there is an increase in the number who had previously lived with both parents who were married. The number with a PLE whose parents had not married but had cohabited increased in the B cohort but remained fairly static in the K cohort. The decline in the 'never lived together' group largely reflects the attrition of this group. This is because it is rare for this group to decline through changes to children's circumstance. That is, few children are reported at one wave to have never lived with both parents, and then at a later wave have parents say that children lived with them both together at some stage.[4]

The weights in LSAC address attrition to some extent, but, in the weighted data, this group declines a little in size, indicating that the weights do not fully account for the higher rates of non-response in this group. See Figure 3.

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4   This can occur, if parents reconcile (or newly live together) but then live separately again at a later time. It can also occur if parents change their reports of when the separation occurred.

Table 10: Child's history of biological parents' co-residence by cohort and wave

Cohort and Wave	Never lived with both parents	Lived with married parents	Lived with cohabiting parents	Missing	Total
B cohort					
Wave 1	371	28	80	9	**488**
Wave 2	228	107	160	18	**513**
Wave 3	178	205	177	16	**576**
Wave 4	147	290	188	54	**679**
Wave 5	131	391	235	21	**778**
Wave 6	101	449	216	21	**787**
K cohort					
Wave 1	200	306	267	31	**804**
Wave 2	124	355	237	32	**748**
Wave 3	116	433	240	43	**832**
Wave 4	97	489	221	84	**891**
Wave 5	86	545	240	49	**920**
Wave 6	58	533	215	36	**842**
Total	**1,837**	**4,131**	**2,476**	**414**	**8,858**

Note: Complex and incomplete cases are coded to missing.

Figure 3: Percentages of children with a parent living elsewhere according to parents' marital history, by cohort and wave
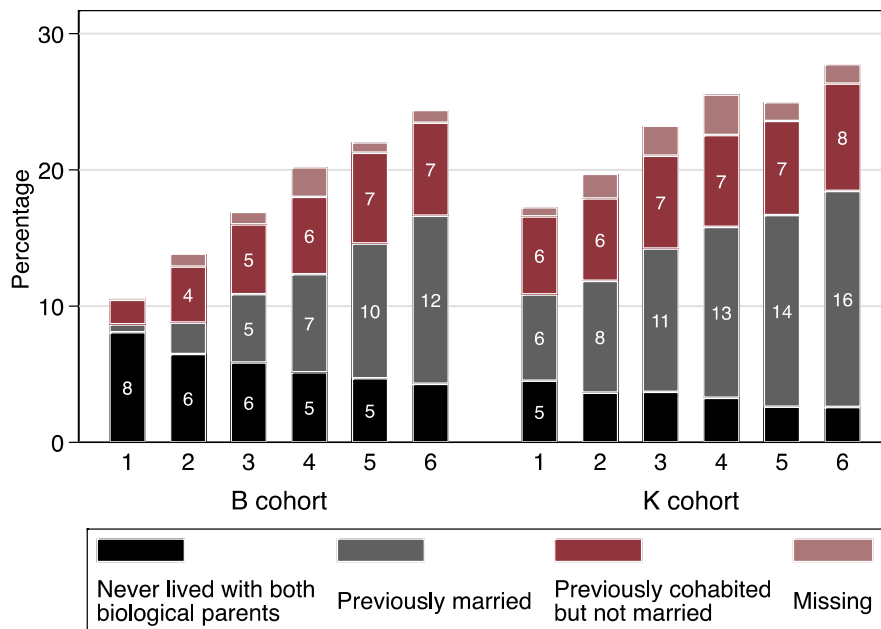
Notes: At each wave, the height of the bar is the total percentage of children who have a PLE. Complex and incomplete cases are coded to missing. These data are weighted. Data labels are omitted if the value was less than 3%.

The derived items *Time since children lived with both biological parents* (Box 7) and *Age at biological parents' separation* (Box 8) have been derived in months. For both variables, there is a separate category for children who never lived with both parents. The following sources of information feed into these variables:

- At Wave 1, the age of the child (in months) at the time they stopped living with their PLE is collected from the primary carer, allowing also for having never lived with that parent. This information is available for those children with a PLE at Wave 1 (#pe01c).

- From Waves 2 to 6, the household file includes information on the date of departure of ex-household members (that is, those who were in the household at the previous wave). This includes the date that a parent leaves the home, in the case of parents separating between waves. This date can be mapped to child age at interview to calculate child age at the time of a parent's departure and to calculate the time since parents last lived together. This information has only been derived here in respect to biological parents, with complex and incomplete cases set to missing. The information is not complete for all families.

- From Waves 2 to 6, the age at which children last lived with both biological parents is collected from the primary carer (#pe23c*). At these waves, the data were collected with a response category for number of months and another for number of years. A derived item is available that presents all data in months for users. However, this information was not collected from all parents, and some of the data were quite inconsistent with the information collected in Wave 1 or as derived from the household file. Problems with these data may be related to some of the data entered, such as months possibly meant to be recorded as years, or perhaps time in months since parents' separation having been captured instead of child's age at the time their parents separated.

To derive the new variables:

- It was assumed that the Wave 1 data were correct for those with a PLE at Wave 1, and these data were used at subsequent waves for as long as the child had a parent living elsewhere.

- If parents had not lived apart at Wave 1, child age when parents separated and timing of parents' separation was derived from the household file, where relevant data were not missing.

- If data on the timing of departure of ex-household members was missing, the information reported by respondents in Waves 2 to 6 interviews was used.

- This left only a small amount of missing data.

- There are some complex cases in which parents lived apart, lived together again, then lived apart. The derived item currently reflects age at, and timing of, parents' first separation. This applies to only a small number of cases.

This derived variable for age at biological parents' separation was compared to the age of the child at the interview to calculate the other derived item, months since children lived with both biological parents.

Box 7: New variable: Time since children lived with both biological parents

1–186. MONTHS SINCE BIOLOGICAL PARENTS' SEPARATION

999. NEVER LIVED WITH BOTH BIOLOGICAL PARENTS

-9. MISSING

-1. NOT APPLICABLE (NO PLE)

Box 8: New variable: Age at biological parents' separation

0. NEVER LIVED WITH BOTH BIOLOGICAL PARENTS

1–186. AGE IN MONTHS AT BIOLOGICAL PARENTS' SEPARATION

-9. MISSING

-1. NOT APPLICABLE (NO PLE)

These data were saved as continuous variables (in months), allowing for cases in which children never lived with both parents. Analysis of these variables is presented in Figure 4 and Figure 5, which show both the median age of last living with both parents, and the timing of parents' separation increase with age.

Figure 4:   Time since children lived with both biological parents, by cohort and wave
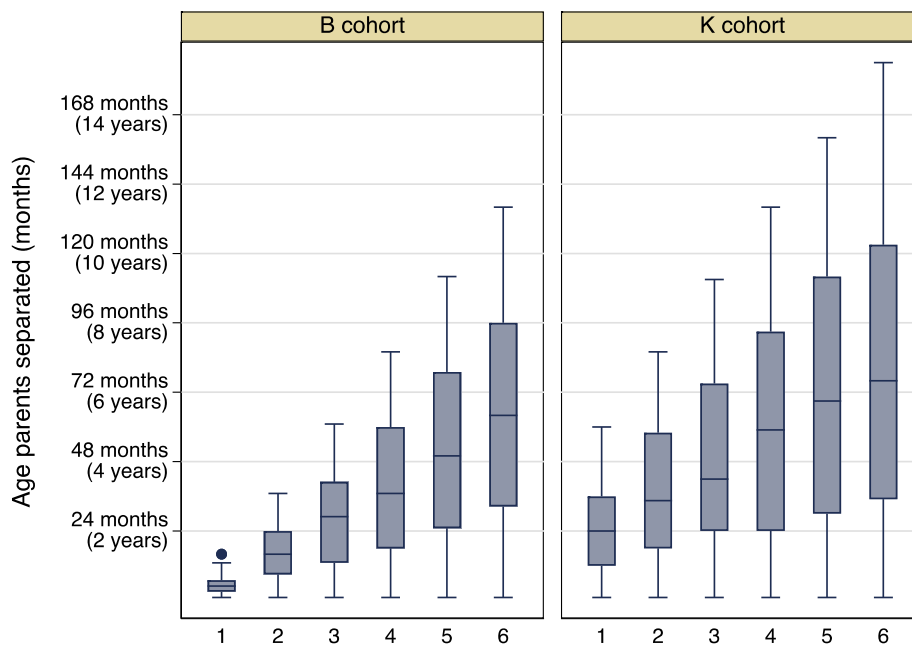
Notes: Excludes children who never lived with both parents and children with missing data. Complex and incomplete cases are coded to missing. The shaded box shows the middle 50% of the distribution, with the horizontal bar within the box being the median value. The whiskers indicate the upper and lower adjacent values.[5] These analyses are unweighted.

Figure 5:   Age of children at time of parents' separation, by cohort and wave
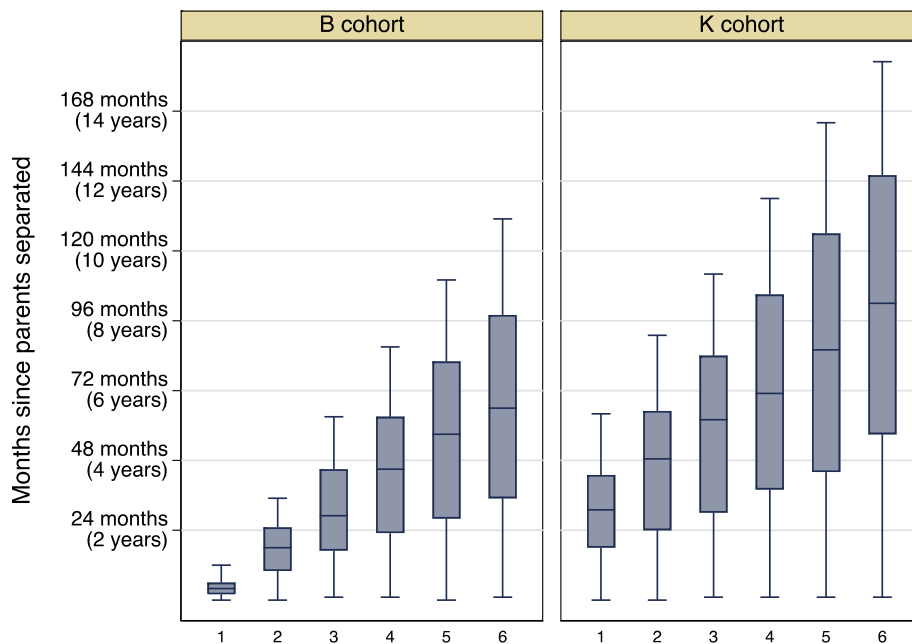
Notes: Excludes children with missing data. Complex and incomplete cases are coded to missing. Children who never lived with both parents are included with an age of zero at parents' separation. These analyses are unweighted.

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5   The adjacent values are functions of the interquartile range (IQR)—the upper and lower values of the IQR*150%.

5.   Parent living elsewhere recruitment and response

5.1   Recruitment of the PLEs

Since Wave 2 of LSAC, data have been collected from children's parents living elsewhere. Once recruited to LSAC, the PLE participates in an interview which replicates aspects of the P1 interview, with the aim of capturing the PLE's own characteristics (and family or household characteristics) as well as capturing the PLE's perspectives on the wellbeing of the study child.

For Waves 2 to 6, the overall approach to recruitment has been to ask P1 for contact details of the PLE if the study child had contact with the PLE in the last year. The PLE is then approached to ask whether they would be willing to participate. The broad steps, and possible outcomes, are shown in Figure 6.

Figure 6:   Decision tree for engaging with PLEs for LSAC
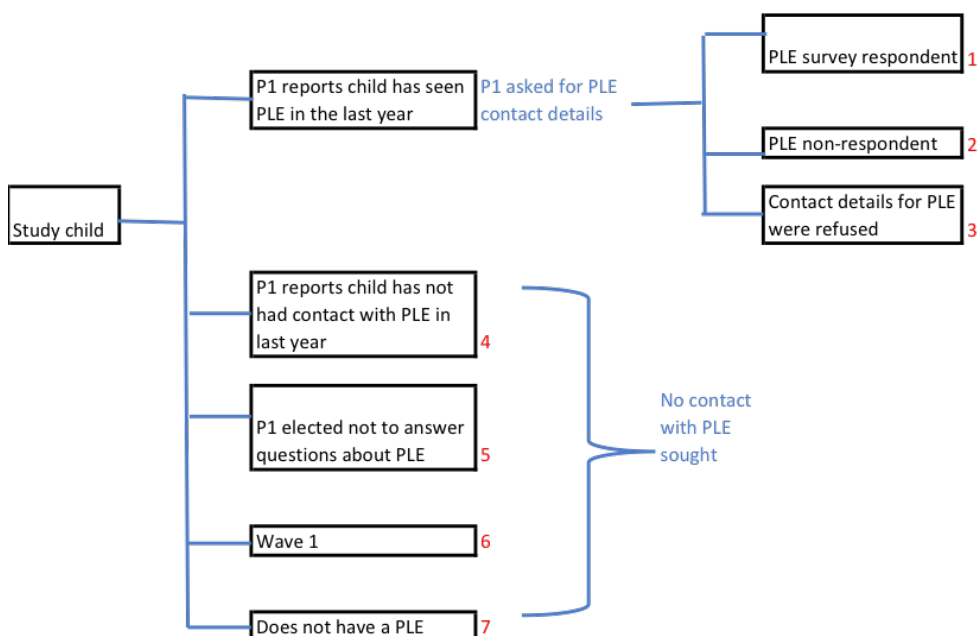
Note: The numbers in this diagram refer to the category in the new 'PLE respondent category' derived variable.

The *LSAC User Guide* contains detailed information about the recruitment methods.[6] These methods did vary for Waves 3 to 6 compared to Wave 2, with no attempt made to contact the PLE in Wave 1:

- In Wave 2, if the P1 reported that children had seen their parent living elsewhere in the previous year, the primary carer was asked whether she (or he) would provide contact details for that parent. If contact details were provided, a mail-back questionnaire was sent to that parent. The response rate was quite low (of those sent a questionnaire, responses were received for 35% for the B cohort and 47% for the K cohort) (LSAC Project Operations Team, 2015).

- From Wave 3, computer-assisted telephone interviewing has been used instead. Primary carers are asked for the contact details of parents living elsewhere, if those parents have had some contact with the child in the last year (see Table 11 for sample numbers). In Wave 3, it was noted that the non-resident parents who were contacted tended to be positive about being asked to be involved in LSAC, and this was reflected in a refusal rate of only 6% of those contacted. Almost 80% of fathers for whom contact details were provided responded to this survey. The remainder of the non-response was due to an inability to make contact with the non-resident fathers (LSAC Project Operations Team, 2015).

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6   Note that the numbers reported in this technical report will not exactly match those presented in the User Guide, in part due to the different datasets used in deriving these numbers.

5.2 PLE respondent variable

A new data item has been derived for children with a PLE, which classifies cases according to whether or not the PLE responded to LSAC and, if they did not, what the reason was for their non-response (Box 9). These categories align with those shown in Figure 6. Some points about this are:

- The third category, which captures those P1 respondents who refused to provide contact details of the PLE, could not be identified in Wave 4, with the PLE non-respondents (Category 4) at that wave including those who were not approached because contact details were not provided.
- The PLE non-respondent category includes non-contacts as well as refusals. These different outcomes could not be distinguished from the data items.

> **Box 9:** New variable: PLE respondent category
>
> 1. PLE QUESTIONS NOT ASKED OF P1
>
> 2. CONSENT FOR PLE CONTACT DETAILS NOT SOUGHT (INFREQUENT OR NO CONTACT)
>
> 3. CONSENT TO PROVIDE CONTACT DETAILS REFUSED (THIS INFORMATION NOT AVAILABLE WAVE 4)
>
> 4. PLE NON-RESPONDENT (REFUSAL AND NON-CONTACT)
>
> 5. PLE SURVEY RESPONDENT
>
> -1. NOT APPLICABLE

Across Waves 3 to 6, for just over half of the children with a parent living elsewhere, that parent responded to LSAC (see the numbers in the 'PLE respondent' column, Table 11). Because some PLEs were not invited to participate in LSAC, it is more relevant to calculate this after excluding those not contacted. The final column shows that, overall, this was around two-thirds of PLEs with whom children had contact in the previous year, although with considerably higher rates in Wave 3. These response rates were much lower for Wave 2

Table 11: Categories of PLE response by wave and cohort, Waves 2–6

Cohort and wave	P1— no PLE questions	Consent for PLE contact details not sought (no/ infrequent contact)	Consent to provide contact details refused	PLE Non-respondent%	PLE respondent	Total child has PLE	% respond-ding, total less cols 1–3
B cohort							
Wave 2	0	113	123	181	96	513	35.0
Wave 3	104	64	62	74	272	576	78.6
Wave 4	0	123	0	179	377	679	67.8
Wave 5	48	104	15	207	404	778	66.1
Wave 6	43	97	68	181	398	787	68.7
K cohort							
Wave 2	0	136	184	229	199	748	46.5
Wave 3	132	94	95	108	403	832	78.9
Wave 4	0	170	0	228	493	891	68.4
Wave 5	49	149	11	248	463	920	65.1
Wave 6	40	149	72	161	420	842	72.3
Total	**416**	**1,199**	**630**	**1,796**	**3,525**	**8,858**	**53.3**

Notes: Excludes Wave 1 as Parents Living Elsewhere were not respondents at this wave. At Wave 4, the indicator of whether consent was given was not provided on the data file, so the PLE non-respondents column includes those who were not contacted because contact details were not provided. Complex and incomplete cases are included in this table.

The PLE response variable is tabulated by selected characteristics in Table A4. Some associations simply reflect the recruitment methods, with very low responses by PLEs when primary carers and children do not have any contact with the PLE – in most of these cases primary carers were not asked for the other parent's contact details. Further, it appears that more "involved" parents living elsewhere are more likely to respond, at least as indicated by the number of nights the child stays with that parent. For analyses of the non-response in the Wave 3 PLE data, see Baxter et al. (2012).

In Table 12, the response by PLE biological parents is examined. The response rates (calculated as a percentage of those for whom the P1 provided contact details) are presented according to whether the PLE was the biological mother or the biological father. The sample sizes for those with a biological mother PLE are quite small, so no attempt has been made to test formally for differences. Overall, there does not appear to be a systematic difference in response rates for biological mother versus biological father PLEs. The vast majority of PLE respondents are fathers, as indicated in the final column, with more biological mothers among PLE respondents in Waves 5 and 6 of the K cohort.

Table 12:   PLE response by who is the PLE and wave and cohort, Waves 2–6

Cohort and wave	Biological mother % response	Biological father % response	Biological parent total % response	Sample size biological parent PLE total	Of PLE respondents, % fathers
B cohort					
Wave 2	25.0	35.4	35.1	95	97.9
Wave 3	80.0	78.2	78.2	266	97.0
Wave 4	59.1	69.3	68.9	354	96.3
Wave 5	75.0	66.0	66.5	399	94.0
Wave 6	72.4	70.3	70.4	397	94.7
K cohort					
Wave 2	41.7	47.0	46.7	195	94.9
Wave 3	70.6	79.8	79.2	395	93.9
Wave 4	72.9	70.4	70.6	464	92.5
Wave 5	70.1	65.6	66.1	450	89.6
Wave 6	75.0	73.0	73.2	410	88.3
Total	**68.6**	**67.0**	**67.1**	**3,425**	**93.2**

Notes: Excludes complex and incomplete cases, so sample sizes are smaller than in Table 11. The denominator for the percentage response is the number who provided PLE contact details, except for Wave 4, which includes some who refused to provide PLE contact details (which cases could not be identified at this wave).

6.   Care time arrangements

6.1   Introduction

One of the most common ways of characterising children's care arrangements when they have parents living apart is according to the number of nights that children stay with each of their parents. This is often done in reference to how many nights per fortnight children stay with their PLE. In this section, derived items relating to children's care time arrangements are presented. This draws on information provided by the primary carer and also, if applicable, by responding parents living elsewhere. This information is especially important for analyses of LSAC, to allow users to understand the extent to which the categories of 'primary carer' and 'parent living elsewhere', as derived from the study design, reflect the way in which the caring responsibilities for the study child are shared.

6.2   Variables

There are three main derived variables that capture care time arrangements:

- primary carer reports of nights spent with parent living elsewhere
- PLE reports of nights spent with parent living elsewhere
- primary carer reports of nights spent with biological father.

More details about how these variables were derived are provided in this subsection, below. These variables have categories that are aligned to ranges used in the calculation of child support, based on the number of nights per year the child stays with their parent living elsewhere (see Table A5). The category with no overnight stays is further separated into those who have at least monthly *daytime* contact, compared to those with less or no contact (See Box 10).

The category 10–14 nights per fortnight with their PLE is possible, as the primary LSAC household is not necessarily the household in which children live most or all of the time.

Box 10: New variables: Nights with parent living elsewhere, Nights with father

Nights with PLE (as reported by P1 or by PLE)	Nights with biological father
1. Less often than monthly contact or none	1. Less often than monthly contact or none
2. Day only up to monthly contact	2. Day only up to monthly contact
3. Stay with PLE 1 night/fortnight	3. Stay with father 1 night/fortnight
4. Stay with PLE 2–4 nights/fortnight	4. Stay with father 2–4 nights/fortnight
5. Stay with PLE 5–9 nights/fortnight	5. Stay with father 5–9 nights/fortnight
6. Stay with PLE 10–14 nights/fortnight	6. Stay with father 10–14 nights/fortnight
-9. Missing	-9. Missing
-1. Not applicable (no PLE)	-1. Not applicable (no PLE)

The core data feeding into each of these variables are questions on how many nights children stay overnight with the PLE (#pe08a1* and #pe08a3* for P1 reports and #pe08p1* and #pe08p3* for PLE reports). However, several steps had to be taken to derive the above items, because these questions were not asked of everyone. Note that there were changes in coding frameworks across the waves for some of these questions (see Appendix 1).

- An initial question asks when children last saw their PLE (#pe06a for P1 and #pe06p for PLE). Most respondents answered this question with much of the missing data relating to parents who did not answer the PLE questions at all. Those who reported that the study child has never seen the PLE are skipped past the subsequent questions, so those cases are coded to 'less often or none' in the derived item.

- Parents are then asked *how often* the child sees their parent living elsewhere; for example, 'at least once a week' (#pe08a1* for P1 and #pe08p1* for PLE). If children see their other parent less than once a year, they are skipped past the subsequent questions and coded to 'less often or never' in the derived item.

- In Waves 1 to 4, parents were then asked *how often* the child stays overnight with their parent living elsewhere; for example, 'at least once a week' (#e08a3* for P1 and #pe083p* for PLE). **This question was dropped for Waves 5 and 6.**
- The final piece of information (#pe08a4* and #pe08p4*) is the number of nights children stay with the PLE every *period.*
  – In Waves 1 to 4, for P1 reports, the period is the period selected when reporting on the frequency of children's overnight stays. For Waves 5 and 6, the period refers to the frequency of children seeing their PLE.
  – For PLE reports, the period in Wave 2 was set at a month for everyone (i.e. PLEs were asked how many nights per month children stayed with them). In Waves 3 and 4, the period is the period selected when reporting on the frequency of overnight stays, and in Wave 5 and 6, it is the period selected when reporting on the frequency of their seeing the child.
- The above questions result in a number of nights children stay with a PLE every week, fortnight, month, and so on. The estimated number of nights per year was derived by multiplying up each within-period estimate to a yearly one. For example, if the frequency was weekly, this was multiplied by 52. Other multiplication factors were Fortnightly = 26; Monthly = 12; 3 Monthly = 4; 6–12 Monthly = 1. Once multiplied out, a few cases were set to missing because they resulted in implausible values.
- Using the calculated nights per year, cases were then allocated to categories as shown in Box 10. Those who had no overnight stays were separated into those who did and did not have at least monthly daytime contact with their parent living elsewhere. This distinction was based on how often children were reported to see their PLE (#pe06a for P1 and #pe06p for PLE).

The sample numbers for these variables are shown by cohort and wave in Table A6.

The majority of PLEs in LSAC are biological fathers, with primary carers in LSAC largely biological mothers. However, there are some families in which these relationships are reversed, with primary carer fathers reporting on time children spend with a biological mother living elsewhere. It is sometimes more relevant for analyses to know how many nights children spend with their biological father (or their biological mother), rather than just their parent living elsewhere. Another derived item, therefore, is equivalent to that described above, but instead refers to the number of nights that children stay overnight with their biological father.

- Most of this is based on biological mothers' reports of children's time spent with a PLE biological father. That is, we start with the derived item for time with PLE, for cases in which the PLE is the biological father.
- If the biological mother is the PLE, from the biological father P1 we have the number of nights children stay with their mother. The number of nights children stay with their father is derived as 365 less this amount.

This variable is shown in Table A7.

Overall, the missing data on each of these variables largely relates to individual non-response, that is, when P1 did not answer the PLE questions, or when the PLE was not a respondent.

6.3 Analysis of the care time arrangement variables

Figure 7 shows the estimated percentages of children in each care time arrangement, by cohort and wave, based on reports by the primary carer about the number of nights per fortnight the study child spends with their parent living elsewhere.

To present the findings for the PLE reports, a comparison figure for P1 reports for children who had a PLE report is included. The findings are presented as percentages of children with a PLE by wave, within cohort (see Figure 8). There is some difference according to who is the informant, with PLE respondents tending toward higher estimates of the number of nights per fortnight children stay with them, relative to the P1 reports.

Table 13 examines the extent to which the PLE and P1 provide the same responses when talking about the care arrangements of their child. To do this, data from both cohorts and Waves 2 to 6 are used, drawing on information for study children for whom the care arrangements variable is non-missing for each of the biological parents.

Figure 7: Percentages of children with a parent living elsewhere according to nights with PLE by cohort and age (years)
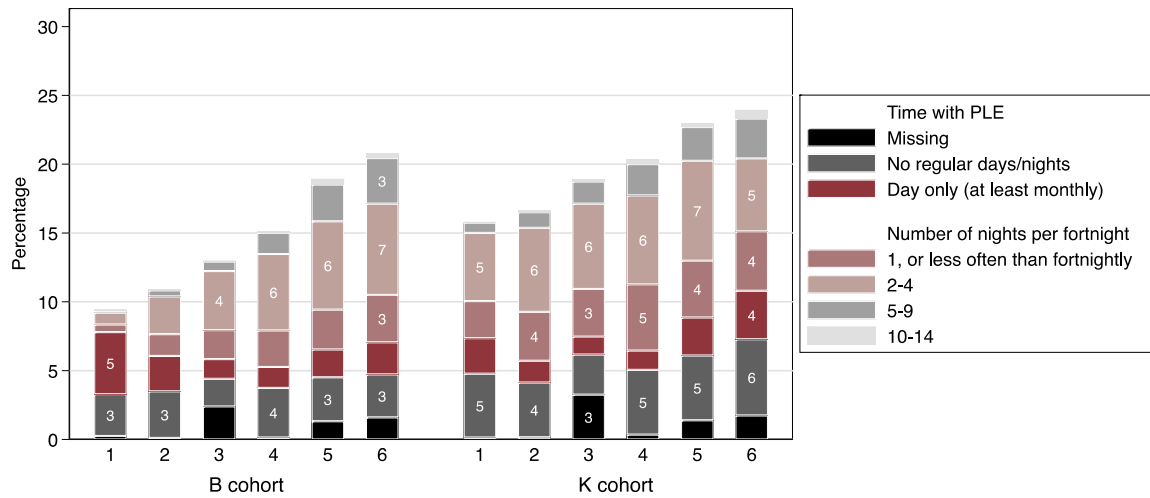
Notes: At each wave, the height of the bar is the total percentage of children who have a PLE. Weights were applied in calculations. Excludes complex and incomplete cases. Data labels are omitted if the value was less than 3%.

Figure 8: Primary carer and PLE reports of number of nights with PLE, by cohort and wave
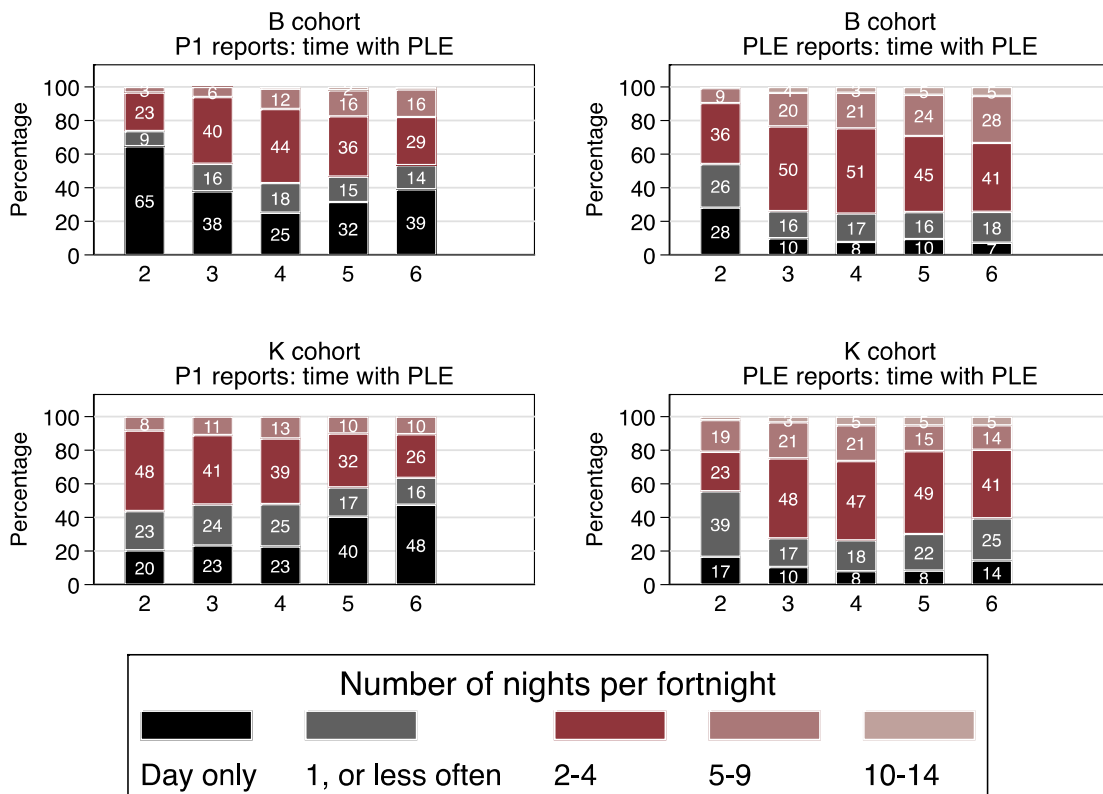
Notes: There was very little missing data once limited to cases with valid care time data for PLE-reports, so those cases with missing data are excluded. These analyses are weighted. Data labels are omitted if the value was less than 3%.

Table 13:   Comparisons of paired PLE and P1 reports of nights per fortnight the study child stays with PLE

P1 report	PLE report						
	Day only %	1 day per fortnight or less often %	2–4 nights/ fortnight %	5–9 nights/ fortnight %	10–14 nights/ fortnight %	Total %	N %
Day only	58.1	32.4	8.6	1.0	0.0	100.0	105
1 day per fortnight or less often	21.5	47.0	27.9	3.1	0.5	100.0	1,131
2–4 nights/fortnight	1.2	7.9	73.6	15.8	1.6	100.0	1,540
5–9 nights/fortnight	0.7	1.1	7.1	75.1	16.0	100.0	562
10–14 nights/fortnight	0.0	0.0	0.0	55.1	44.9	100.0	69
Total	**9.6**	**20.3**	**43.9**	**21.7**	**4.4**	**100.0**	**3,407**

Note: Includes pooled data Waves 2–6, those with P1 and PLE response to this item, excluding complex or incomplete cases.

There is some concordance between the reports of primary carers and the other parent, but there are many families in which the reports do not exactly correspond. Parents were most likely to give consistent reports when (according to the P1) children stayed 2–4 nights per fortnight or 5–9 nights per fortnight with the PLE. Around 75% of the PLEs gave the same report. About another 16% of the PLEs reported that the child spends more time with them. It was not common for the PLE to report lower levels of overnight stays, relative to the reports of the primary carer.

While some of the inconsistency may be due to inaccuracies in the underlying data or perhaps problems introduced in deriving these variables, it remains possible that parents themselves have given quite different responses in regard to children's living arrangements. For example, arrangements may be variable or not yet fixed, and so each parent may view the care arrangements differently, or arrangements may have changed recently, between the P1 and PLE interview.

The other variable derived for children with a parent living elsewhere is that of care arrangements measured as nights children stay with their biological father. The overall percentages for this variable are shown in Figure 9. The findings are similar to those shown in Figure 7. A key difference is that, for older children in the K cohort, the analyses of time with fathers show more clearly how arrangements appear to shift slightly to there being more children living predominantly with their father as they grow older. Still, such arrangements remain in the minority, compared to children living predominantly with their biological mother.

Figure 9:   Percentages of children with a parent living elsewhere according to nights per fortnight with biological father by cohort and wave
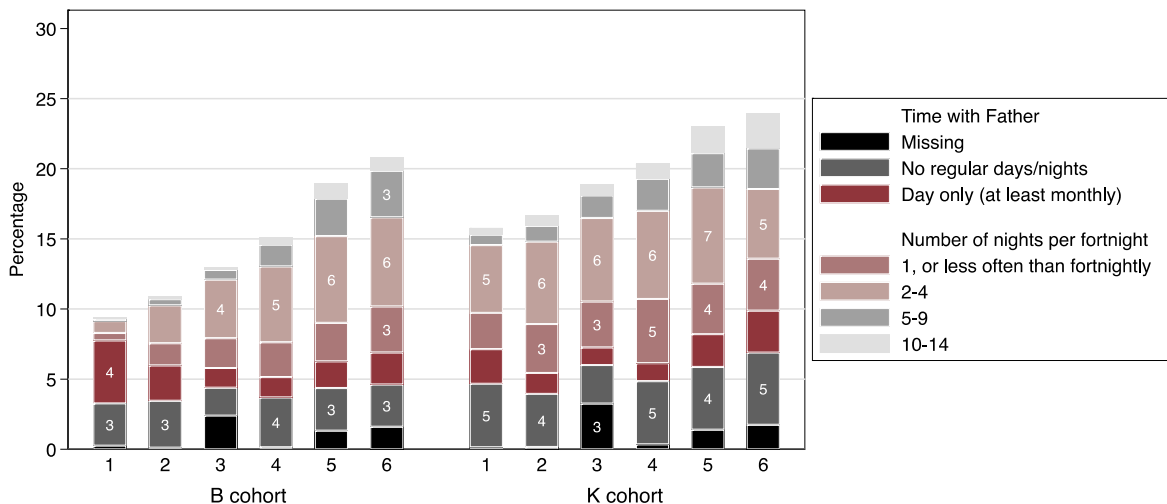
Notes: At each wave, the height of the bar is the total percentage of children who have a PLE within the in-scope sample. Weights were applied in calculations. Data labels are omitted if the value was less than 3%.

7.   Summary

Much effort has been devoted to the collection of data on and about parents living elsewhere in LSAC. However, given the complexity of these data, they have to date been under-utilised. This technical report has presented some new derived items that will aid researchers to understand the parent living elsewhere sample and to make use of the rich set of the LSAC data on these families.

References

Baxter, J. A. (under review). *When parents live apart: Children's experiences and wellbeing according to post-separation arrangements and contexts*. LSAC Research Report. Melbourne: Australian Institute of Family Studies.

Baxter, J. A., Edwards, B., & Maguire, B. (2012). *New father figures and fathers living elsewhere* (FaHCSIA Occasional Paper No. 42). Canberra: FaHCSIA.

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Appendix 1: LSAC variables used in PLE analyses

Table A1: LSAC variables used in PLE analyses

Waves	Variable	Dataset	Question / Item	Note
1	#pe02a	Main	Does [child] have one other parent living elsewhere? (1) One only; (2) Two elsewhere; (3) Other parent deceased	If parents reply (2), they are prompted to talk about the parent who has had the most to do with the child since birth
2	#pe02b	Main	Does [child] have another parent living elsewhere? (1) No, both biological or adoptive parents live here; (2) No, other parent deceased; (3) Yes, one only; (4) Yes, two elsewhere	These response options did not allow for respondents who were single parents who want to indicate that the child does not have another parent, because that parent is completely absent from their lives. There was some missing data in this item which may reflect this
3–6	#pe02b	Main	Derived, or if cannot be derived, the above question is asked during household file completion	This information collection moved to the household file part of the interview. For those who were PLEs at previous waves, it is rolled forward, and for those who were in the P1 household, it is derived from that. If it cannot be derived, a direct question is asked
4–6	#pe02c	Main	DERIVED: Does study child have a PLE? (1) Yes; (2) No	As above, this information is derived from information collected while doing updates to the household form, with this direction question also. There is a small amount of inconsistency between#pe02b and #pe02c
3–6	#plemn	Main	PLE member number	Waves 3 to 4, this is member number of the PLE who was previously resident in the primary household. For Waves 5 and 6, other PLES also have a unique identifier
1–6	#f21am@	Household	Person type	If an ex-household member is a PLE, they are coded as 6.
1–6	#f01m@	Household	Present for wave	Check that a person with a PLE person type is not present (=1 if present)
Who is the PLE (and used to derive parents' relationship history)				
1–6	#pe03a	Main	Sex of the PLE	From direct questions or derived from the household form, or rolled forward from earlier waves
1–6	zf02m@	Household	Sex of person	Used to derive whether PLE is mother or father
1–3, 5–6	#pe04	Main	Relationship of PLE to child	From direct questions or derived from the household form, or rolled forward from earlier waves. Missing for Wave 4
4	#f08dple	Main	Detailed relationship of PLE to child	Appears to be derived from the household form. Is missing for many
1–6	#f08m@	Household	Relationship to study child	Used to derive relationship of PLE to child

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Waves	Variable	Dataset	Question / Item	Note
Reason PLE lives elsewhere (used to check data, but not used in derived items)				
2–3	#pe23b*	Main	Reasons PLE lives elsewhere	Yes/no questions for a list of possible reasons for living apart (all with a PLE)
2–6	#f15m@	Household	Reason person left the household	Used to derive reason for parents living apart
2–6	#f16m@	Household	Reason person temporarily away	Check that PLE has left, rather than being temporarily away
4–6	#pe23d	Main	Reason PLE lives elsewhere	Only for new PLEs who are not picked up in the household form
1–6	#pe07a	Main	Main reason child has never seen PLE	Used to capture reasons for living apart for those not captured by questions above (if child has never seen PLE)
1–5	#pe07b	Main	Main reason child has not seen PLE for past month	Used to capture reasons for living apart for those not captured by questions above (if child has not seen PLE in last month)
Parents' relationship history (see 'who is the PLE' above)				
1	#pe01*	Main	Whether primary carer and PLE had been married (#pe01a) and, if not, whether they had cohabited (#pe01b)	Rolled forward to later waves
1–6	#f07#p1	Main	Marital status of P2 to P1	Used only if P1 and P2 are the biological parents. Rolled forward for capturing relationship history when parents later separated.
1	#pe01c	Main	Age of child when PLE and P1 stopped living together	Rolled forward to later waves
2–6	#f14m@	Household	Date person left the household	Used along with the date at interview (#datint) and study child age in months (#scagem) to calculate when and at what age child last lived with both parents
2–6	#pe23c*	Main	Age of child when PLE and P1 stopped living together	The quality of these data is questionable – the data are often very inconsistent with the Wave 1-reported data and household-file-derived data. Only used here if other data not available
Who are the primary carers?				
1–6	#f08#p1 and #f08#p2	Main	Relationship of P1 and P2 to study child	Derived from the household file, and rolled forward from wave to wave. Used to derive whether biological parents are in the household
1–6	zf02p1 and zf02p2	Main	Sex of P1 and P2	Used to derive whether biological mother and/or father are in the household
1–6	'#bmoth' and '#bfath'	Main	Indicators of biological mother and biological father being in household	Used to derive whether biological mother and/or father are in the household
Primary carer non-response to PLE questions				
3	#id45	Main	P1 declined to answer PLE questions. A direct question was asked about willingness to answer	This was dropped in Wave 4
5–6	"#pe23a1	Main	P1 declined to answer PLE questions	Not a direct question but an available option if P1 expresses unwillingness to answer these questions
5–6	"#pe23a2	Main	Reason P1 declined to answer PLE questions	Only available on general release files for B cohort

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Waves	Variable	Dataset	Question / Item	Note
PLE recruitment and response (and see contact questions – only asked if contact in last year)				
2,3,5,6	#id29*	Main	P1 consent to contact PLE	There is an ID29 (Waves 2,3,5,6) and ID29a (Waves 5,6). It is not apparent what the differences are. (All 'no' id29= 'no' id29a, but some 'yes' id29 are 'no' id29a)
P1 reports on contact between P1 and PLE or child and PLE				
1–6	pe06a	Main	P1 report: Length of time since study child last saw PLE	In categories from 'has never seen' through to 'saw today'
1–6	pe08a1*	Main	P1 report: How often PLE sees child	Coding framework was different in Waves 4–6 (08a1c) from Waves 1–3 (08a1a)
1–4	pe08a3*	Main	P1 report: How often child stays overnight at PLE house	Coding framework was different in Wave 4 (08a3b) to Waves 1–3 (08a3a)
1–6	pe08a4a	Main	P1 report: Number of nights per period that child stays overnight	Integer values. 'Period' is as identified in 08a3a for Waves 1–3, 08a3b for Wave 4 and 08a1c for Waves 5–6
PLE reports on contact between P1 and PLE or child and PLE				
2–6	pe06p	Main	PLE report: Length of time since SC last saw PLE	In categories from 'has never seen' through to 'saw today'. Categories are the same for each wave, but the wave 4 variable was incorrect, with responses aligned to the wrong categories
2–6	pe08p1*	Main	PLE report: How often PLE sees child	Coding framework was different across waves: 08p1a for Waves 3 and 4; 08p1b for Waves 2 and 3; 08p1d for Waves 4 to 6
2–6	pe08p3*	Main	PLE report: How often child stays overnight at PLE house	Coding framework was different across waves: 08p3a for Waves 3 and 4; 08p3b for Waves 2 to 4; 08p3c for Waves 5 and 6
2–6	pe08p4*	Main	PLE report: Number of nights per period that child stays overnight	Integer values. 'Period' is a month in Wave 2 (in pe08p4b), otherwise (pe08p4a) is the frequency identified in 08p3a for Waves 3 and 4, and pe08p1c for Waves 5–6.

Note: @ Refers to member number in the household.

Appendix 2: Supplementary tables

Table A2:   Complex or incomplete cases, sample sizes

Cohort and wave	1. One biological PLE but no biological parent in P1 household	2. PLE deceased	3. Does not have a PLE but only one biological parent in P1 household	4. Has a PLE but not biological, or same sex as biological parent in P1 household	5. Has two biological PLEs	6. Missing information about PLE	Complex or incomplete total
B cohort							
Wave 1	6	6	13	3	0	0	28
Wave 2	10	14	5	7	0	19	55
Wave 3	7	18	5	8	0	15	53
Wave 4	8	22	25	45	0	0	100
Wave 5	8	31	28	11	0	0	78
Wave 6	8	35	25	13	0	0	81
K cohort							
Wave 1	13	27	22	9	8	0	79
Wave 2	15	39	10	6	1	36	107
Wave 3	15	47	7	15	5	27	116
Wave 4	26	56	36	44	8	5	175
Wave 5	17	77	30	23	6	0	153
Wave 6	13	90	32	14	6	3	158
Total	**146**	**462**	**238**	**198**	**34**	**105**	**1,183**

Notes: 1. Includes those with a biological PLE and two biological primary parents, and those with a biological PLE but missing information about presence of biological parents in P1 household. 3. Includes those without a biological PLE, and with missing information about presence of biological parents in P1 household.

Table A3:   P1 reports about PLE in selected waves, children with a PLE, by previous wave characteristics

Characteristics at previous wave	% P1 answers PLE questions Wave 3	% P1 answers PLE questions Wave 5	% P1 answers PLE questions Wave 6	% P1 answers PLE questions (Wave 3, 5 or 6)
PLE				
No PLE	99.7	99.2	98.9	99.3
Has PLE	81.1	91.2	92.4	88.8
Time since parents separated if living apart				
Never lived together	70.8	82.6	87.6	78.5
Up to 2 years	88.1	92.5	92.0	90.6
>2 to 4 years	87.6	94.6	96.4	93.2
>4 years	81.5	92.9	92.7	90.9
Care time if living apart				
Less often or none	58.2	83.1	88.4	76.3
Day only up to monthly	88.2	85.6	93.5	89.5
1 night	85.1	96	96.9	93.2
2–4 nights	92.2	95.5	95.3	94.5
5–14 nights	94.2	95.1	94.9	94.9
Total	**82.9**	**94.4**	**94.9**	**91.2**

Notes: Data are weighted. Excludes Wave 1 and excludes cases in which P1 did not answer PLE questions (Waves 3, 5 and 6). At Wave 4, the indicator of whether consent was given was not provided on the data file, so, for this wave, PLE non-respondents includes those who were not contacted because contact details were not provided.

Table A4:   Categories of PLE response at Waves 3, 5, 6 by selected variables, children with a PLE

Variables	Consent for PLE contact details not sought (no/infrequent contact) %	Consent to provide contact details refused %	PLE non-respondent %	PLE respondent %	Total (child has PLE, in-scope) %
Child age when parents separated					
Before birth/never	35.8	16.1	24.4	23.7	100.0
Up to 1 year	19.3	16.2	25.5	39.0	100.0
>1 to 2 years	18.4	15.4	22.5	43.8	100.0
>2 to 4 years	11.1	10.8	26.0	52.1	100.0
>4 to 6 years	6.9	7.8	24.5	60.9	100.0
>6 years	6.9	5.5	25.0	62.7	100.0
Care time					
Less often or none	75.7	10.5	6.8	7.1	100.0
Day only up to monthly	0.0	20.2	35.7	44.1	100.0
1 night	0.0	15.0	28.5	56.5	100.0
2–4 nights	0.0	8.1	27.4	64.6	100.0
5–14 nights	0.0	4.5	23.8	71.7	100.0
Total	**16.3**	**11.0**	**23.8**	**48.8**	**100.0**

Notes: Data are weighted. Excludes Wave 1 and excludes cases in which P1 did not answer PLE questions (Waves 3, 5 and 6). Wave 4 was excluded because consent for PLE contact was not asked then.

Source: LSAC Waves 2, 3, 5, 6, B and K cohorts.

Table A5:   DHS child support categories

Number of nights a fortnight	Equal to number of nights a year	Child support care percentage	Child support cost percentage
1	0–51	0–13%	Nil
2–4	52–127	14–34%	24%
5–6	128–175	35–47%	25% plus 2% for every percentage point over 35% of care
7	176–189	48–52%	50%
8–9	190–237	53–65%	51% plus 2% for every percentage point over 53% of care
10–12	238–313	66–86%	76%
13–14	314–365	87–100%	100%

Table A6:   Nights with PLE by cohort and wave, children with a PLE, sample sizes if hasple==1

Cohort and wave	Less often than monthly contact or none	Day only up to monthly contact	With PLE 1 night / fort-night	With PLE 2–4 nights/ fort-night	With PLE 5–9 nights/ fort-night	With PLE 10–14 nights/ fort-night	Missing	Total
P1 reports								
B cohort								
Wave 1	154	229	28	44	8	3	22	488
Wave 2	154	117	72	125	20	3	22	513
Wave 3	87	62	91	186	30	1	119	576
Wave 4	149	63	110	230	64	4	59	679
Wave 5	128	81	116	257	107	17	72	778
Wave 6	115	86	127	244	122	13	80	787
K cohort								
Wave 1	227	127	132	243	36	2	37	804
Wave 2	173	69	155	266	49	7	29	748
Wave 3	123	55	146	261	68	7	172	832
Wave 4	188	56	192	258	91	14	92	891
Wave 5	179	105	157	276	93	11	99	920
Wave 6	187	119	146	179	98	21	92	842
Total	**1,864**	**1,169**	**1,472**	**2,569**	**786**	**103**	**895**	**8,858**
PLE reports								
B cohort								
Wave 1								
Wave 2		27	25	35	8	1	0	96
Wave 3		27	49	132	56	8	0	272
Wave 4		24	62	188	86	14	3	377
Wave 5		36	63	182	103	20	0	404
Wave 6		25	75	157	120	21	0	398
K cohort								
Wave 1								
Wave 2		31	79	49	35	5	0	199
Wave 3		41	68	191	90	13	0	403
Wave 4		35	84	232	116	25	1	493
Wave 5		35	102	221	76	26	3	463
Wave 6		54	113	160	70	23	0	420
Total		**335**	**720**	**1,547**	**760**	**156**	**7**	**3,525**

Notes: PLE reports of nights with PLE not available Wave 1. By design, PLE respondents exclude those who have little or no contact with the study child. Complex and incomplete cases are classified as missing.

Table A7:   Nights with father by cohort and wave, children with PLE, sample sizes

Cohort and wave	Less often than monthly contact or none	Day only up to monthly contact	With PLE 1 night / fort-night	With PLE 2–4 nights/ fort-night	With PLE 5–9 nights/ fort-night	With PLE 10–14 nights/ fort-night	Missing	Total
B cohort								
Wave 1	153	228	27	43	8	7	22	488
Wave 2	152	115	72	123	20	9	22	513
Wave 3	86	61	92	181	30	7	119	576
Wave 4	147	60	103	224	64	22	59	679
Wave 5	122	76	110	248	107	43	72	778
Wave 6	111	84	121	234	122	35	80	787
K cohort								
Wave 1	222	121	127	237	36	24	37	804
Wave 2	165	65	152	256	49	32	29	748
Wave 3	116	53	138	251	68	34	172	832
Wave 4	180	51	183	251	91	43	92	891
Wave 5	170	89	137	261	93	71	99	920
Wave 6	174	101	125	168	98	84	92	842
Total	**1,798**	**1,104**	**1,387**	**2,477**	**786**	**411**	**895**	**8,858**

Notes: By design, PLE respondents exclude those who have little or no contact with the study child. Complex and incomplete cases are classified as missing. This variable is based on P1 reports.