



The kids are alright

Adolescents and their fathers in the UK

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A REVIEW OF DATA IN
SIX UK LONGITUDINAL STUDIES

Other reports in this series can be found at:

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Statements about each quantitative dataset are based on the authors’ interpretations of online documentation reviewed in 2023

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Executive summary

Overview

Content

The kids are alright review of longitudinal studies investigates the quantitative data about fathers of adolescents (ages 10-18 years inclusive), father-adolescent relationships, and co-parenting during adolescence that has been collected in six large-scale UK longitudinal studies. It is aimed at an audience of researchers and research funders.

The six longitudinal studies reviewed are: the Millennium Cohort Study (MCS), the Avon Longitudinal Study of Parents and Children (ALSPAC), the first *Growing Up in Scotland* birth cohort study (GUS), the first and second Longitudinal Survey of Young People in England (LSYPE) studies (*Next Steps* and *Our Future*) and *Understanding Society* (the UK Household Longitudinal Study).

Resources for research studies are tight, and these multi-purpose studies have broader aims than researching fathers. Yet collecting equivalent data about fathers and mothers is central to researching the lives and development of children, including adolescent children.

Aims

This review's aims are to identify 'fathers-in-adolescence' *data collection* and *data analysis gaps*, the implications of *study design* for data about fathers, and *opportunities for future analysis*.

Methods

Using study documentation available online, a desk review was carried out of:

- the 'father-factor' content of the questionnaires and interviews which collected data from fathers, mothers and children during children's adolescence in the six selected longitudinal studies
- features of study design connected to the breadth and quality of the fathers-in-adolescence data collected.

The kids are alright father-factor framework was developed for categorising data collected in the six longitudinal studies about father involvement (three types: *engagement*, *accessibility* and *responsibility*), father-child relationships, co-parenting and other aspects of fathering during children's adolescence.

To identify analysis gaps, the breadth of fathers-in-adolescence' data *which had been collected* by the six longitudinal studies was compared with the content of *published analyses* of these studies in the Fatherhood Institute's extensive and systematically collected Literature Library. In this way, it was identified where data collected has not been analysed within publications in the Literature Library.

Findings in brief

Broad categories of data collected

The studies have collected a variety of data about fathers living for all or most of the time with their adolescent child/ren, giving much potential for secondary analysis on issues of scholarly, policy and practice interest. The questions asked of fathers, mothers and children fall into the following broad categories:

1. Contextual factors
2. Father involvement – *accessibility*
3. Father involvement- *direct engagement*
4. Father involvement – *responsibility*
5. The father-child relationship
6. Co-parenting
7. Fathers' beliefs, feelings and attitudes in relation to their fathering role.

Data collection gaps

Despite around 40% of adolescents having a birth father living elsewhere for all or most of the time, far less data has been collected about these Own Household Fathers (OHFs), who were rarely included in data collection, than has been collected about co-resident fathers.

There is need for a balance in the fathers-in-adolescence data collected so that it includes father involvement, the father-child relationship and co-parenting as well as father economic activity, employment and income. These two sets of factors can interact in their influences on children.

Questions about father *accessibility* (which may be especially relevant during adolescence) and father *responsibility*, as well as fathering-related beliefs, feelings and attitudes, have been less extensively asked than questions about fathers' *direct engagement* with their child/ren (which generally declines during adolescence) and (for co-resident fathers) *father-adolescent relationships*. *Co-parenting* is also a key data collection gap, both where parents live together and where they live separately.

Given that educational attainment is such a policy focus, less data has been collected about fathers' involvement in their children's education than would be expected, even in studies focusing on educational and vocational outcomes.

The importance of study design decisions

The breadth of 'fathers-in-adolescence' data collection, and the validity of these data, are increased when (i) data is collected directly from a full range of fathers in every sweep or

wave; (ii) substantial efforts are made to recruit fathers, including Own Household Fathers, for example with interviewer time and sufficient budgets; (iii) interviews and self-completion questionnaires, including those for fathers as research participants, collect equivalent data about ‘father-factors’ and ‘mother-factors’; (iv) questions are asked separately about fathers and mothers, rather than about a single category of ‘parents’; (v) questions are asked about birth fathers living elsewhere (Own Household Fathers – OHFs), whether or not they are engaged in their children’s day-to-day lives; and (v) questions asked about fathers differentiate between co-resident fathers and OHFs; and also where possible between birth/adoptive fathers and ‘father-figures’/‘stepfathers’.

Data analysis gaps

Most extensively used in analysis are (in relation to co-resident fathers) questions about father-adolescent relationships; and (in relation to OHFs) the quantity of engagement.

Least used in published analysis, in relation to both co-resident fathers and OHFs, are questions about the extent of father and child co-residence, types of father engagement, father involvement in their children’s education, father responsibility and co-parenting.

Several analyses of MCS, ALSPAC and other data in the Fatherhood Institute’s Literature Library frame OHFs as ‘absent’, and parental separation as ‘father loss’ and do not incorporate the data that have been collected about OHF involvement in their children’s lives.

Few published analyses were found of the large-scale longitudinal data most recently collected in the UK about the fathers of contemporary adolescents: in the Millennium Cohort Study, *Growing Up in Scotland*, and *Understanding Society* (including parenting style).

The oldest cohort studies offer enduring value for analyses of the impact of fathering in adolescence and father-adolescent relationships on adult outcomes and pathways, and of intergenerational effects for the adolescents’ future children.

Factors in explaining why researchers have not so far used the collected data in analysis may include sample sizes and data quality, the data only recently becoming available for analysis, and researcher knowledge of the data that have been collected.

Recommendations

The kids are alright review of longitudinal studies will be disseminated to highlight this rich longitudinal data about the fathers of UK adolescents that is available to be drawn on by current and future generations of researchers.

Recommendations for data collection

Equivalent data should be collected about ‘father-factors’ and ‘mother-factors’ in quantitative studies of influences on children during adolescence and young adulthood. The ‘father-data’ should include father characteristics, fathering ‘status’, father involvement, fathering style, father-adolescent relationships and co-parenting.

Both co-resident fathers and Own Household Fathers should be included in research studies of adolescents and younger children.

Involved Own Household Fathers should be asked a similar range of questions about father involvement, fathering, father-adolescent relationships and co-parenting as asked of co-resident fathers.

Longitudinal and cross-sectional studies providing data for research about families and children should incorporate from the outset those resources and fieldwork practices that will be likely to achieve high engagement from fathers as research participants. In longitudinal studies, this includes continued participation from parents (usually fathers) who leave a child’s main household during the study.

Recommendations for research analysis and reporting

Research publications about children and their families should give evidence specific to fathers and to mothers, rather than for ‘parents’ as a single category in order to explore similarities and differences in relation to situation or gender. In addition, the term ‘parent’ as a euphemism or synonym for mother excludes consideration of father-factors and may ‘mask’ the absence of fathers from the sample.

Analyses of the impacts of family structures and parental separation should not explicitly or implicitly conceptualise or label Own Household Fathers as ‘non-resident’ or ‘absent’ or even ‘separated’¹. They should incorporate into analysis the data collected about OHFs’ involvement in their children’s lives, including part-time co-residence.

Quantitative researchers and research funders in the fields of fatherhood, families and adolescence should investigate the rich data available in the UK’s large-scale longitudinal studies for developing the evidence base about fathers and adolescents, as documented in *The kids are alright* review of longitudinal studies.

¹ Some may never have lived with their child and the child’s birth mother together at the same address.

1. About the review of UK longitudinal studies

*The kids are alright review of longitudinal studies*² has investigated the quantitative data about fathers³ of adolescents (ages 10-18 years inclusive⁴), father-adolescent relationships, and co-parenting⁵ during adolescence⁶ that have been collected in the following large-scale UK studies: the Millennium Cohort Study (MCS), the Avon Longitudinal Study of Parents and Children (ALSPAC), the first *Growing Up in Scotland* (GUS) birth cohort study, the first and second Longitudinal Survey of Young People in England (LSYPE) studies (*Next Steps* and *Our Future*) and *Understanding Society* (also known as the UK Household Longitudinal Study).

This review is part of the Nuffield Foundation-funded *Contemporary Fathers in the UK* series, in which the Institute has already published reviews of longitudinal studies in relation to fathers at other points in the parenting life-cycle⁷. *The kids are alright review of longitudinal studies* is the companion review to [The kids are alright research review](#).

1.1. Aims

The aims of this review are:

- to identify data collection gaps, and the implications of study design for collection of father-focused-data, which might inform the content of new longitudinal studies and large-scale cross-sectional surveys
- to show the potential for secondary analysis of the data already collected, by identifying under-studied ‘fathers-in-adolescence’ data (in published research) and future analytic opportunities.

These aims were operationalised in the form of four main research questions, which also form the chapter titles in this report⁸. The term ‘data’ refers to the questions asked of

² The longitudinal studies have followed samples of children or households over time to study change, with multiple ‘sweeps’ or ‘waves’ of data collection.

³ The term ‘father’ in this report includes birth fathers, adoptive fathers, ‘stepfathers’ (e.g. mothers’ cohabiting partners) and foster fathers.

⁴ The World Health Organisation defines adolescence as between ages 10 and 19 [Adolescent health \(who.int\)](#)

⁵ Co-parenting is about how parents collaborate and support one another (or not) as parents, in the context of child-rearing. The quality of co-parenting is relevant whether or not parents are living together or in a couple-relationship.

⁶ The term ‘adolescence’ in this report refers to the adolescence of the fathers’ children, and not to the adolescence of children’s fathers, nor to adolescent fathers.

⁷ The antenatal period – *Who’s the Bloke in the Room?* (Burgess & Goldman, 2018); and the postnatal period – *Bringing Baby Home* (Burgess & Goldman, 2022).

⁸ **Chapter 2:** Study design: how has ‘fathers-in-adolescence’ data been collected?

Chapter 3: What ‘fathers-in-adolescence’ data have been collected?

Chapter 4: What are the implications of study design decisions for the data collected?

Chapter 5: Identification of under-studied data: to what extent has the data collected been used in published analysis?

research participants⁹ in the longitudinal studies which give fathers-in-adolescence variables for analysis. Issues of sample size, response rate, item non-response and representativeness of the study datasets are not explored in detail¹⁰; nor is detailed comparison of father-focused v. mother-focused data within the remit of this review.

1.2. The need for equivalent data about fathers and mothers

The topics and questions included in the six longitudinal studies result from decisions made by research funders and directors in specific contexts¹¹. Resources are tight, and these multi-purpose studies have broader aims than researching fathers. Yet researching fathers is central to researching children including adolescent children:

- Fathers are a key part of adolescents' world (Burgess and Goldman, 2023), with 59% of 14-year-old girls and 69% of 14-year-old boys in the UK reporting in 2014/15 that their relationship with their 'natural' father was extremely or very 'close' (Benson & McKay, 2018). The centrality of fathers to adolescents applies when both birth parents are fully co-resident with the young person in the same household, and also when one birth parent (usually the father) lives full-time or part-time in another household (Goldman et al., 2019). Around 40% of adolescent children have a birth father living elsewhere; and at least half of those in contact with him, see him regularly¹².
- Collecting data about and from fathers (as well as mothers) is important to examine the influences of parents on adolescents' development and 'outcomes' via genetic, epigenetic, socioeconomic, psychosocial, environmental and other pathways.
- Without data from fathers, it may be assumed (without evidence) that only maternal effects are important as predictors of child outcomes (Sharp et al., 2018). Yet there are distinctive independent father effects (Burgess and Goldman, 2023).
- If father involvement and characteristics are not controlled for in analyses of mother-effects, then the apparent net 'mother effect' may represent the impact of both parents¹³.

⁹ In interviews and questionnaires.

¹⁰ **Table 1E (in Section 2.4.4, below)** and **Appendix A Table 1** give brief details of sample size and response rates for the cohort study data collections completed by fathers.

¹¹ Including the aims of the study, the funder/s of the study, and constraints created by its overall study design (see **Sections 2.1, 2.2 and 2.3 below**).

¹² New analysis of UK-wide MCS data conducted for this review (by Professor Stephen McKay, July 2023) shows that around 40% of 17-year-olds in 2018-19 had a birth father living elsewhere. Among 17-year-olds in contact with this father, 52% reported seeing him in-person once a week or more, and another 23% at least once a month; while 75% had 'virtual' contact (e.g. by phone, messaging or social media) at least once a week (29% at least five times a week). Among 14-year-olds who saw their father who lived elsewhere, 36% reported staying overnight with him once a week or more (Burgess and Goldman, 2023).

¹³ This applies in reverse to father-effects where there are no equivalent variables relating to mothers, but this situation is far less common.

- Collecting equivalent data about fathers and mothers regardless of division of time and childcare responsibilities may enable parental gender effects to be disentangled in analysis from the impact of different shares of parent-child time and other parenting responsibilities.
- If the father's and mother's shares of parenting time or activities change; or their interest in the research study changes; or the parental couple separates or changes their living arrangements¹⁴, then the individuals completing 'main parental participant', 'partner' and 'father living elsewhere' (Own Household Father – OHF) interviews may change over time¹⁵, potentially limiting the sample for some longitudinal analyses. This difficulty can be avoided where father and mother, from the outset, complete equivalent questionnaire modules about parental characteristics, parenting and parent-child relationships.
- Finally, biological fathers contribute half a child's genetic inheritance: collecting data about the characteristics of biological fathers (such as demographics, health, height and weight, mental health, health behaviours, personality and numeracy), especially when combined with genetic samples, has value in biosocial research aiming to disentangle genetic and social influences on children's development.

1.3. Gathering father-data: who is the informant?

An important issue is whether the data is collected from fathers, mothers and/or children:

- Direct data collection from fathers (rather than by *proxy* from mothers) is crucial for valid data collection about the fathers; and to obtain both parents' perceptions of the couple relationship and coparenting. There is potential inaccuracy and bias in mothers' reports of fathers' characteristics¹⁶, perceptions, attitudes, and behaviours¹⁷ (Goldman & Burgess, 2017; Hinchliffe, 2013) and even more so when the father and mother live apart (Bryson et al., 2017; Kiernan, 2016).
- Including fathers as research participants enables studies to ask about fathers' own parents¹⁸ – key for analyses of intergenerational mechanisms and adolescents' social mobility through to adulthood.

¹⁴ The child may also change their living arrangements over time.

¹⁵ The parent completing the main (or sole) parental interview was more likely to change between sweeps in the LSYPE1 study than in the MCS and GUS.

¹⁶ For some factual measures and analytic purposes, concordance levels between mother and father may be sufficient (Prady & Kiernan, 2016) to mean that collecting data from mothers is adequate in terms of data validity. However, even facts such as occupation, educational qualifications, paid work hours and income can be problematic where a survey respondent reports on their partner (Dawe & Knight, 1997; Prady & Kiernan, 2016; Tagiyeva et al., 2011).

¹⁷ This may not apply to socially undesirable behaviours, which some fathers may under-report compared to their partner or children.

¹⁸ e.g. socio-economic status, educational qualifications and health problems.

- Adolescents can be asked about time and relationships with their father/s. ‘Symmetrical data’¹⁹ can be collected from father, child, and where relevant, from the mother. This is especially important for information about father-child relationships, fathering styles and co-parenting, because the perspectives of those involved are subjective.

1.4. Categories of fathers in this review of longitudinal studies

This review looks at the data collected about two main categories of fathers during their children’s adolescence: (1) Cohabiting Partner Fathers (CPFs); and (2) Own Household Fathers (OHFs)²⁰. These can be birth, adoptive, ‘step’ or foster fathers. **Box 1, below**, gives definitions of CPFs²¹, OHFs²², birth fathers and ‘stepfathers’, as used in this report.

Box 1: Categories of fathers included in this review of longitudinal studies		
	Definition for this review	Comments
Cohabiting Partner Father (CPF)	A birth, adoptive, ‘step’ or foster father who is a cohabiting partner ²³ of their child’s (birth, adoptive, ‘step’ or foster) mother or father ²⁴ , both of whom live in the child’s (sole or main) household at the time of data collection.	Most CPFs are birth fathers. The rest are mostly ‘stepfathers’ (see the row below). Nearly all mothers living with adolescent children are birth mothers.
Own Household Father (OHF)	A father ²⁵ whose main home is a separate household from his child’s sole or main household. Research and public discourse sometimes restrict OHFs to birth fathers,	OHFs are sometimes (often inappropriately) called ‘non-resident’ or ‘separated’ or ‘absent’. The great majority of OHFs are in contact with their adolescent, and a

¹⁹ Here this term denotes identical or similar data collected from at least two of fathers, mothers and children about a father-factor – behaviour, characteristic etc.

²⁰ The term ‘OHF’ in this report refers to birth fathers unless otherwise stated, and to the vast majority who are not currently in a relationship with their child’s other birth or adoptive parent, whom we call ‘Non-partner OHFs’. A small proportion are a non-cohabiting partner of the birth mother in a (LAT) ‘Living-Apart-Together’ relationship, and data collected about these ‘Partner OHFs’ are excluded from the scope of this review.

²¹ In the Millennium Cohort Study (MCS), in 2012-13, almost 75% of 11-year-olds lived with a CPF (birth/ ‘step’/ adoptive/ foster) (Connelly et al., 2014). Similar proportions of adolescents in Growing up in Scotland and the first sweep of the second Longitudinal Study of Young People in England had a second parent eligible for data collection in their main household.

²² Around 40% of adolescent children have an OHF who is a birth father.

²³ Included in this category are the small proportion of fathers co-residing with both their adolescent child/ren and their children’s mother while not (or no longer) in a couple relationship with her.

²⁴ This report refers to mothers when discussing the CPF’s cohabiting partner, but in a small proportion of families, the partner would be a CPF’s male partner.

²⁵ Around 90% of birth parents living separately from their child/ren for all or most of the time are fathers (Connelly et al., 2014).

	although a child can have an adoptive, 'step' or foster OHF.	substantial minority can be considered to be part-time resident (i.e. their child stays regularly). Most but not all have lived with their child. Most but not all have been in an ongoing relationship with their child's mother.
Birth father	A father whose name is on his child's birth certificate (whether or not he is the biological father of the child) or who is otherwise recognised as the biological father of the child.	The longitudinal studies generally use the term 'natural father' or 'biological father'. Most but not all birth parents are biological parents.
'Stepfather'	A birth/adoptive mother's/father's cohabiting male partner who is not a birth or adoptive father to the child. In this report, the term refers only to 'stepfathers' living in the child's (sole or main) household ²⁶ .	11% ²⁷ of all 11-year-olds in the MCS (in 2012-13) lived with a mother's partner who was not their 'natural' father (Connelly et al., 2014). Not all such fathers are termed 'stepfathers' by children or their parents. Because terms such as 'mum's partner' or 'mum's boyfriend' may be used, some cohort studies use "step-parent/parent's partner" (or similar) in questionnaires.

In this review of longitudinal studies, the Cohabiting Partner Fathers (CPFs) and Own Household Fathers (OHFs) were investigated separately but in parallel (i.e. in a linked way) because:

- much more extensive data were collected about the CPFs – in large part because OHFs were rarely included as research participants
- CPFs and OHFs have distinctive elements of father involvement (as well as many elements in common) and distinctive contextual factors potentially underlying their involvement (see **Section 1.5, below**).

Data collected in the longitudinal studies about 'single' or 'lone' fathers²⁸ are not within scope of this review.

²⁶ A 'stepfather' can also be the male partner of an OHP (a birth parent who does not primarily live with their child). or can be a previously co-resident 'stepfather' (Goldman & Burgess, 2017).

²⁷ Calculated by the Fatherhood Institute from figures in (Connelly et al., 2014). The proportion of children in the MCS with a co-resident 'stepfather' had increased from 6% at child-age seven (Calderwood, 2010) while still remaining a small minority at age 11.

²⁸ Fathers without a cohabiting partner who live (for all or most of the time) with their adolescent child/ren have low prevalence in the included longitudinal studies. The longitudinal studies generally collected the same data about these fathers as about co-resident mothers, which was much more extensive than the data collected about CPFs and OHFs. In the MCS, around 1.5% of the 11-year-old children lived in a 'single father household' (calculated by the Fatherhood Institute from figures in Connelly et al., 2014). This was a higher proportion than in early childhood.

1.5. The kids are alright father-factor framework

This review of the six longitudinal studies has developed a bespoke framework – ‘*The kids are alright father-factor framework*’. This is comprised of three established broad categories of father involvement (Lamb et al., 1987) plus four other broad categories for which data have been collected in relation to CPFs and/or OHFs in *at least one* of the included studies²⁹. The ‘father-factor framework’ therefore consists of seven broad categories of data relating to fathers *during the adolescence of their children*.

- *Contextual factors* for father involvement, fathering, the father-child relationship and coparenting which are about the father or parental couple relationship during the child’s adolescence, and which go beyond the ‘father characteristics’ covered in **Section 3.2, below**. Other potentially important *contextual factors*³⁰ are outside the scope of this review.
- *Father involvement – direct engagement* (Lamb et al., 1987): focused on the frequency and quantity of direct father-adolescent interactions and activities together, rather than the quality of time together.
- *Father involvement – accessibility*³¹ (Lamb et al., 1987): father being available and ‘on call’ so he can provide practical or emotional support³² or transportation³³ when needed³⁴. Note: for adolescents, ‘accessibility’ may be of increasing importance relative to direct engagement (Lewis & Welsh, 2005; Norman, 2017; Warin et al., 1999) as young people go out independently and spend more time in *solo* activities at home (including when other family members are in the same or a different room). Support or ‘monitoring’ may be carried out ‘virtually’ on the phone or via messaging, as well as in-person.
- *Father involvement – responsibility* (Lamb): this was later characterised (by Pleck, 2010) as (i) ‘indirect care’ – activities carried out exclusively for his child/ren when not physically present with them³⁵ (so – not including breadwinning/financial responsibilities³⁶); and (ii) ‘process responsibility’ – making decisions about the

²⁹ Other relevant factors which may be collected in longitudinal studies internationally, or in smaller-scale studies, or not at all, could be added to the framework in further work.

³⁰ Such as the father’s earlier life (including his involvement when his child was younger), mother-factors, adolescent-child-factors and household and broader family factors.

³¹ In tables for this review, accessibility has been placed first in the ‘father involvement’ trio (engagement, accessibility and responsibility) due to its prominence of direct engagement for adolescents.

³² “... something more than physically ‘being there’, carrying with it some sense of being psychologically available” (Warin et al., 1999, p6).

³³ Transportation is included as ‘accessibility’ because it gives the opportunity for ‘direct engagement’ e.g. conversation between father and child (Warin et al., 1999).

³⁴ In contrast, ‘accessibility’ for younger children often involves continuous in-person supervision of the child.

³⁵ For adolescents, this could involve e.g. buying or arranging resources for the child, dealing with school communications, and child-related paperwork and appointments.

³⁶ Breadwinning is excluded because the income generated is usually for the whole household and not exclusively for children.

child, taking initiative, monitoring and planning for the child. ‘Process responsibility’ involves the associated concepts of ‘mental load’³⁷ and ‘cognitive and emotional labour’ including forward planning, associated anxieties, and the emotional maintenance of family relationships.

- *The father-child relationship* – including broad emotional aspects of the relationship, conflict, parenting style³⁸, and the quality of father-child interactions, conversations and emotional support, drawing on Pleck (2010)’s ‘warmth’, ‘responsiveness’ and ‘control’).
- *Co-parenting* – including the ‘parenting alliance’³⁹, co-parental decisions about and with the child, and triadic (father-mother-child) interactions. Co-parenting is specifically in relation to the child, so goes beyond the overall relationship between the parents (the ‘couple relationship’), which is instead classified as a *contextual factor* (above).
- *Fathers’ beliefs, feelings and attitudes in relation to their parental role or the child* – called the ‘affective and cognitive domains of fathering’ (Palkovitz & Hull, 2018) and “fathering attitudes” (Shafer & Jeffery, 2022).

[Appendix B](#) shows how these seven ‘broad categories’ of data relate to sub-categories of data collected in the longitudinal studies – called ‘topics’ in this report. For example, the ‘direct engagement’ broad category includes the following ‘topics’ for both CPFs and OHFs:

1. Frequency or amount of father-child in-person time together
2. Looks after child/ren without mother present, including when mother working
3. Father involvement in specific activities and outings with child – leisure and ‘routine’
4. ‘Virtual’ time together including video-calls, messaging and social media
5. Father involvement with homework;
6. Conversations with child about school, schoolwork, or educational/vocational options
7. Conversations with child about other specific issues
8. Father’s, child’s or mother’s perception of amount of time that father spends with adolescent child/ren
9. (for OHFs only) Regular overnight stays of child with OHF.

See [Appendix B](#) for *all* the sub-categories of data (topics) collected in relation to all the seven ‘broad categories’ of data collected.

³⁷ For an account of mental load in separated families see (Luthra & Haux, 2022).

³⁸ Parenting style has been included in the broad ‘father-child relationship’ category, but some components of ‘parenting style’ (e.g. parental monitoring) could be classified as ‘responsibility’.

³⁹ Cohen and Weissman (1984) describe ‘parenting alliance’ as occurring when parents “acknowledge, respect, and value the parenting roles and tasks of the partner (Cohen & Weissman, 1984).

Notes

- i. For *contextual factors* and the three '*father involvement*' broad categories, there is a core of common topics for both CPFs and OHFs, and also some topics which are relevant to *either* CPFs or OHFs.
- ii. This framework is not derived empirically but has drawn on the fatherhood literature as a way of structuring discussion of the questions asked across the six UK longitudinal studies (see **Section 3.3, below**). Empirical work using the framework could involve quantitative analysis of large-scale studies⁴⁰, or in-depth qualitative research.

1.6. Review methods

1.6.1. Methods for review of the data collected

A desk review was carried out of:

- the 'father-factor'⁴¹ content of the questionnaires⁴² and interviews which collected data from fathers, mothers and children during the children's adolescence in the six selected longitudinal studies
- features of study design connected to the breadth and quality of the 'fathers-in-adolescence' data collected.

This investigation involved manual and electronic searches for questions relating to fathers in study questionnaires⁴³, and examination of technical documentation⁴⁴, available online in 2023 on individual study websites or the UK Data Service website. Data dictionaries and variable catalogues, such as those provided by the individual studies and CLOSER Discovery⁴⁵ were consulted for clarification where needed but were not searched comprehensively. Clarifications and information were also received from study research teams (see **Acknowledgements, above**).

⁴⁰ See Norman and Elliot, 2015 for an example using MCS postnatal father involvement variables.

⁴¹ In *Understanding Society*, this included questions which were asked to all study participants, regardless of their parental status.

⁴² In this report, the term 'questionnaire' refers to the data collection instrument, whether that is a paper or online self-completion questionnaire or a structured interview schedule (which sometimes includes a self-completion component).

⁴³ Questionnaires were available online in 2023 (at the time of writing this report) for all adolescence sweeps of ALSPAC, the MCS (except for household interview questions at ages 14 and 17) and the first LSYPE study (*Next Steps*); but only for the first three (out of four) adolescence sweeps of the first GUS cohort study (ages 10, 12 and 14); and only for the first three adolescence sweeps (out of six) of the second LSYPE study (*Our Future* – ages 13-14, 14-15 and 15-16). The most recent *Understanding Society* questionnaire available in 2023 (at the time of writing) was wave 13. Previous *Understanding Society* waves were consulted only for additional modules (for which the questionnaire from the most recent wave was examined).

⁴⁴ The technical documentation reviewed included dataset user guides, technical/fieldwork reports and interviewer instructions where available.

⁴⁵ [About – CLOSER Discovery](#)

1.6.2. Methods for review of the data analysed to identify ‘under-studied data’

The range of ‘fathers-in-adolescence’ variables included in research papers in the Fatherhood Institute’s extensive digital Literature Library⁴⁶ that had *analysed* data collected in the six longitudinal studies, was compared to the breadth of ‘fathers-in-adolescence’ data which had actually been *collected* by these longitudinal studies. In this way, analysis gaps were identified i.e. where data collected has not been analysed within publications in the Literature Library. This identification of analysis gaps is therefore in relation to *published* research.

The Institute’s Literature Library is likely to include the great majority⁴⁷ of published analyses of data about fathers from the six included longitudinal studies. It is an extensive collection of research publications (and unpublished papers with author permission) about UK fathers, fatherhood and inter-parental relationships, as well as relevant international research reviews and methodological papers, back to 1998. It was created through systematic searches of eleven bibliographic databases⁴⁸ (in 2014 and repeated in 2019) and supplementary search methods to identify journal articles, book chapters and ‘grey literature’ (Davies et al., 2017). It has been continuously updated⁴⁹ since 2014, including screening of recent publications (up to April 2023) listed on longitudinal study websites⁵⁰.

Box 2: Exclusions from the scope of this desk review

- i. retrospective data about fathers during their children’s adolescence years that were collected later when the children were adults – *this data would generally have lower reliability than data collected during the adolescence years*
- ii. data about fathers during earlier phases of their children’s lives or prior to the birth of their children that were collected during the adolescence years
- iii. the content of proxy interviews in the MCS and Understanding Society – these were carried out in small minorities of study households

⁴⁶ The Literature Library was searched for all analyses of data from the six selected longitudinal studies. Each full text was screened for analysis that included variables about father involvement, fathering, coparenting or father-child relationships during children’s adolescence. This could be a descriptive analysis of variables, or a cross-sectional or longitudinal analysis of statistical relationships between father-factors and other variables.

⁴⁷ Analyses of father-factors that form a minor part of a publication with a wider or different focus, or had a biomedical focus, may have been missed.

⁴⁸ Prioritising social science databases, UK databases and those covering UK research journals.

⁴⁹ Through expert contacts, web searches, social media, and organisational alerts and newsletters.

⁵⁰ A title screen of recent publications listed on study websites was carried out. Where the title suggested that the focus of the paper was fathers, mothers, or parental relationships, the abstract was screened and, where relevant, the full text was also screened, looking for inclusion of relevant variables.

- iv. linked administrative data (Lut et al., 2022), clinical measures and bio-samples e.g. *in the MCS, saliva samples were collected from birth fathers and mothers when children were aged 14 years.*
- v. data collected about fathers living with their adolescent child/ren (for all or most of the time) in 'single father households' (see section 1.4)
- vi. data collected about fathers who are a non-cohabiting partner of their adolescent child/ren's mother and may live part-time with her in the child/ren's (main) household (see section 1.4).

2. Study design: how has ‘fathers-in-adolescence’ data been collected?

2.1. The six selected UK longitudinal studies

The six longitudinal research studies included in this review were listed at the beginning of **Chapter 1**. Below, in **Table 1A** (an extract from the very detailed [Appendix A Table 1](#) we name them again, adding information about the type and focus of each study, the geographical area covered and the birth dates of the children/young people who are the focus of this review:

Table 1A: The six longitudinal studies					
Child cohort studies					Household panel study
Abbreviation and full name of study					
LSYPE1 Next Steps (Longitudinal Study of Young People in England – 1st cohort)	ALSPAC (Avon Longitudinal Study of Parents and Children –G1 cohort ⁵¹ of adolescents	MCS (Millennium Cohort Study)	LYSPE2 Our Future (Longitudinal Study of Young People in England, 2nd cohort)	GUS (Growing Up in Scotland – Birth Cohort 1)	Understanding Society
Geographical area covered					
England	The old administrative county of Avon (in and around Bristol) in SW England	All four countries of the UK	England	Scotland	All four countries of the UK
Focus of study (funder/s)					
During adolescence sweeps ⁵² : – Educational and vocational transitions	Environmental, biological and genetic factors that affect health and development	Social science – multidisciplinary evidence for science and policy development	Educational and vocational transitions, and young people’s wider lives and experiences	Evidence to develop and monitor policies and services for children and families, especially	Social science – multi-disciplinary evidence for science and

⁵¹ The fathers of these Generation 1 (G1) adolescents are the ALSPAC ‘G0 Partners cohort’.

⁵² The focus broadened from age 25, when the funder changed to the Economic and Social Research Council.

(Department for Education)	(Medical Research Council; Wellcome Trust; University of Bristol)	(Economic and Social Research Council; central government)	(Department for Education)	education and health (Scottish Government)	policy development (Economic and Social Research Council; central government)
Adolescents born in					
1989-1990	1991-1993	2000-2002	1998-1999	2004-2005	Various years – from 1991 to 2013 in wave 1 up to wave 13 ⁵³
Age of children in first sweep or wave of the study					
13-14 years	Pregnancy	9 months	13-14 years	10 months	All ages

Each study has gained information about a large-scale research sample of thousands of children, fathers and mothers over a long stretch of time, including the adolescent years. When these data are analysed longitudinally (i.e. using data from at least two ‘sweeps’ or ‘waves’), these studies give much greater validity in evidencing cause-and-effect relationships between father-factors and subsequent changes in children’s development and outcomes than do ‘cross-sectional studies’ that collect data only at one point in time.

Given the range of birth dates of the children, this set of six research studies gives longitudinal ‘fathers-in-adolescence’ data for children who entered adolescence (at age 10) in the early 21st century (LSYPE1 and ALSPAC), during the 2010s (the MCS, GUS and LSYPE2), and to 2023 and beyond (*Understanding Society*).

While all six studies set out to be representative of a specific cohort of children or of households⁵⁴ in specific geographical areas, their representativeness has declined to some 2. over time, due to ‘attrition’ (drop-out) of children or parents, with some population subgroups less likely to continue to engage with the study than others⁵⁵. This especially applies to the longer-running birth cohort studies such as the MCS and GUS, which had been running for nearly ten years by the time the cohort children began to enter adolescence at age 10.

As already observed, tight resources and the broad aims of these multi-purpose studies constrain the amount of data relating to fathers that can realistically be collected:

⁵³ Wave 13 was the most recent Understanding Society questionnaire available in 2023 (at the time of writing this report).

⁵⁴ The child cohort study samples were designed to give representative data for a cohort of children; whereas the Understanding Society sample was designed to be representative of households in the UK.

⁵⁵ In the British Household Panel Survey (a study with similar design to *Understanding Society*), couples with low education, low income, who were renting or who were unemployed were more likely than other couples to drop out between waves (Brewer and Nandi, 2014).

furthermore, if too many questions are asked of respondents in questionnaires or interviews, the burden on them can become so great that response rates or data quality are compromised, or they drop out of the study. In addition, longitudinal studies strive for consistency over time⁵⁶ which can constrain participant selection criteria, questions asked and other key features in each sweep or wave. Even so, changes are made in longitudinal studies where there is a good case for doing so, and respondent burden can also depend on interest in the topic (Calderwood, 2016), which gives the potential for greater breadth and validity of fathers-in-adolescence data in later sweeps and waves (see **Section 2.3, below**).

In light of these important contextual issues, **Table 1B, below** – our second excerpt from the more detailed [Appendix A Table 1](#) – provides information about fathers-in-adolescence data collection in each of the six longitudinal studies:

Table 1B: Fathers-in-adolescence data collection: when and from whom						
Type of study	Child cohort studies					Household panel study
Name of study	LSYPE1 Next Steps	ALSPAC	MCS	LYSPE2 Our Future	GUS	Understanding Society
Ages of adolescent children (average) in sweeps or waves	Age 13-14 (sweep 1) Age 14-15 (sweep 2) Age 15-16 (sweep 3) Age 16-17 (sweep 4) Age 17-18 (sweep 5 – no parental interviews) Age 18-19 years (sweep 6 – no parental interviews)	Carer questionnaires ages 10, 11, 12, 12.5, 17.5, 18.5 Partner questionnaires ages 10, 11, 12, 12.5 Child-based questionnaires (completed by mother or main carer) ages approx. 10.5, 11.5, 13, 14, 16, 16.5 years	Age 11 (sweep 5) Age 14 (sweep 6) Age 17 (sweep 7)	Age 13-14 (sweep 1) Age 14-15 (sweep 2) Age 15-16 (sweep 3) Age 16-17 (sweep 4 – no parental interviews) Age 17-18 (sweep 5 – no parental interviews) Age 18-19 years (sweep 6 – no parental interviews) Questionnaires not	Age 10 (sweep 8) Age 12 (sweep 9) Age 14 (sweep 10) Age 17 (sweep 11) Questionnaire not available for sweep 11	Adolescent sample members aged 10-18 in every annual wave since 2009-10 Most recent questionnaire available was wave 13

⁵⁶ For example in study design, methods and research instruments.

		Child-completed questionnaires and puberty questionnaires at various time points		available ⁵⁷ for sweeps 4, 5 and 6		
Research participants	Mothers Fathers Cohort children (not siblings)	Mothers Fathers Cohort children (not siblings)	Mothers Fathers Cohort children (not siblings) Teachers	Mothers Fathers Cohort children (not siblings)	Mothers Fathers Cohort children (not siblings) Teachers	Mothers Fathers Dependent children (of any age) living in sample households (including adolescent children's younger and older siblings)
Categories of fathers ⁵⁸ included (as participants) in data collection in at least one sweep or wave	Cohabiting Partner Fathers (CPFs)	Cohabiting Partner Fathers (CPFs) Partner Own Household Fathers ('Partner OHFs') ⁵⁹	Cohabiting Partner Fathers (CPFs) Partner Own Household Fathers ('Partner OHFs') ⁶⁰	Cohabiting Partner Fathers (CPFs)	Cohabiting Partner Fathers (CPFs)	Cohabiting Partner Fathers (CPFs) Own Household Fathers (OHFs) (including OHFs who previously lived with their child/ren in

⁵⁷ The term 'available' in **Table 1B** refers to whether the questionnaire was available online (on the study website or the UK Data Service website) in 2023 at the time of writing this report.

⁵⁸ In the cohort studies, this refers to the vast majority of fathers who were **not** the main parental research participant.

⁵⁹ 'Partner OHFs' are those currently in a non-cohabiting (LAT) 'Living-Apart-Together' relationship with the child's other birth or adoptive parent, usually the mother. A small proportion of Non-partner OHFs (those not currently in a relationship with the child's mother) could have been included, because mothers could pass on the questionnaires to whoever they felt appropriate (Northstone et al., 2023).

⁶⁰ Only those 'Partner OHFs' (a small number of fathers in a romantic relationship with their children's mother) and reported by the household interview respondent to be part-time resident in the cohort child's main household.

						another study household and have been tracked into a new study household)
Ages of adolescent children when fathers ⁶¹ were actively included (as participants) in data collection	Ages 13-14 and 14-15	Ages 10, 11, 12 and 12.5	At ages 11, 14 and 17	Age 13-14	Ages 12 and 14 ⁶²	In every annual wave since 2009-10

Notes

- i. All six longitudinal studies have collected data about fathers of adolescents from fathers, mothers and the adolescent children. Fathers completed interviews (in *Understanding Society*, the MCS age 11 and age 14 sweeps⁶³, and the LSYPE studies) and/or self-completion questionnaires (paper questionnaires in ALSPAC and GUS, and online questionnaires in the age 17 sweep of the MCS).
- ii. There were differences in the main categories⁶⁴ of fathers who were research participants:
- iii. In the five child cohort studies, the father-reported data is only from Cohabiting Partner Fathers (CPFs)⁶⁵. This is due to these studies collecting data only in the cohort child's sole or main household.
- iv. Despite around 40% of adolescents having a birth father-living-elsewhere⁶⁶ (an Own Household Father – OHF), only *Understanding Society* has collected data from this category of fathers. This is explored further in **Section 2.2B, below**.

⁶¹ In the cohort studies, this refers to the vast majority of fathers who were **not** the main parental research participant.

⁶² GUS had a further adolescence sweep during 2021-23, at age 17. This is not included in *The kids are alright* review of longitudinal studies because questionnaires and technical documentation were not yet available online in 2023 at the time of writing this report.

⁶³ These *Understanding Society* and MCS interviews included a self-completion component.

⁶⁴ See **Box 1, above**. This review did not cover data collected from fathers in 'single father households', who were also included as research participants in all six studies.

⁶⁵ With the exceptions of very small samples of 'Partner OHFs' in ALSPAC and the MCS.

⁶⁶ And not in an ongoing romantic relationship with their birth mother.

- v. This means that, in the cohort studies, co-resident ‘stepfathers’ were included in data collection, while involved OHFs were not – even if the cohort child was part-time resident in the OHF’s household.
- vi. In cohort study sweeps which included a full span⁶⁷ of CPFs in data collection (where that applied, in two-parent households), the co-resident mother generally completed a more extensive questionnaire or interview as the ‘main’ parental research participant, and the CPF generally completed a less extensive ‘partner’ or ‘second parent’ questionnaire or interview. This issue is covered in more depth in **Section 2.4, below**.

2.2. Three types of longitudinal study – birth cohorts, adolescent cohorts and a household panel study

In the previous section, we described our six included longitudinal studies as comprised of one ‘household panel study’ and five ‘child cohort studies’ (**Tables 1A and 1B, above**). In fact, our included child cohort studies comprise two sub-types: *birth cohort studies* and *adolescent cohort studies*, each of which begins with a sample of children of a specific age during a defined time-period, referred to as ‘a cohort’ of children. Their main objective is to track the cohort children’s development, experiences and ‘outcomes’ over time, and collect data across a range of child-related factors, so that researchers can examine socio-demographic, economic, family, educational and other influences on the life course. The focus in each study is data collection in relation to the selected ‘cohort child’.

In contrast, a *household panel study* such as *Understanding Society* follows a representative sample of households in a defined geographical population, measuring a broader set of changes over time. Only some of the households at each wave include dependent children (or specifically adolescent children) and so (unlike the child cohort studies) the main study-aim and the data collection are not focused on specific ‘cohort children’ nor on child development. This type of study can however be used to track the development of a specific age-cohort within the overall sample, such as examining how 10-year-olds in the first study wave (in 2009-10) change through their adolescence (by 2017-18).

2.2.1. More about the five cohort studies

The three included *birth cohort studies* (ALSPAC, MCS and GUS) have followed samples of thousands of babies from birth or the postnatal year⁶⁸ through childhood and into adolescence and adulthood, with a data collection sweep annually, biennially or every few

⁶⁷ i.e. including (in a small minority of study households) the CPFs who were selected as the main parental research participant.

⁶⁸ ALSPAC recruited a cohort of pregnant mothers, collecting data from the women and expectant fathers antenatally as well as from early infancy onwards. The MCS and GUS each recruited a cohort of infants from birth registration records, and started collecting data when the babies were nine or ten months old. For the purposes of this report, we call all three ‘birth cohort’ studies.

years (depending on the study and life-stage). The ALSPAC babies were born in 1991-1993, the MCS babies in 2000-2002; and the GUS (birth cohort 1⁶⁹) babies in 2004-05⁷⁰. These three studies had differing key objectives, perhaps influenced by their funders (see **Table 1A, above**).

The two LSYPE *adolescent cohort studies*⁷¹ have followed samples of thousands of adolescents through their remaining adolescent years and into adulthood. LSYPE1 has tracked adolescents who were born in 1989-90; with the first sweep in 2004. LSYPE2 has tracked adolescents who were born in 1998-99, with the first sweep in 2013. They interviewed the young people annually from the age of 13-14 (Year 9 in school); and collected data from one or two parents living in the adolescent's (main) household at the first few sweeps. The adolescence sweeps of LSYPE1 focused on education, training and employment in the transition to adulthood; whereas LSYPE2 also aimed to collect broader data about young people's lives such as risk behaviours and leisure time.

2.2.2. More about the household panel study

The broad aim of *Understanding Society* is to understand how different generations experience life in the UK, by collecting data about an extensive range of short-term and long-term changes in and influences on people's lives. Individuals living in a nationally representative sample of UK households in 2009-10 have been tracked in numerous 'waves' of data collection. Adult sample members, who include fathers and mothers of adolescents, as well as older adolescents aged 16-21, are approached annually for an interview. In addition, adolescent children aged 10-15 in study households are asked to complete a self-completion 'youth questionnaire' (left in the household or posted to a parent) at each wave. Response rates for these 'youth questionnaires' (ages 10-15) are lower than for the main interviews (with participants aged 16 years and older).

Understanding Society includes (Pelikh 2019):

- at least 7,000 children born between 2006 and 2010 – who would be aged 13 to 17 in 2023
- at least 7,000 young adults born between 2001 and 2005 who would be aged 18 to 22 in 2023.

⁶⁹ GUS Birth Cohort 1 babies have been followed through to the adolescent years, whereas GUS Birth Cohort 2 babies (born in 2010-11) were followed only until they were aged just under five years, Therefore this second cohort is not included in *The kids are alright* review of longitudinal studies.

⁷⁰ ALSPAC is carried out by the University of Bristol; the MCS is carried out by the Centre for Longitudinal Studies at University College London with partner fieldwork companies; and GUS is carried out by the Scottish Centre for Social Research (ScotCen).

⁷¹ The first LSYPE study (LSYPE1 – *Next Steps*) is carried out by the Centre for Longitudinal Studies at University College London, and previously during the children's adolescent years by the Department for Education. The second LSYPE study (LSYPE2 – *Our Future*) is carried out by the Department for Education – with partner fieldwork companies.

- around 12,000 children born between 1993 and 2008 who completed at least one youth questionnaire across waves 1 to 8⁷².

For those adolescents living in two-parent households, *Understanding Society* has collected extensive interview data directly from their CPFs (as part of their sample of adults) during every annual wave since 2009-10.

As mentioned in **Section 2.1 (above)**, *Understanding Society* is the only one of the six longitudinal studies which includes (as participants) in data collection those fathers with dependent children not living (primarily or at all) in their main household. These sample members (Own Household Fathers – OHFs), interviewed annually, are asked broadly the same set of questions about their non-parenting-related characteristics, beliefs and behaviours as are asked of other sample members, including CPFs. However (see **Section 4, below**), the OHFs are asked only a relatively narrow set of questions about their children living elsewhere (who may or may not be part of the study), even if they are much involved with these children. Male sample members' self-identification as an OHF (i.e. having a dependent child living elsewhere) is lower than expected⁷³, and biased towards those more involved with their children in a different household (Bryson and McKay, 2018).

Uniquely among ongoing large-scale UK longitudinal studies – and related to its household panel design (Lugtig and Smith, 2019) – *Understanding Society* includes adults who have moved out of the initially sampled household to live elsewhere during the course of the study. This means that if a father (who is a sample member) was living with his child/ren and their mother but then moved out (permanently or temporarily) from the sampled household to become an OHF, he remains part of the study and can be interviewed annually at his new address along with new household members. In these family scenarios, both the OHF and his adolescent child/ren living elsewhere (in the OHF's previous household) could be interviewed at the same sweep. However, the study drop-out rate has been high for *Understanding Society* sample members who, whilst participating in the study, become an OHF⁷⁴ after a relationship separation (Bryson et al., 2017⁷⁵; Brewer and Nandi, 2014). Ongoing work is taking place to improve participants' retention in the study after major life transitions (Benzeval 2019, Benzeval 2021).

⁷² Around 4,800 of these 12,000 young people had first been interviewed at age 10, with 86% of these completing a questionnaire in at least 2 waves (waves 1 to 8). 82% of 15-year-old children in study households across waves 1 to 6 joined the *Understanding Society* sample of adults after turning 16 (Pelikh, 2019).

⁷³ Additionally, men who are OHFs may be less likely to participate in the study in the first place.

⁷⁴ i.e. following the relationship separation, the father no longer lives (fully or primarily) with his child/ren.

⁷⁵ Also see Brewer and Nandi (2014) for a higher attrition rate for men after a couple break-up than for women. This analysis is not specific to couples with dependent children.

2.3. Questionnaire content and flexibility for changes in study methods

This section discusses features of the three types of longitudinal study that can influence questionnaire content and flexibility for change in study methods, and/or can create constraints on data collection design. These constraints are not insurmountable.

In common with other child cohort studies, the selected birth cohort and adolescent cohort studies have been able to tailor their questionnaire content and other measures to 'child outcomes' and child-related factors. While they have repeated *core* question topics and questions at each sweep to enable measurement of change in longitudinal analysis, they have also introduced new questionnaire topics and questions over the years of the study to reflect the changing developmental stage of the children, and improvements in measures.

As already mentioned, the aims of the multi-purpose household panel study, *Understanding Society*, are not specifically focused on children. Much of the questionnaire for adult sample members is relevant to a broad cross-section of adults in the UK, and this data is collected from sample members regardless of their family circumstances. Nevertheless, the interview includes annual and biennial question modules specifically for parents of dependent children, including questions about family life and parental involvement; questions about parents (of dependent children) living elsewhere and dependent children living elsewhere; and child-age-specific questions to collect age-appropriate data about child development and parenting behaviours.

As a result of the longitudinal studies' objective of measuring change over time, the study methods and research participant selection criteria in all these studies have remained as consistent as possible across sweeps or waves, but with changes and additions where these have increased the validity, representativeness or breadth of data. This emphasis on 'consistency where possible' constrains to some extent the questions asked and study methods (including research participant selection criteria) in the adolescence sweeps of the birth cohort studies, and in more recent waves of *Understanding Society*, which developed their main design features many years previously for the first sweep or wave. In contrast, because their starting sample was of adolescents, the LSYPE studies had flexibility within their resources and priorities to design data collection and the content of questionnaires in a way that was optimal for this developmental stage and that could provide evidence for adolescent-related policy development at that time.

Nevertheless, changes and additions can be made for the adolescence sweeps of birth cohort studies that increase the extent and validity of fathers-in-adolescence data. One example is that fathers (specifically CPFs who were not, originally, the main parental research participant) were included in data collection in GUS at the second (age 3) sweep, but then not again until the age 12 and 14 adolescence sweeps. Another example is that the MCS and GUS collected data about OHFs only from mothers in their earlier childhood sweeps but then started asking children about their OHFs in the adolescence sweeps. And

the MCS in its age 17 sweep changed from a longer ‘*main respondent*’ interview and a shorter ‘partner interview’ to a design in which both co-resident parents received an identical online questionnaire (see **Section 2.4.2, below**). There have also been changes in modes of data collection over time, such as a shift from in-person interviews to the use of online questionnaires.

This degree of flexibility also applies to *Understanding Society*, which is now planning to collect data from the OHFs of children in study households (including adolescent children) where the OHF has not been part of the study (Benzeval, 2019). A ‘Significant Other Survey’ is due to be included in the 15th wave starting in 2023 (Understanding Society, 2022). If implemented, this will bring the full range of OHFs of *Understanding Society*’s adolescent children into the scope of data collection.

Another contextual issue is that the LSYPE studies had to leave questionnaire space for collecting all relevant details about research participants, whereas the birth cohort studies and *Understanding Society* had already, in earlier sweeps/waves, collected ‘stable’ characteristics (e.g. age, ethnicity, religion and educational qualifications) and the research participants’ ‘history’ (e.g. previous economic activity). This did not, of course, apply where the participant was a new entrant to the study (usually when they had moved into the study household).

2.4. Cohabiting Partner Fathers as ‘partners’ or ‘second parents’ in the cohort studies

Where an adolescent child’s main household included two co-resident parents, there were key differences between the cohort studies and *Understanding Society* in, firstly, how often a full span of CPFs⁷⁶ were included as research participants (see **Section 2.4.1, below**); and secondly (in sweeps or waves in which CPFs were included) the extent of data collection from CPFs compared to that from co-resident mothers (**Section 2.4.2, below**). In summary, in almost all the cohort studies – but not in *Understanding Society* – (co-resident) mothers were research participants at a greater number of data collection points (sweeps or waves) than were CPFs; and in sweeps which interviewed two co-resident parents for each cohort child, mothers tended to complete a more substantial ‘main parent’ data collection instrument (interview or questionnaire) than did CPFs.

2.4.1. How often a full span of Cohabiting Partner Fathers were included as research participants

CPF of adolescents were interviewed annually in *Understanding Society*, as part of the overall sample of adults, as were mothers of adolescents. But among the cohort studies, only the

⁷⁶ I.e. including (in a small minority of households) the CPFs who were selected as the sole or main parental research participant.

MCS set out to include a full span of CPFs as research participants in every adolescence sweep (see **Table 1C**, below – our third excerpt from the more detailed [Appendix A Table 1](#)).

Table 1C: Proportion of cohort study sweeps which actively included a full span of CPFs in the scope of data collection					
Name of study	LSYPE1 Next Steps	ALSPAC GI cohort	MCS	LYSPE2 Our Future	GUS Birth cohort 1
Full span of CPFs included as research participants in data collection	Two out of the four younger adolescence sweeps which involved at least one parent (the later adolescence sweeps did not interview parent/s, only the young people)	Four out of the twelve adolescence sweeps which involved at least one parent ⁷⁷	All adolescence sweeps	One out of the three younger adolescence sweeps which involved at least one parent (the later adolescence sweeps did not interview parent/s, only the young people)	Two out of the three adolescence sweeps for which documentation is available
Name of research instrument for collecting data from CPFs ⁷⁸	'Second parent interview'	'Partner questionnaire'	Ages 11 and 14 'Partner interview' Age 17 'Parent questionnaire'	'Second parent interview'	'Partner questionnaire'

2.4.2. The extent of data collection from Cohabiting Partner Fathers

As a household panel study not specifically focused on child development, *Understanding Society* collects broadly the same data annually from both parents and non-parents in its sample, but several questionnaire modules are dependent on the individual's characteristics, including modules specifically for parents of dependent children (see **Section 2.3, above**). In general, the study has collected the same set of data about parental involvement,

⁷⁷ Additionally there were five girls puberty questionnaires to be completed by "mother or daughter" and five boys puberty questionnaires to be completed by "parent or son" (gender of completing parent not collected).

⁷⁸ In the cohort studies, this refers to the vast majority of fathers who were **not** the main parental research participant.

parenting and father-child relationships from CPFs as collected from their cohabiting partner, usually the child/ren's co-resident mother, so giving equivalent 'father-factor' and 'mother-factor' data. A co-resident birth mother was automatically prioritised over a co-resident birth father to answer questions (as the 'responsible adult') about their adolescent children's schooling, non-parental childcare and any special educational needs or disabilities⁷⁹.

In almost all those adolescence (and earlier) cohort study sweeps which collected data from *both* co-resident parents, there were separate questionnaires or interviews for:

- **the main parental⁸⁰ research participant, usually the mother**, who completed a more extensive '*main respondent*' (MCS), '*main/ chief carer*' (GUS and ALSPAC) or '*main parent*' (LSYPE1 and LSYPE2) interview or questionnaire
- **the main parental participant's cohabiting partner (MCS, GUS and LSYPEs⁸¹) or partner (ALSPAC), usually the CPF**, who completed a less extensive '*partner*' or '*second parent*' interview or questionnaire.

The selection criteria (see **Table 1D, below** – our fourth excerpt from the more detailed [Appendix A Table 1](#) – and their implications are discussed in **Section 2.4.3, below**. Due to the great majority of the sole or main parental participants being mothers, and the great majority of 'partners' and 'second parents' being fathers, many fewer variables were collected from CPFs than from mothers. Some of these additional questions for mothers were about the child, her partner⁸², the child's OHF, and the household, wider family and neighbourhood; but they also included questions about mother characteristics, mother involvement and the mother-adolescent relationship.

The exception was the MCS age 17 sweep, in which the cohort child was the main research participant, and each parent living in the child's main or sole household received an identical self-completion online questionnaire⁸³. One of these parents also completed a Strengths and Difficulties Questionnaire about the child, with the decision about who completed it being left up to the parents. Of the SDQ respondents, 86% were female (Booth et al., 2023) which is a similar proportion to that for main and sole parental research participants in LSYPE1.

⁷⁹ In recent waves, it appears from questionnaires that only the 'responsible adult' (usually the birth mother) was asked about helping their child with homework, and their educational aspirations for their adolescent child. In earlier waves, these questions were asked to all co-resident parents of dependent children – both fathers and mothers.

⁸⁰ The term 'parental' in relation to data collection in the cohort studies is used to mean acting in a parental capacity. This includes grandparents and other non-parental caregivers living with the child without a resident birth, adoptive, 'step' or foster parent.

⁸¹ In the first sweep of LSYPE1 (but not in later sweeps), the parent completing 'second parent' data collection had to be in a stated parental role to the child ('natural', adoptive, step or foster parent).

⁸² Or were asked in relation to e.g. "*you and/or your partner*".

⁸³ The relative proportions of mothers and fathers among household interview respondents is not known.

The MCS, the LSYPE studies and *Understanding Society* also had a ‘household interview’⁸⁴ to collect data about the household and its members, which only needed to be asked of one parent or adult at the child’s main address. In cohort study sweeps for which there is data, most of these interviews were carried out with the mother.⁸⁵

2.4.3. Criteria for selection of sole or main parental research participants in the cohort studies

Table 1D, below (shows that the cohort studies had different ways of allocating the role of the sole or main parental research participant in a two-parent household.

Table 1D: Cohort studies’ ways of allocating the role of sole/main parental research participant					
Name of study	LSYPE1 Next Steps	ALSPAC	MCS	LYSPE2 Our Future	GUS
How sole/main parental research participant was selected at each sweep ⁸⁶	The parent in child’s sole/main household who had most involvement in child’s education ⁸⁷	Mother or person taking the role of mother (for ‘carer questionnaires’ ⁸⁸) Mother or person taking the role of mother or “the chief carer” ⁸⁹ (for ‘child-based questionnaires’ ⁹⁰)	The ‘natural mother’ or (if not present) the ‘natural father’, or the parent participating as the ‘main respondent’ in previous sweep, who was nearly always the mother	The parent in child’s sole/main household who had most involvement in child’s education	The parent participating as the ‘main carer’ in previous sweep, who was nearly always the mother

⁸⁴ Sometimes called the ‘household module’ of the questionnaire, or similar.

⁸⁵ For example in the first sweep of LSYPE1, 19% of household interview respondents were co-resident fathers (Goldman and Burgess, 2017).

⁸⁶ Documented on the basis of technical reports and questionnaires because interviewer guidance was not available online for every study,

⁸⁷ In both the LSYPE studies, this was according to the mother, father or other adult completing the household section of the interview.

⁸⁸ ALSPAC ‘carer questionnaires’ were primarily about the mother and her partner and family.

⁸⁹ This was most probably the mother’s assessment, because the mother received all questionnaires (including the ‘partner questionnaire’) from the study team.

⁹⁰ ALSPAC ‘child-based questionnaires’ were primarily about the child, including parenting-related questions.

Notes

- i. For ALSPAC ‘carer questionnaires’, the MCS (ages 12 and 14) and GUS, the mother was specifically selected, and/or interviewers were instructed to prioritise the sole or main parental research participant in the previous sweep. If traced back through the sweeps, the mother was prioritised in the first sweep/s due to questions asked about pregnancy and birth (see Burgess and Goldman, 2018; Burgess and Goldman, 2022)⁹¹. This meant that in the vast majority of cases, the sole or main parental participant in adolescence sweeps was the mother, regardless of the current division of parental time with the adolescent cohort child.
- ii. As a result, the proportion of the *sole* or *main* parental research participants who were fathers (both CPFs⁹² and ‘lone fathers’) was tiny, ranging from 3% to 6% in the MCS (ages 11 and 14) and GUS adolescence sweeps (see [Appendix A Table 1](#)). Similarly, for ALSPAC ‘child-based questionnaire’ sweeps, the mother or ‘chief carer’ of the cohort child was prioritised – the emphasis was questions about the child. Fathers were involved in completion (sometimes jointly with the mother and/or child) in only 3% of cases.
- iii. These tiny minorities of sole or main parental research participants who were fathers are too small for substantial separate analysis.
- iv. However, in LSYPE1, with a focus on adolescent educational and vocational pathways, the selection criterion was which parent was most involved in the adolescent child’s education. This resulted in a relatively higher proportion (just under a fifth⁹³) of sole or main parental research participants who were fathers – see [Appendix A Table 1](#). LSYPE2 used the same criterion.
- v. If the LSYPE cohabiting parents were equally involved, they could do a joint ‘main parent’ interview, but this occurred in only a small proportion of cases (Goldman and Burgess, 2017).
- vi. In the LSYPE studies, the more substantial subset of involved fathers receiving a ‘main parent’ interview⁹⁴ were asked a much fuller set of questions than those fathers interviewed as ‘second parents’, including educational aspirations for their teenaged children, involvement in their child’s schooling, parental monitoring and discipline, and the quality of their relationship with the child. This sample of

⁹¹ Additionally, the ALSPAC, MCS and GUS cohort babies were generally recruited through their mothers (via health services or Child Benefit records).

⁹² These included CPFs in birth father/stepmother families (in the MCS), and where the mother was away, could otherwise not participate (e.g. due to illness, disability or language issues), or did not want to participate. In the MCS and GUS, co-resident parents could over-ride the CAPI interview program’s or interviewer’s selection.

⁹³ This is broadly consistent with the COSMO study, a new cohort study of older adolescents being followed into adulthood, in which around four fifths of the sole parental respondents (one parent per young person) were female (Cullinane et al., 2023).

⁹⁴ Skaliotis (2010) shows that fathers who were the ‘main parent’ at child-age 13-14 and 15-16 years were more likely than other co-resident fathers to have a degree, be living without a partner, be older than 45 years, be working part-time, unemployed, ‘looking after the family’ or retired, and Indian, Pakistani, Bangladeshi, Black African or “Other race”.

involved fathers is large enough in LSYPE1 to be separately analysed (Skaliotis 2010), and possibly also in LSYPE2⁹⁵.

2.4.4. Features of ‘partner’ and ‘second parent’ data collections in the cohort studies

The partner of the main parental research participant completed ‘partner’ or ‘second parent’ data collection and was generally the child’s father. As seen in the detailed [Appendix A Table 1](#), CPFs completed almost all ‘partner’ data collections in ALSPAC, GUS, and the MCS age 11 and age 14 sweeps; and around 80% of LSYPE1 ‘second parent’ interviews⁹⁶. These CPF participants were split mainly between birth fathers (the predominant ‘father’ category) and ‘stepfathers’. Response rates were generally high (see summary in [Table 1E, below](#) (our fifth excerpt from the more detailed [Appendix A Table 1](#)).

Table 1E: Features of ‘partner’ and ‘second parent’ data collections					
Name of study	LSYPE1 Next Steps	ALSPAC	MCS	LYSPE2 Our Future	GUS
Average interview/questionnaire completion time/length	Time taken not available	‘Partner questionnaires’ ranged from 15-54 pages ⁹⁷	15-20 minutes (depending on the sweep)	7 minutes	Approx 15 minutes ⁹⁸ 14 pages (at age 12) 11 pages (at age 14)
Response rates	Almost all around 70% to 80%, including GUS self-completion questionnaires; and approaching 90% in the MCS age 11 sweep and in LSYPE2. ALSPAC ‘partner questionnaire’ rates were lower and calculated on a different basis.				
Response bias	In the MCS (Plewis 2007) and GUS (Sweep 9 User Guide), there was differential response from ‘partners’ according to key ‘main respondent/carer’, ‘partner’ and area characteristics .				
Achieved sample sizes	Ranged from almost 11,500 in the first sweep of LSYPE1 (8,800 with birth or ‘step’ fathers) to 2,000 in age 12 and age 14 GUS sweeps				

⁹⁵ The sample size of ‘main parent’ fathers in LSYPE2 was not available for this review.

⁹⁶ The sample size of ‘second parent’ fathers in LSYPE2 was not available for this review.

⁹⁷ In [Table 1E](#), the number of pages refers to the number of pages of **questions**, i.e. excluding introductory pages.

⁹⁸ Bradshaw, P. (personal communication, 31 May 2023).

Notes

- i. The MCS (ages 11 and 14), LSYPE1 and LSYPE2 collected data from both co-resident mothers and fathers using in-home interviews carried out by skilled survey interviewers.
- ii. CPFs in GUS completed self-completion paper questionnaires, but interviewers (who were in the child's main home to conduct both the 'main carer' and child interviews) obtained their contact details, and so the study office was able to follow up with reminders, and potentially a repeat interviewer visit.
- iii. The advantage of interviewer involvement in these studies was a higher response rate from CPFs than in ALSPAC (see [Appendix A Table 1](#)), including for the GUS self-completion questionnaires (which were also substantially shorter than ALSPAC questionnaires).
- iv. In ALSPAC, recruited mothers were asked to give paper questionnaires to their partner at each survey sweep – and the fathers were asked to post back the questionnaires. But because ALSPAC had no information on the identity of the mother's partner, nor whether the mother had passed the questionnaire to him, reminders could not be sent, reducing response rates (Northstone et al., 2023), with potential impacts on the representativeness of ALSPAC 'partners' data.

3. What ‘fathers-in-adolescence’ data have been collected ?

This section looks at the breadth of data collected about Cohabiting Partner Fathers (CPFs) and Own Household Fathers (OHFs) of adolescent children by examining:

- the questions asked in study questionnaire documentation available online (interviews and self-completion research instruments)
- whether the data about fathers was collected from fathers, mothers and/or children.

The methods used and the exclusions from scope are set out in **Section 1.6 and Box 2, above**.

There is a balance to be struck in each study between questions about the following ‘father-factors’ (alongside equivalent data about mothers):

- father characteristics including their demographics, health, wellbeing, economic activity, employment, income and attitudes and behaviours (**Section 3.2, below**); and
- father involvement, fathering, father-child relationships and co-parenting (**Section 3.3, below**)

especially since these factors can interact in their influences on children (Dermott & Fowler, 2020; Keizer, 2020).

Whilst the ‘breadwinning role’ is an important part of the parental role (Gatrell et al., 2015), questions about economic activity (for example, whether working, and reason for economic inactivity), occupational status (which is used to derive socio-economic status) and income are usually ‘treated’ in analysis as important demographics, and are covered as ‘father characteristics’ in **Section 3.2, below**.

Given that in all the cohort studies, the great majority of main or sole parental research participants are mothers and the great majority of ‘partner’ or ‘second parent’ research participants are fathers, the discussion of what data have been collected about CPFs is restricted (for the cohort studies) to families in which the (co-resident) mother completed data collection designed for *mothers or main parental research participants*, and, if included at that sweep, the CPF⁹⁹ completed data collection designed for *fathers or partners / ‘second parents’*. As explained in **Section 2.4.2, above**, this issue did not apply to the same degree in

⁹⁹ The MCS and *Understanding Society* also collected data about Cohabiting Partner Fathers in a ‘proxy interview’ with the mother when her cohabiting partner could not be interviewed, but only when specific criteria applied. The content of proxy interviews is excluded from this review of longitudinal studies.

Understanding Society or in the age 17 MCS sweep, where the fathers and mothers received very similar data collection instruments.

With the exception of *Understanding Society*, and small subsets of ‘Partner OHFs’¹⁰⁰ in ALSPAC and the MCS, the included studies did not collect data from OHFs, so discussion in relation to OHFs and the child cohort studies is restricted to the limited data collected about OHFs from mothers and children.

3.1. What categories of fathers (of adolescent children) can be identified in the data collected?

3.1.1. Identifying Cohabiting Partner Fathers (CPFs)

Cohabiting Partner Fathers¹⁰¹ of adolescent children can be clearly identified in all sweeps and waves of all of the included studies except ALSPAC¹⁰², both as fathers about whom mothers report, and as participants in data collection. However, in a few of the studies, it appears from questionnaire documentation that some questions for the children about their ‘father’¹⁰³ did not specify whether the question should be answered in relation to a CPF (who could be a ‘stepfather’) or an OHF (birth or adoptive father), which was relevant for the tenth of children who had both fathers.

The ‘household interview’ respondent¹⁰⁴ (in the MCS, the LSYPE studies and *Understanding Society*) or the child’s mother (GUS and ALSPAC) answered questions about whom they or the child lived with, deciding whether or not to include a part-time resident partner (or child’s parent) as a household member. In most of the studies, there were household residence criteria for the interviewer to apply if this partner was temporarily away, for example for work or study – which was usually to include him as a household member (and therefore a CPF) if he was away for less than six months. These issues are covered in more depth in Goldman & Burgess, 2017.

¹⁰⁰ ‘Partner OHFs’ are those currently in a non-cohabiting (LAT) ‘Living-Apart-Together’ relationship with the child’s other birth or adoptive parent.

¹⁰¹ See **Box 1, above**: a birth, adoptive, ‘step’ or foster father who is a cohabiting partner of their child’s (birth, adoptive, ‘step’ or foster) mother or father, both of whom live in the child’s (sole or main household at the time of data collection).

¹⁰² Although most ALSPAC ‘carer questionnaires’ did not explicitly identify the gender of the mother’s partner (this was collected in ‘partner questionnaires’); and not all of the ‘partner questionnaires’ explicitly identified whether the completing father lived with the child or mother, it can be assumed that in the vast majority of cases, these mothers’ partners were male cohabiting partners. This could also be derived to some extent from data given at previous sweeps. The partner may have changed between sweeps, but individuals can be matched on the basis of date of birth. Changes of partner occurred for only around 4% of the 98% of cases with complete date of birth data (Northstone et al., 2023).

¹⁰³ This issue also applied to some questions in ALSPAC **for mothers** about the ‘father’.

¹⁰⁴ Usually the mother in the cohort study sweeps (LSYPE1 and the MCS) for which we have data on the relative proportions of fathers and mothers among household interview respondents.

3.1.2. Identifying Own Household Fathers (OHFs)

All the included studies can identify to differing extents whether an adolescent child (the cohort child or, in *Understanding Society*, a ‘young sample member’) has a *living* birth (or adoptive) OHF¹⁰⁵. In the LSYPE studies, it can be identified that the child does not live with a birth father, but not whether this father is living¹⁰⁶, although only a tiny proportion will have died (around 1% in the MCS). In the other studies, the gender of the parent living elsewhere who is being asked about is rarely explicitly identified and is instead assumed¹⁰⁷. A few questions referred to an ‘ex-partner’ of the mother (with gender and relationship to the child unknown)¹⁰⁸ rather than to a parent (of the child) living elsewhere. Nevertheless, in **Sections 3.2 and 3.3 (below)** which documents the data collected about OHFs, all the questions about parents living elsewhere or ex-partners are treated as being about OHFs, since the proportion of OHFs and ex-partners who are of the same gender as a residing birth or adoptive parent will be very small, and around 90% of Own Household Parents are fathers (see **Section 1.4, above**).

As stated above, it appears from questionnaire documentation available online that some questions for the children about their ‘father’ did not specify whether the question was about a CPF or an OHF, which is relevant for the tenth of children who had both fathers. Data from these questions could be analysed *in relation to OHFs* for the children who do not have a CPF – that is, do not live with a birth, adoptive, ‘step’ or foster father.

3.2. What father characteristics have been collected?

The term ‘father characteristics’ in this report denotes data collected about fathers’ demographics, health, attitudes and behaviours that are not directly about father involvement, fathering or the father-child relationship; and could be asked to any adult, not only to the parent of a dependent child. These father characteristics may be used as independent variables in their own right in relation to children’s experiences and outcomes, or in analyses of intergenerational transmission of circumstances and inequalities. They are often controlled for as confounding variables in analyses of the impacts of fathering and father involvement on children; or can be used to specify subsets of fathers for analysis. Sometimes they act as moderating factors for the impact of fathering and father involvement on children.

¹⁰⁵ See **Box 1, above**; a father whose main home is a separate household from his child’s sole or main household.

¹⁰⁶ Except where the birth father had been in the study household at the previous sweep, and their death had been reported during the interview.

¹⁰⁷ ALSPAC asks mothers specifically about *fathers* living elsewhere, whereas in the MCS, GUS and *Understanding Society*, the gender of the parent living elsewhere is not asked. In contrast, the GUS age 14 sweep does ask the cohort child about the gender of their parent living elsewhere.

¹⁰⁸ For example, questions about who attended parents evening or looked after the child [LSYPE studies and the MCS] and about child maintenance (*Understanding Society*).

3.2.1. Cohabiting Partner Father characteristics

A core set of father characteristics (see **Box 3 below** for a summary) was collected¹⁰⁹ in all six studies or in five of the studies (see [Appendix A Table 2](#)) covering demographics, health, economic activity and socio-economic status. Other father characteristics were asked in at least two of the studies. This gives the opportunity for time series of father characteristics, showing how these have changed between the decades for adolescents of broadly the same age; and also for cross-cohort analyses of the statistical associations of father characteristics with father involvement, fathering and child outcomes. Many of the characteristics were collected about both mothers and fathers, although not always with identical questions and scales. Therefore, within the constraints of sample sizes and data quality, analysis is possible which integrates equivalent mother-characteristics and father-characteristics into statistical models of the impacts of parental factors on child development, experiences and outcomes.

BOX 3: Key points about CPF characteristics collected in the studies

Overall, Understanding Society and the MCS collected the greatest variety of CPF characteristics, including cognition, numeracy, literacy, and social attitudes. Understanding Society collected the same set of characteristics about CPFs as is collected about every adult sample member. It is the only one of the six longitudinal studies to have collected data about:

- the sexual orientation of fathers
- loneliness among fathers
- specific features of father personality such as self-efficacy and delayed gratification.

ALSPAC collected detailed data from both the (co-resident) mother and CPF about the father's health (physical and mental) and health behaviours (probably because the study is rooted in medical, health and genetic studies). It is also the only one of the six studies to have collected data about:

- father suicidal attempt
- father criminal conviction.

Apart from father demographics, the LSYPE studies collected mainly data on father socio-economic status and economic activity, linked to the study focus on adolescents' transitions to further study and employment.

The studies differed in who reported the 'father characteristics' data – the mother, the CPF or the adolescent child, with details in **Box 4, below**.

¹⁰⁹ Or available from earlier sweeps and waves, such as the father's current age, ethnicity, and the age at which he left continuous full-time education.

BOX 4: Who reported CPF characteristics?

Most of the CPF characteristics that the MCS and Understanding Society collected were reported by fathers, with mothers asked little about their cohabiting partner (except for a few demographics); but there was the option of a 'proxy partner interview' with the mother to collect basic data about her cohabiting partner when he could not be interviewed (carried out in only a small proportion of cases, and so not included in scope of this review of longitudinal studies).

In contrast, GUS collected CPF demographics (including ethnicity, religion and educational qualifications) and economic activity / employment details from mothers, even in the two adolescent sweeps in which these fathers received a questionnaire.

In ALSPAC, both fathers and mothers were asked for a lot of information about their partner's characteristics. This meant that broadly 'symmetrical' father-reported and mother-reported data was obtained (where the mother and father both completed a questionnaire) about father (and mother) characteristics, including the father's health and health behaviours.

3.2.2. Own Household Father characteristics

In *Understanding Society*, sample members who were OHFs were asked the same huge breadth of questions that were asked to other participating adults (where relevant). However, in this study, only age and economic activity were collected (from mothers) about the OHFs of adolescent sample members who were not, themselves, sample members.

In great contrast, few variables were collected in the adolescence sweeps of the cohort studies about the characteristics of the OHF of the adolescent cohort child (which were not directly about parenting, the parent-child or inter-parental relationship). ALSPAC asked a few questions about the OHF's physical characteristics such as height and eye colour, and whether the father had experienced mental health conditions; and the MCS asked about the age of the OHF.

In all these studies, if the OHF had previously lived with the adolescent child (in the child's main household) during a previous study sweep or wave (and especially if they had completed data collection), their 'stable' characteristics (e.g. age, ethnicity, religion and educational qualifications) would be known; and also their 'history' (e.g. previous economic activity and health problems) during the child's earlier adolescence and childhood and perhaps also prior to their birth, depending on the study.

3.3. What data have been collected about father involvement (three types), the father-child relationship, co-parenting and fathering beliefs and attitudes?

This section summarises the data collected about father involvement (three types), the father-child relationship, co-parenting and fathering beliefs and attitudes during children's

adolescence in the six longitudinal studies, using the seven broad categories of data as set out in *The kids are alright father-factor framework* (see **Section 1.5, above**).

3.3.1. Cohabiting Partner Fathers – broad categories of data collected (contextual factors, father involvement – three types, the father-child relationship, co-parenting and fathering beliefs and attitudes)

Table 3A below provides a summary assessment of [Appendix A Table 3](#) showing how extensively the seven broad categories of ‘father factor’ data¹¹⁰ are covered by the questionnaires from the six included longitudinal studies, **in relation to CPFs** during their children’s adolescence. An additional row has been added w for fathers’ involvement in their child/ren’s education, drawing on education-linked topics across the seven broad categories.

The three colours in **Table 3A** represent the *number of topics* covered in each broad category:- each of the seven broad categories of data includes a number of ‘*topics*’ (sub-categories of data collected), as shown in [Appendix B](#). The three colours do not represent the number, quality or depth of the individual questions and measures, nor the breadth of types of informants (father / mother / child), sample sizes/response bias, or numbers of sweeps at which data is collected. Therefore, they do not constitute a quality assessment of the data from each study.

¹¹⁰ In *The kids are alright father-factor framework*.

Table 3A: Summary assessment of how extensively the broad categories of data are covered for Cohabiting Partner Fathers (CPFs)						
Key:	Yellow = One topic (for which data is collected to an adequate degree ¹¹¹)	Light orange = Two or three topics (for which data is collected to an adequate degree)	Dark orange = Four or more topics (for which data is collected to an adequate degree)	White = No topics (for which data collected to an adequate degree)		
From whom data collected: F=Father. M=Mother. C=Child. T=Teacher						
Type of study	Child cohort studies					Household panel study
Name of study	ALSPAC	MCS	GUS	LSYPE1 Next Steps	LSYPE2 Our Future	Understanding Society
Contextual factors	F M	F M	M	F M	F M	F M
Father involvement – accessibility		F M C	F M C	C	F M C	F M C
Father involvement – direct engagement (including education-relevant engagement)	F	F M C	F	M C	M C	C
Father involvement – responsibility (including education-relevant responsibility)		F M	F	M	M	F
Father-child relationship	F M C	F C	F C	C	C	F C
Co-parenting			F M			
Beliefs, feelings and attitudes in relation to parental role or the adolescent child (including	M	F T	F C			F

¹¹¹ Collection “to an adequate degree” excludes where the data collected on a topic was very limited or (in *Understanding Society*) was not specific to adolescent children. See the colour coding in Appendix A Tables 3 and 4.

education-relevant beliefs and attitudes)						
Involvement in child’s education		F M C T	F	M	M	F C

Notes

Looking across the rows of **Table 3A above**, it can be seen that, for *CPF*:

- i. All broad categories except *accessibility*¹¹² have at least four topics covered by at least one study.
- ii. The broad category covered most extensively across the set of studies is *contextual factors*, followed closely by the *father-child relationship*, more so than any father involvement category of data
- iii. The most extensively covered broad category in the Lamb et al. ‘father involvement’ trio is *direct engagement*. This probably reflects that engagement is the easiest to define, and the easiest to measure, for example in terms of the frequency or quantity of time spent on specified types of father-child activities and interactions together. *Accessibility* is less extensively covered, despite the fact that it is likely to be a core part of father (and mother) involvement for adolescent children.
- iv. GUS is the only study to have covered all broad categories, because only GUS collected data related to *co-parenting*.
- v. GUS and the MCS covered the broad categories most extensively in terms of topics, with *Understanding Society* following closely behind. GUS collected demographics and *contextual factors* from mothers, so reserving space in the ‘partner questionnaires’ for questions on father involvement, fathering and the father-child relationship.

3.3.2. Own Household Fathers – broad categories of data collected (contextual factors, father involvement – three types, the father-child relationship, co-parenting and fathering beliefs and attitudes)

Table 4A below provides a summary assessment of [Appendix A Table 4](#) showing how extensively the seven broad categories of ‘father factor’ data¹¹³ are covered by the questionnaires from the six included longitudinal studies, **in relation to OHFs** during their

¹¹² And co-parenting, which is not sub-categorised into ‘topics’ in Appendix A Tables 3 and 4.

¹¹³ In The kids are alright father-factor framework.

children’s adolescence. As in Table 3A, an additional row has been added for fathers’ involvement in their child/ren’s education, drawing on education-linked topics across the seven broad categories.

The three colours in **Table 4A** represent the *number of topics* covered in each broad category:- each of these seven broad categories of data includes a number of ‘*topics*’ – sub-categories of data collected – as shown in [Appendix B](#). As in Table 3A, the three colours in **Table 4A** do not represent the number, quality or depth of the individual questions and measures, nor the breadth of types of informants (father / mother / child), sample sizes/response bias, or numbers of sweeps at which data is collected. Therefore, they do not constitute a quality assessment of the data from each study.

Table 4A: Summary assessment of how extensively the broad categories of data are covered for Own Household Fathers						
Key:	Yellow = One topic (for which data is collected to an adequate degree ¹¹⁴)	Light orange = Two or three topics (for which data is collected to an adequate degree)	Dark orange = Four or more topics (for which data is collected to an adequate degree)	White = No topics (for which data collected to an adequate degree)		
From whom data collected: F Father M Mother C Child						
Type of study	Child cohort studies					Household panel study
Name of study	ALSPAC	MCS	GUS	LSYPE1 Next Steps	LSYPE2 Our Future	Understanding Society
Contextual factors	M	M	M C			F M C
Father involvement – accessibility		M C	M C		C	C
Father involvement – direct engagement (including education-relevant engagement)	M	M C	M C		C	F M C
Father involvement – responsibility	M	M	M	M	M	F M

¹¹⁴ Collection “to an adequate degree” excludes where the data collected on a topic was very limited or (in *Understanding Society*) was not specific to adolescent children. See the colour coding in Appendix A Tables 3 and 4.

(including education-relevant responsibility)						
Father-child relationship		M C	C	C		C
Co-parenting		M				M
Beliefs and attitudes in relation to parental role or the adolescent child (including education-relevant beliefs and attitudes)						
Involvement in child's education		M C		M	M	M C

Notes

- i. Looking across the rows of **Table 4A, above**, it can be seen that, for *OHF*s:
 - The table is much more sparsely populated for *OHF*s than for *CPF*s (c.f. **Table 3A, above**). Only *contextual factors*, *accessibility* and *direct engagement* have at least four topics covered by at least one study.
 - The broad categories of data covered most extensively across the six studies are *contextual factors* and *direct engagement*, although ALSPAC and the LSYPE studies covered only one or two topics for these broad categories.
 - Only the MCS and *Understanding Society* collected data relating to *co-parenting* between birth/adoptive parents living separately.
 - None of the studies collected data relating to the *beliefs and attitudes* of *OHF*s in relation to the parental role or the child/ren (that was specific to adolescent children).
- ii. The range of broad categories and topics covered, in particular the *father-child relationship*, *co-parenting* and the father's *beliefs and attitudes*, were strongly limited by *OHF*s not being included in data collection in the cohort studies, so that all the data was from mothers (most often) and adolescent children.
- iii. Even though *Understanding Society* sample members included involved *OHF*s¹¹⁵, these men were not asked the questions about parental involvement and parenting (including parenting style) that were asked of co-resident mothers and *CPF*s. Neither were they asked all the questions that were asked of the mother of a child with an *OHF* about various forms of support to the child, the inter-parental relationship, co-parenting and child maintenance. Instead they were asked a more limited range of questions, mainly focusing on the extent of contact and time with their children living elsewhere, which were not specific to individual children.

¹¹⁵ For example, those in regular in-person contact with their children or having their children to stay regularly.

3.3.3. Cohabiting Partner Fathers and Own Household Fathers – data topics collected and data collection gaps within the broad categories (contextual factors, father involvement – three types, fathering, the father-child relationship and co-parenting)

Box 5, below, presents the topics about which data have been most frequently collected (to at least some extent) across the six included longitudinal studies. This is based on [Appendix A Table 3](#) for CPFs and [Appendix A Table 4](#) for OHFs, which show (for each study) the data topics collected within the seven broad data categories of ‘father factor’ data¹¹⁶.

BOX 5: Topics collected in at least three of the six included longitudinal studies

CONTEXTUAL FACTORS

How father/‘father-figure’ is related to child (CPFs, OHFs)

Features of employment (CPFs)

Quality of couple relationship (CPFs)

Caring for adults inside or outside household (CPFs)

ACCESSIBILITY AND DIRECT ENGAGEMENT

Extent of co-residence / regular overnight stays (CPFs, OHFs)

Frequency of any in-person time together (OHFs)

Looks after child/ren without mother present; including when mother working (OHFs)

Father’s, mother’s or child’s perception of father’s amount of time with child (CPFs)

QUALITY OF FATHER-CHILD RELATIONSHIP AND EMOTIONAL ACCESSIBILITY

Quality of the father-child relationship (including perceived closeness, attachment and conflict (CPFs, OHFs))

Emotional accessibility of the father to the child / Emotional support/Conversation (CPFs)

Parenting Style, focused on parental monitoring and control (CPFs)

FATHERS’ BELIEFS AND ATTITUDES

Feelings and confidence about parental role, or towards child (CPFs)

RESPONSIBILITY / INVOLVEMENT IN CHILD’S EDUCATION

Attending parents evening or other meetings with teachers about their individual child (CPFs, OHFs)

Educational or vocational expectations or aspirations for the child (CPFs)

Payment of child maintenance (OHFs)

¹¹⁶ In *The kids are alright father-factor framework*.

[Appendix C](#) presents detail about the topics that are relative or absolute¹¹⁷ data collection (questionnaire) gaps for CPFs and/or OHFs across the six included longitudinal studies. This is based on [Appendix A Table 3](#) for CPFs and [Appendix A Table 4](#) for OHFs.

Some of these data collection gaps may also apply to mother involvement, mothering and mother-child relationships. However, across the cohort studies, and to a lesser extent in *Understanding Society*, (co-resident) mothers were asked a greater range of questions than were CPFs, in more extensive data collection (see **Section 2.4.2, above**). In some cohort sweeps, this included questions about her own involvement and mothering and about the mother-child relationship that were not asked (as equivalent ‘father-factor’ questions) to fathers in ‘partner’ or ‘second parent’ data collection¹¹⁸.

¹¹⁷ Data on some of these topics have not been collected in any of the set of six studies; whereas others have been collected in a minority of the studies.

¹¹⁸ Detailed comparison of the extent of ‘father-factor’ data and ‘mother-factor’ data collection is not within scope of this review.

4. What are the implications of study design decisions for the data collected?

The breadth of data collection about fathers – Cohabiting Partner Fathers (CPFs) and Own Household Fathers (OHFs) – is linked to the overall design of a study, including decisions taken about questionnaire topics and question design. Below, in three columns, we name seven specific design features and their consequences for the fathers-in-adolescence data collected, while also giving examples from the six included longitudinal studies.

Design feature	Consequences of this design feature	Examples in this review of datasets
(1) The proportion of sweeps or waves in which data were collected directly from CPFs (those who are not the sole/main parental research participant) and from OHFs (see Sections 2.1 and 2.4A, above)	<p>In general, in sweeps of the cohort studies in which CPFs were <i>not</i> participants in data collection (i.e. information was not gathered <i>from</i> them but was gathered from others <i>about</i> them), no data or much less data was collected about these fathers' mental health; engagement and relationship with the child (<i>i.e. no father perspective</i>); parenting-related beliefs; and perceptions of the couple relationship and coparenting.</p> <p>Because OHFs¹¹⁹ were not included as research participants in any of the cohort studies, the data collected about OHFs was limited to a small set of variables gained from mothers and children (including the extent of OHF involvement, the OHF-child relationship and child maintenance).</p>	<p>In the LSYPE studies, more data was collected about father demographics (e.g. education) and employment (e.g. work income and hours) in the first sweep/s (in which CPFs were interviewed) than in subsequent sweeps (in which only the mother or young person reported information about a CPF).</p> <p>Data collection from CPFs themselves in the GUS age 12 and 14 sweeps had a substantial impact on the breadth of variables collected: in these sweeps, data about the father's mental health and wellbeing, father involvement, fathering, relationship with the child, and health/risky behaviours were collected in the 'partner questionnaires' – i.e. those filled out by CPFs.</p> <p>In contrast, in the GUS age 10 sweep, data about CPFs were only collected from mothers and children. So the variables were mainly limited to factual data that mothers were able to report, and to only the child's perspective on fathering and the father-child relationship.</p> <p>Because OHFs were full sample members in <i>Understanding Society</i>, this was the only one of the six longitudinal studies to collect an extensive range of variables about OHF characteristics (including demographics, health, health behaviours and economic activity); and contextual factors for father involvement (such as the OHF's household members, gender role attitudes and features of his employment).</p>

¹¹⁹ Those OHFs (the vast majority) who were **not** 'Partner OHFs' – i.e. they were not currently the mother's romantic partner living in a separate household.

		<p>Equivalent data were collected about the characteristics of OHFs, CPFs and mothers.</p> <p><i>Understanding Society</i> was also the only study to collect the OHF's perspective on his time and relationship with and financial contributions for child/ren living elsewhere. However, this was a limited set of questions, and not specific to his adolescent child/ren if he also had younger children living elsewhere (see below).</p>
(2) How substantial the data collection from fathers was in terms of interview time or self-completion questionnaire length, compared to data collection from mothers (see Sections 2.4B, 2.4C and 2.4D, above)	In cohort study sweeps which interviewed two co-resident parents for each cohort child, (co-resident) mothers tended to complete a more extensive 'main parent' data collection interview or questionnaire than did CPFs, who instead completed a 'second parent' or 'partner' interview or questionnaire. This meant that substantially fewer variables were collected from CPFs than from the mothers	The LSYPE 'second parent' interviews were the shortest out of the cohort study 'partner'/'second parent' data collections, with an average time of seven minutes in LSYPE2. Questions asked to fathers were mainly about his demographics, economic activity/income, and own parents. There were no questions to fathers about father involvement, fathering or the father-child relationship. Despite their focus on children's educational and vocational outcomes, LSYPE1 and LSYPE2 (together with the health-focused ALSPAC) collected the least data about CPFs' involvement in or aspirations for their adolescent child's education out of the six studies included in this review.
(3) Decisions taken (explicitly or implicitly) about how limited questionnaire space or interview length ¹²⁰ for fathers was to be allocated to different topics (see Chapter 3, above)	As stated, at the beginning of Chapter 3 (below), there is a balance to be struck in each study between questions asked about (1) father characteristics and the detail of fathers' economic activity, employment and income; and (2) father involvement, fathering, co-parenting and father-child relationships; especially since these two sets of father-factors can interact in their influences on children.	<p>Even though the aim of <i>Understanding Society</i> is broader than researching families with dependent children, this household panel study collected rich data about CPF father involvement, fathering and father-child relationships – although this data was adolescent-specific only for 10-year-olds. However, there were no questions for involved OHFs about their parenting style, and few about their parenting activities, because these fathers were not asked the in-depth questions in the 'Parents and Child' and 'Parenting Style' modules¹²¹ that were asked of CPFs (despite many of these questions being relevant¹²²).</p> <p>In contrast to <i>Understanding Society</i>, ALSPAC asked few questions of fathers about their</p>

¹²⁰ In *Understanding Society*, this comprises the questionnaire modules and questions specifically for parents of dependent children.

¹²¹ In *Understanding Society*, these questionnaire modules and questions are asked only to fathers and mothers who are co-resident (for all or most of the time) with their dependent children in a study household.

¹²² For example, questions about educational aspirations for their child; help with homework; activities and outings together; talking with their child about "things that matter" (to the child); praising and hugging their child; conflict with their child; setting and enforcing rules; shouting and physical punishment.

	An undue emphasis on one of these broad topics means that there is a substantial gap in the data collected about influences on children's development and outcomes.	parental role, parenting, or relationship with their adolescent child. There were four lengthy questionnaires for fathers / partners during the adolescence sweeps; but most of these questions were about father and mother characteristics (with a strong focus on health, health behaviours, employment, adult learning, life events, broader social and environmental factors, and the couple relationship) – often with equivalent data collected from mothers in 'carer questionnaires'. Fathers were asked about their partner's feelings towards the child – but were not asked about their own feelings. This is a very different emphasis from the content of 'partner questionnaires' in the antenatal and postnatal ALSPAC sweeps which collected rich data about fathering and father involvement (Burgess & Goldman, 2018, 2022).
(4) Decisions taken (explicitly or implicitly) about how limited questionnaire space or interview length for adolescent children was to be allocated to different topics	Questionnaires and interviews for the adolescent children in all the studies covered many topics. 'Family' and 'parents' were given a relatively small amount of questionnaire or interview space, which restricted the breadth and depth of data collected about the adolescent's perspective on the father-child relationship, fathering and other 'father-factors'.	In general, there were only a few questions specifically about fathers and about mothers in questionnaires for the adolescent children. The exception was GUS, which included a set of 'People in My Life' (PIML) ¹²³ questions for each adolescent child about their relationship with their co-resident father / father-figure and (separately) their relationship with their OHF (where that applied). Across the six studies, there was rarely symmetrical data from both father and child about father involvement, fathering or the father-child relationship. The main exception was in GUS for emotional accessibility and the father-child relationship, because near-identical 'People in My Life' (PIML) items were asked of both co-resident father and child.
(5) Decisions taken about the extent to which data about fathers was collected from mothers in sweeps /waves in which fathers could also participate in data	In almost all the studies, there was at least some doubly-reported 'symmetrical' data in which both fathers and mothers reported on specific father characteristics ¹²⁴ , for example father health and health behaviours in	In ALSPAC, since both fathers and mothers were asked many questions about their partner, there was broadly 'symmetrical' data for some father characteristics (e.g. work hours, health behaviours and abuse towards the child), as well as about the couple relationship (including division of household labour, and partner violence) i.e. with both mother and father reports. This meant that data about father

¹²³ This comprised items from the trust and communication subscales of the validated *People in My Life* (PIML) scale (Ridenour et al., 2006). These items can be categorised as both emotional accessibility and the father-child relationship in *The kids are alright father-factor framework* (see **Appendix B, below**).

¹²⁴ Not always with identical questions or scales; and (in ALSPAC) not always asked in the same sweep.

<p>collection (see Section 3.2A, above)</p>	<p>ALSPAC, and father income in the MCS. This may have been because this data was especially important for the study, and it was predicted that mothers were more likely to participate than fathers. For cases in which fathers participated, data for analysis could be taken from the father interview/questionnaire due to greater validity, especially where questions were identical. Of course interviewers' time is expensive, and respondent fatigue increases with longer interviews and questionnaires.</p>	<p>characteristics were gained in cases where the father didn't complete a 'partner questionnaire'.</p> <p>The other studies collected fewer 'doubly-reported' data about father characteristics but did so for questions (where asked) about the couple relationship and co-parenting.</p> <p>GUS collected CPF demographics (e.g. ethnicity, religion and educational qualifications) and economic activity / employment details (including work hours and job security) from mothers only (i.e. not from fathers) in the two adolescent sweeps in which fathers received a questionnaire. This ensured that these data about fathers were collected even if the father did not participate¹²⁵. It also left space in the 'partner questionnaire' for questions to fathers about father involvement, fathering and the father-child relationship as well as their health and wellbeing. There may have been impacts on data validity for some mother-reported father demographics and employment details.</p> <p>The MCS and Understanding Society took the 'middle ground', asking the mother little about her cohabiting partner's characteristics, but had the option of a 'proxy partner interview' (to collect basic data about her partner) when the father did not participate.</p>
<p>(6) Whether questions about parental involvement, parenting and parent-child relationships were to be asked specifically about fathers and about mothers, or instead about 'parents' or 'the family'</p>	<p>Where the child lived in a two-parent household, questions asked to mothers and children about parents (including parent-child relationships and parenting style) may be asked in terms of the parental couple or the parents living apart as a single unit (e.g. 'your parents' or 'you and/or your partner'), rather than separately about a mother and about a father.</p> <p>Yet fathers and mothers may parent differently, and the quality of relationship of the child with each parent may</p>	<p>Many questions for mothers and adolescent children across the longitudinal studies were asked about 'parents' or 'family', so greatly restricting the data available about fathers and about mothers. In ALSPAC, a few questions asked to mothers and to adolescent children which would have given data about father involvement were asked in relation to any male adult (e.g. "a father or other male adult in your family") which could have included grandfathers and older siblings aged 16+ years.</p> <p>There may be concerns about how questions which differentiate fathers and mothers, or 'resident' fathers and OHFs, can work for children living in a wide range of family types, to avoid sensitivities or distress when a child is not in contact with their birth father. <i>Understanding Society</i> and GUS had ways of overcoming this</p>

¹²⁵ Unlike in the MCS and *Understanding Society*, there was no proxy partner interview in GUS, nor in the LSYPE sweeps which interviewed 'second parents'.

	<p>be different. For example, whether the father and mother (including any involved OHP) have similar or different parenting styles could be relevant factors in addition to the type/s of parenting style.</p> <p>Furthermore, children may find it difficult to 'average' across their parents, so potentially affecting the validity of the data gained.</p>	<p>by asking feeder questions or using interviewer preambles.</p> <p>In <i>Understanding Society</i>, there was also an issue about differentiating <i>children</i>: questions for both CPFs and OHFs were often asked about all dependent children (resident in the study household, or living elsewhere), so that analysis cannot be focused on a specific age-range, except for those families with only younger children or only adolescent children. Of course, questions asked individually about each child take up a lot more questionnaire space and can be repetitive.</p>
<p>(7) Whether questions for mothers and adolescent children about father involvement, fathering and father-child relationships were to be asked separately about co-resident fathers (CPFs, and fathers in single-father households¹) and OHFs.</p>	<p>If co-resident fathers (mainly CPFs) and OHFs are not differentiated in questions (with separate questions where possible), then analysis of children with both a co-resident 'stepfather' and an OHF (around a tenth of adolescent children) cannot give evidence which is specific to co-resident fathers, OHFs, birth fathers or 'stepfathers', despite these differing living arrangements and relationships potentially having an impact on father involvement, father-child relationships, fathering and children's outcomes.</p>	<p>In some of the studies, it was unclear in questionnaires for adolescent children whether a question to the child about a 'father' was to be answered in relation to a 'resident' parent (who could be a co-resident 'stepfather') or an OHF.</p> <p>GUS was an example of good practice:- questions were asked to the adolescent child separately about a 'resident' father (also differentiating birth fathers and 'father-figures') and about an OHF.</p> <p>Likewise, <i>Understanding Society</i> asked separate questions about a 'father' who may live with the child or elsewhere, and a 'step-parent'.</p>

5. To what extent has the data collected been used in published analysis? (identification of under-studied data)

This chapter investigates the extent to which data collected about father involvement (three types), the father-child relationship, co-parenting and fathering beliefs and attitudes during children's adolescence have been included¹²⁶ in published analyses of the six UK longitudinal studies: ALSPAC, the MCS, *Growing Up in Scotland*, the two LSYPE studies and *Understanding Society*. It aims to identify analysis gaps and opportunities for future analysis. Father characteristics and contextual factors for father involvement were excluded from scope of this work.

The methods used were set out in detail in **Section 1.6, above**. In summary, the content of *analyses* of the six longitudinal studies in research publications in the Fatherhood Institute's extensive and systematically collected Literature Library was compared to the fathering-in-adolescence data which *had been collected* in these longitudinal studies (see in [Appendix A Tables 3 and 4](#)) so that analysis gaps could be identified – i.e. where data collected has not been analysed within publications in the Literature Library¹²⁷. This identification of analysis gaps is therefore in relation to *published* research. There may have been additional fathers-in-adolescence analyses carried out of these longitudinal datasets which have not yet been published or which will not be published.

In the Fatherhood Institute's equivalent reviews of longitudinal studies (*Who's the Bloke in the Room* and *Bringing Baby Home*), the authors found that substantial numbers of data items on fathers did not appear to have been analysed in published literature (Burgess & Goldman, 2018, 2022). Other investigations into 'analysis gaps' (on topics other than fatherhood) have likewise found under-studied data¹²⁸.

5.1. Under-studied data

[Appendix A Table 5](#) shows the 'fathering in adolescence' topics for which variables¹²⁹ have been included in published analyses (of data from the six longitudinal studies) which

¹²⁶ The findings of many of these analyses are reported in the evidence synthesis in *The kids are alright* research review (Burgess and Goldman, 2023).

¹²⁷ The Institute's Literature Library is likely to include the great majority¹²⁷ of published analyses of data about fathers from the six included longitudinal studies (see **Section 1.6, above**).

¹²⁸ The EPPI-Centre and Centre for Longitudinal Studies at UCL examined published studies that used MCS data for analysis on selected topics about children, and found under-utilised MCS data (Kneale et al., 2016). The *Understanding Society* project team found no published research papers using *Understanding Society* data on pregnancy outcomes, nor data on child development for children aged one to eight years (Benzeval, 2019).

¹²⁹ This comparison is restricted to variables collected about the CPFs who were **not** the main or sole parental research participant.

are in the Fatherhood Institute’s Literature Library. The ‘fathering in adolescence’ topics may have been analysed descriptively or included as part of a correlational analysis or statistical model of variables collected only at the same sweep (a cross-sectional analysis) or as part of an analysis including variables from earlier or later sweeps (a longitudinal analysis).

The greatest number of analyses found are of MCS data, with 17 analyses of MCS ‘fathering in adolescence’ data published in or since 2015¹³⁰, compared to nine analyses of *Understanding Society* data and four analyses of GUS data. No analyses published in or since 2015 were found of LSYPE1 data, nor of the first three sweeps of LSYPE2 data (one analysis only was found, published in 2014). Only one analysis was found of ALSPAC ‘fathering-factor’ data. **Section 3 (above)** shows that far fewer fathering-in-adolescence variables were collected in ALSPAC and the LSYPE studies.

The main ‘fathering in adolescence’ topics for which variables have been *most extensively used in analysis* in the published literature (in the Fatherhood Institute’s Literature Library) are set out in **Box 6, below**.

BOX 6: Categories of variables most extensively used in analysis

For Cohabiting Partner Fathers/co-resident fathers; or for ‘fathers’ without differentiation of CPFs and OHFs

- **Emotional accessibility to the child**, such as talking to the child about matters important to the child – the variables collected in *Understanding Society* have been most extensively used in analysis, with limited analysis of MCS and LSYPE variables.
- **The father-adolescent relationship**, in particular father-child closeness, father-child conflict, and emotional support/conversation (collected in the MCS and *Understanding Society*), although there are relatively few analyses of the GUS ‘*People in My Life*’ (PIML) data (see **Chapter 4, above**), and none were found that used the *Understanding Society* child’s rating of their relationship with a ‘step-parent’.

For Own Household Fathers

- **Quantity of engagement**, with a focus on variables measuring the frequency of in-person and ‘virtual’ time, together including overnight stays.

Notes

- The CPF¹³¹ ‘fathering in adolescence’ data have been analysed descriptively and in cross-sectional and longitudinal analyses in relation to a wide variety of variables

¹³⁰ Another two analyses of MCS ‘fathering-factor’ adolescence data, another five analyses of *Understanding Society* data, and three analyses of LSYPE1 data (one of which also incorporated LSYPE2 data) were published prior to 2015.

¹³¹ Or using child-reported data about fathers with CPFs and OHFs not differentiated in analysis. For example, father-child and mother-child relationship quality were compared without taking account of living arrangements. Nearly all children live with their birth mother; around 40% of adolescents do not live with their birth father.

which include child, father, mother and family characteristics (e.g. family employment pattern, father working hours, parental relationship quality and child gender), as well as earlier father involvement and father-child relationship quality, and an array of child outcomes.¹³²

- ii. The OHF ‘fathering in adolescence’ data have been analysed (descriptively and in cross-sectional and longitudinal analyses) in relation to child gender, child age at separation, pre-separation fathering, adolescent cognitive and educational outcomes, adolescent violence in early adulthood, adolescent gender attitudes, and the experience of childhood deprivation.

Appendix D presents detail about the topics for which fathers-in-adolescence variables have been collected but little or not at all used in the published analyses in the Fatherhood Institute’s Literature Library. Least used in published analysis, in relation to both CPFs and OHFs, are questions about the extent of father and child co-residence; types of father engagement; father involvement in their children’s education; father responsibility; and co-parenting. There are also analysis gaps that are specific to CPFs or OHFs, including *Understanding Society* and GUS data about father parenting style; and data collected about OHF-child relationships.

It is surprising that UK analyses of the impact of father involvement in their adolescent child’s education on educational attainment have only used data collected in the National Child Development Study and the British Cohort Study for earlier cohorts of adolescents (born in 1958 and 1970). Equivalent analyses have not been found that use more recent UK datasets such as the MCS or GUS.

Sample sizes and quality of the data collected may contribute to explaining why researchers have not used data in analysis (even where it is highly relevant to policy and practice interests) although this should not be assumed. There may also be a lack of researcher knowledge of the fathers-in-adolescence data that have been collected – and this is commonly found in other arenas. For example, by 2019, there were no published analyses using the child development data collected for children aged 1 to 8 in *Understanding Society* (Benzeval, 2019). In response, *Understanding Society* has launched a new ‘PEACH’ dataset which brings together all the data collected on each child from pregnancy to the age of 10 years including the age 10 ‘parenting style’ data¹³³. It would be valuable to extend this datafile to include data collected from young people in the youth questionnaires, so that parenting style at age 10 could be easily linked with later outcomes such as adolescents’ emotional wellbeing, risky behaviours and relationships with their fathers and their mothers.

¹³² These child outcomes include adolescent mental health and behavioural outcomes (e.g. the SDQ measure), self-esteem, life satisfaction, peer issues, school wellbeing, happiness with family, satisfaction with appearance, risky behaviours, sexual activity, gender role attitudes, being bullied, educational aspirations and GCSE results.

¹³³ The PEACH User Guide is at https://doc.ukdataservice.ac.uk/doc/9075/mrdoc/pdf/9075_peach_user_guide.pdf

5.2. Father ‘absence’

Several analyses of MCS, ALSPAC and other data in the Fatherhood Institute’s Literature Library frame OHFs as ‘absent’, and parental separation as ‘father loss’. Often analyses of the impact of parental separation and ‘lone mother’ family structure on adolescent children (and also younger children) do not incorporate the data that has been collected about OHF involvement in their children’s lives (see Section 2.2 (‘Family Composition’), p.21 in [The kids are alright research review](#)). This confuses parental separation with termination of the father-child relationship.

In addition, no analyses have been found of the adolescent-reported *Understanding Society* data about OHF-child conversation and quarrels¹³⁴, and an OHF’s help with homework¹³⁵. Such analyses could also draw on the rich data collected directly from OHFs about their characteristics and other contextual factors for father involvement. This is the *only* large-scale UK longitudinal study (included in this review) in which data has been collected directly from OHFs, and which tracks fathers who leave study households, for example after parental separation, although as discussed in **Section 2.2.2, above**, the attrition rate is high.

5.3. New opportunities

Few published analyses were found of the large-scale longitudinal data most recently collected in the UK about the fathers of contemporary adolescents. To date, no published analysis been found of the ‘fathering in adolescence’ data collected in the age 17 MCS sweep; nor (see **Box 6, above**) of the rich ‘*People in My Life*’¹³⁶ (PIML) data (on emotional accessibility and father-child relationships) collected from both fathers and children in the age 14 GUS sweep¹³⁷. These datasets have become available relatively recently and offer future opportunities for analysis. There has been a subsequent GUS adolescence sweep for which data is not yet available for analysis (in 2023, at the time of writing).

No analyses were found of the MCS data about fathers’ time with 14-year-old children that have been collected in child-completed time use diaries¹³⁸ (other age 14 fathers-in-

¹³⁴ These questions were asked to the child (age 10-15) about their “father”, preceded by a preamble that the questions were about “your parents even if either of them lives in a different household to you”, and followed by a separate question about their relationship with a step-parent. This implies that the child should answer in relation to their OHF if they have both an OHF and a co-resident ‘stepfather’. Data could be analysed for the third of adolescents who have an OHF and no co-resident ‘stepfather’.

¹³⁵ In wave 13, the question about help with homework differentiated “Dad” and “Step-dad”.

¹³⁶ Ridenour et al., 2006.

¹³⁷ The Scottish Government’s report of findings from the age 14 sweep analysed this data for mothers but not for fathers (Scottish Government, 2022).

¹³⁸ For each episode of activity on one randomly selected weekday and one randomly selected weekend day, the child was asked the nature of the activity, who it was with (including father), where it took place and how much they

adolescence data have been analysed in a number of publications). Depending on data quality, these diaries give potential for deriving the frequency and quantity of total father-child in-person time together, of specific activities together, and of father-child time when the mother and/or siblings are not also involved, in particular in relation to CPFs. There may be an equivalent analysis gap for data about mothers, since published analyses of MCS time use diary data to date appear to be focused on screen and social media use, sedentary activity, sleep and mental health.

Recent and forthcoming developments in *Understanding Society* have the potential to improve the quality and sample size for data collected about and from OHFs, such as a greater number of child-specific questions; harmonisation of questions asked of OHFs and mothers¹³⁹; and attempts to increase the retention rate after life events such as relationship separation (see Burgess and Goldman, 2022; Benzeval, 2019; 2021).

Beyond these most recent sweeps and waves, there is also current and future potential to exploit the enduring value of the older fathers-in-adolescence data collected across these longitudinal studies for analyses of the impact of ‘fathering in adolescence’ (including co-parenting and father-adolescent relationships) on adult outcomes measured at later sweeps, and (where data allows) looking at intergenerational effects for the adolescents’ future children. Only long-running studies can offer this analytic potential, even though the experiences of the adolescents and their fathers (entering adolescence in the 2000s or 2010s) may not reflect the contemporary context of fatherhood 10 or 20 years later. Changes include a growing focus on father involvement, and the influence of the internet and social media.

Where there is symmetrical data collected from cohabiting mothers and fathers, or parents living separately, for example about the child’s behaviour (MCS) or co-parenting (GUS); or collected from fathers and children, for example about father-child closeness and conflict and father emotional support; analyses could look at the level of concordance between reports, and the impact of differing views and perceptions.

Further work would need to establish specific research questions, as well as the sample sizes, item non-response and response bias for individual questions and composite measures.

liked the activity. See [Millennium Cohort Study Sixth Sweep \(MCS6\): Time Use Diary Documentation \(ukdataservice.ac.uk\)](https://ukdataservice.ac.uk).

¹³⁹ This refers to future harmonisation of questions about OHFs and their child/ren in the Child Maintenance and Family Networks modules.

6. Conclusions and recommendations

6.1. Conclusions

In summary, this review found that the six large-scale UK longitudinal studies have collected a variety of data about partnered fathers living for all or most of the time with their adolescent child/ren (Cohabiting Partner Fathers – CPFs), giving much potential for secondary analysis on issues of scholarly, policy and practice interest. However, some important questions about fathers during their children’s adolescence have not been asked (‘data collection gaps’); and some of the data collected appears not to have been used in published analyses (‘data analysis gaps’).

Despite around 40% of adolescents having a birth father living elsewhere for all or most of the time, far less data have been collected about these Own Household Fathers (OHFs). This is mainly because OHFs were rarely included in data collection, other than in *Understanding Society*¹⁴⁰; and also because mothers and children were asked relatively few questions about OHFs. Topics covered in this review of longitudinal studies (father involvement, fathering, father-child relationships and co-parenting) are as relevant to involved OHFs as they are to CPFs.

There is the need for a balance in the fathers-in-adolescence data collected so that it includes father involvement, fathering, the father-child relationship and co-parenting as well as father-factors not directly about children such as health, economic activity, employment and income. These two sets of father-factors (child-centred; and not directly about children) can interact in their influences on adolescents.

Questions about father accessibility and responsibility, and fathering-related fathers’ beliefs, feelings and attitudes, have been less extensively asked than questions about fathers’ direct engagement with their child/ren and (for CPFs) father-child relationships. This is even though the importance of father accessibility may rise during adolescence in tandem with a fall in the amount of direct father-child (and mother-child) engagement. Co-parenting is also a key gap, both where parents live together and where they live separately¹⁴¹. Given that educational attainment is such a policy focus, less data has been collected about father involvement in their children’s education than would be expected, even in the LSYPE studies which had educational and vocational outcomes as a core objective.

¹⁴⁰ And small subsets of ‘Partner OHFs’ were included in ALSPAC and the MCS.

¹⁴¹ In addition to obtaining data from fathers and mothers, young people could be asked about their experiences of and perspectives on co-parenting by their parents.

Study and questionnaire design are important for the collection of fathers-in-adolescence data. The breadth of data collection about fathers, and the validity of these data, are increased when:

- i. a full range of fathers are included as research participants in every sweep or wave;
- ii. substantial efforts are made to recruit fathers, including OHFs. for example with interviewer time and sufficient budgets;
- iii. interviews and self-completion questionnaires (including those for fathers as research participants) collect equivalent data about ‘father-factors’ and ‘mother-factors’; and
- iv. questions are asked separately about fathers and mothers, rather than about a single category of ‘parents’.

Despite not being a child cohort study, exclusively focused on children and their families, *Understanding Society* has collected in-depth data about fathering, father involvement and father-child relationships.

A longer or identical interview for fathers – or for ‘partner’ research participants or ‘second parent’ research participants (who are much more often fathers than mothers) – carries increased costs and participant burden. Yet this may raise the response rate from fathers by showing that the study values both fathers and mothers as research participants, and by including a range of relevant and interesting questions that are not limited to fathers’ characteristics and breadwinning role. Questions were added to the MCS ‘partner interview’ after early piloting so that the interview was more interesting for fathers (Kiernan, 2016). *Growing up in Ireland* is an exemplar of a large-scale birth cohort study which has collected data from fathers on a range of parenting activities, parenting stress, and the father-child relationship (Smyth & Russell, 2021).

Fathers-in-adolescence topics for which variables have been most extensively used in analysis are (for CPFs/co-resident fathers; or for ‘fathers’ without differentiation of CPFs and OHFs) the father-adolescent relationship and emotional accessibility of the father to the child, and (for OHFs) the quantity of engagement. Least used in published analysis, for both CPFs and OHFs, are questions about the extent of father and child co-residence, types of father engagement, father involvement in their children’s education; father responsibility; and co-parenting.

In particular, there are few or no published ‘father and adolescence’ analyses found of GUS ‘*People in My Life*’ (PIML) data¹⁴², *Understanding Society* parenting style data, age 17 MCS data, age 14 GUS data, and the MCS age 14 child time use diaries (some of this data has become available for analysis only recently). This is the large-scale longitudinal study data that has been collected most recently about the fathers of contemporary adolescents.

¹⁴² Ridenour et al., 2006.

The oldest cohort studies offer enduring value for analyses of the impact of fathering in adolescence and father-adolescent relationships on adult outcomes and pathways, and of intergenerational effects for the adolescents' future children. All offer potential for future analyses relevant to scholarly interests (some of which feature in international literature) and practice and policy issues.

6.2. Recommendations

6.2.1. How to collect fathers-in-adolescence data in future studies and study sweeps

Longitudinal and cross-sectional studies collecting data for research about families and children should incorporate into their design and budget from the outset:

- Data collection directly from both co-resident fathers and involved Own Household Fathers
- Sufficient study resources to implement fieldwork practices (including interviewer involvement) that will be likely to achieve high engagement from fathers as research participants – as for data collection from mothers and other main parental research participants (see Goldman et al., 2019)
- In longitudinal studies, tracking of parents (usually fathers) who leave a child's main household during the study, and continued data collection from these fathers as for other parents
- Largely identical data collection instruments for co-resident mothers, co-resident fathers and involved parents who live separately (who are mainly Own Household Fathers) to collect equivalent father-data and mother-data about parental characteristics, parental involvement, parenting style, parent-child relationships and co-parenting.
- A 'household' or 'child-based' interview can ask one parent for data about the household, other family members and the child's schooling, activities and development; although it is useful to collect some data from both mothers and fathers (including involved parents living elsewhere) about the child's personality and behaviours.

6.2.2. What fathers-in-adolescence data to collect in future studies and study sweeps

- Data about father characteristics, fathering-'status' (birth, 'step', adoptive or foster; co-resident for all or most of the time, or Own Household Father), father involvement, parenting style, father-adolescent relationships, fathers' relevant beliefs and attitudes, and co-parenting should be collected in quantitative longitudinal studies of influences on children during adolescence and young adulthood.

- This data should be gained primarily from fathers (including involved Own Household Fathers) and adolescent children, rather than from other study participants. Fathers and children should be asked the same or similar questions about father-child relationships and ‘parenting style’ to obtain symmetrical data incorporating both perspectives.
- Involved fathers living separately from their child should be asked a similar range of questions about father involvement, fathering, father-adolescent relationships and co-parenting as asked of co-resident fathers.
- Mothers’ perspectives should be gained where relevant, for example in relation to co-parenting; and also to collect data about less involved Own Household Fathers, who are less likely to participate and may not be eligible for data collection.
- Questions asked to research participants should include questions that are specific to fathers and to mothers, rather than asking about ‘parents’ as a single category. Questions should be asked separately about co-resident fathers (living for all or most of the time in the child’s main household), differentiating between co-resident birth fathers and father-figures, and also about Own Household Fathers, as in the in-depth data collected by *Growing Up in Scotland* about father-child relationships.

6.2.3. Recommendations for future analysis of the fathers-in-adolescence data collected

- Quantitative researchers and research funders in the fields of fatherhood, families and adolescence should investigate the rich data available in the UK’s large-scale longitudinal studies for developing the evidence base about fathers and adolescents, as documented in *The kids are alright* review of datasets. This includes recently collected data in *Growing Up in Scotland*, the Millennium Cohort Study (e.g. time use diaries) and *Understanding Society*.
- Research findings about children and their families should give evidence specific to fathers, mothers and other parents, rather than for ‘parents’ as a single category, in order to explore similarities and differences in relation to situation, parental roles and gender. In addition, the term ‘parent’ as a euphemism or synonym for mother excludes consideration of father-factors and may ‘mask’ the absence of fathers from the sample.
- Analyses of the impacts of family structures and parental separation should not explicitly or implicitly conceptualise or label Own Household Fathers as ‘non-resident’ or ‘absent’ or even ‘separated’¹⁴³. They should incorporate into analysis the data that has been collected about OHFs’ involvement in their children’s lives, including part-time co-residence.

¹⁴³ Some may never have lived with their child and the child’s birth mother together at the same address.

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APPENDIX A

Appendix A Table 1: Characteristics of the six longitudinal studies in relation to fathers in adolescence						
Type of study	Child cohort studies					Household panel study
Abbreviation and full name of study	LYSPE 1 Next Steps (Longitudinal Study of Young People in England 1st cohort)	ALSPAC (Avon Longitudinal Study of Parents and Children – G1 cohort of adolescents ¹⁴⁴)	MCS (Millennium Cohort Study)	LYSPE2 Our Future (Longitudinal Study of Young People in England 2nd cohort)	GUS (Growing Up in Scotland – Birth Cohort 1)	Understanding Society
Geographical area covered	England	The old administrative county of Avon (in and around Bristol) in SW England	All four countries of the UK	England	Scotland	All four countries of the UK
Current funder	Department for Education <i>during adolescence sweeps</i> ¹⁴⁵	Medical Research Council, Wellcome Trust and University of Bristol	Economic and Social Research Council; and government departments	Department for Education	Scottish Government	Economic and Social Research Council; and government departments

¹⁴⁴ The fathers of these G1 adolescents are the ALSPAC 'G0 Partners cohort'.

¹⁴⁵ Currently funded by the Economic and Social Research Council.

Focus of study	Educational and vocational transitions <i>during adolescence sweeps</i> ¹⁴⁶	Environmental, biological and genetic factors that affect health and development	Social science – multidisciplinary evidence for science and policy development	Educational and vocational transitions, and young people’s wider lives and experiences	Evidence to develop and monitor policies and services for children and families, especially education and health	Social science – multidisciplinary evidence for science and policy development
Adolescents born in...	1989-1990	1991-1993	2000-2002	1998-1999	2004-2005	Various years – from 1991 to 2013 in wave 1 up to wave 13 ¹⁴⁷
Adolescents aged 10 in...	1999-2000	2001-2003	2010-2012	2008-2009	2014-2015	Various years – from 2001 to 2023 in wave 1 up to wave 13
Approximate age of children in first sweep or wave of the study	13-14 years	Pregnancy	9 months	13-14 years	10 months	All ages
Ages of adolescent children (average) in	Age 13-14 (sweep 1) Age 14-15 (sweep 2) Age 15-16 (sweep 3)	Carer questionnaires ages 10, 11, 12, 12.5, 17.5, 18.5	Age 11 (sweep 5) Age 14 (sweep 6) Age 17 (sweep 7)	Age 13-14 (sweep 1) Age 14-15 (sweep 2) Age 15-16 (sweep 3)	Age 10 (sweep 8) Age 12 (sweep 9) Age 14 (sweep 10)	Adolescent sample members aged 10-18 in every annual wave since 2009-10

¹⁴⁶ The focus broadened from age 25 when the funder changed to the Economic and Social Research Council.

¹⁴⁷ Wave 13 was the most recent Understanding Society questionnaire available in 2023 (at the time of writing this report).

<p>sweeps or waves</p>	<p>Age 16-17 (sweep 4) Age 17-18 (sweep 5 – <i>no parental interviews</i>) Age 18-19 (sweep 6 – <i>no parental interviews</i>)</p>	<p>Partner questionnaires ages 10, 11, 12, 12.5 Child-based questionnaires (completed by mother or main carer) ages approx. 10.5, 11.5, 13, 14, 16, 16.5 years Child-completed questionnaires and puberty questionnaires at various time points</p>		<p>Age 16-17 (sweep 4 – <i>no parental interviews</i>) Age 17-18 (sweep 5 – <i>no parental interviews</i>) Age 18-19 years (sweep 6 – <i>no parental interviews</i>) <i>Questionnaires not available¹⁴⁸ for sweeps 4, 5 and 6</i></p>	<p>Age 17 (sweep 11) <i>Questionnaire not available for sweep 11</i></p>	
<p>Research participants</p>	<p>Mothers Fathers Cohort children (<i>not siblings</i>)</p>	<p>Mothers Fathers Cohort children (<i>not siblings</i>)</p>	<p>Mothers Fathers Cohort children (<i>not siblings</i>) Teachers</p>	<p>Mothers Fathers Cohort children (<i>not siblings</i>)</p>	<p>Mothers Fathers Cohort children (<i>not siblings</i>) Teachers</p>	<p>Mothers Fathers Dependent children (of any age) living in sample households (<i>including adolescent children's younger and older siblings</i>)</p>

¹⁴⁸ The term 'available' in this row of Table 1 refers to whether the questionnaire was available online (on the study website or the UK Data Service website) in 2023 at the time of writing this report.

<p>Categories of fathers¹⁴⁹ included (as participants) in data collection in at least one sweep or wave</p>	<p>Cohabiting Partner Fathers (CPFes)</p>	<p>Cohabiting Partner Fathers (CPFes) Partner Own Household Fathers ('Partner OHFs')^{150 151}</p>	<p>Cohabiting Partner Fathers (CPFes) Partner Own Household Fathers ('Partner OHFs')¹⁵²</p>	<p>Cohabiting Partner Fathers (CPFes)</p>	<p>Cohabiting Partner Fathers (CPFes)</p>	<p>Cohabiting Partner Fathers (CPFes) Own Household Fathers (OHFs) (including OHFs who previously lived with their child/ren in another study household and have been tracked into a new study household)</p>
<p>How sole/main parental research participant was selected</p>	<p>The parent in child's sole/main household who had most involvement in child's education¹⁵⁴</p>	<p>Mother or person taking the role of mother (for 'carer questionnaires'¹⁵⁵) Mother or person taking the role of</p>	<p>The 'natural mother' or (if not present) the 'natural father', or the parent participating as the 'main respondent' in</p>	<p>The parent in child's sole/main household who had most involvement in child's education</p>	<p>The parent participating as the 'main carer' in previous sweep, who was nearly always the mother</p>	<p>N/A</p>

¹⁴⁹ In the cohort studies, this refers to the vast majority of fathers who were **not** the main parental research participant.

¹⁵⁰ 'Partner OHFs' are those currently in a non-cohabiting (LAT) 'Living-Apart-Together' relationship with the child's other birth or adoptive parent, usually the mother.

¹⁵¹ It appears that at ages 10, 11 and 12 in ALSPAC, around 3% of fathers/partners completing 'partner questionnaires' as "the study child's father or the person taking the role of father" did not live with the cohort child, and another 0.5% or less lived with the child occasionally (CLOSER Discovery, August 2023. London, UK: CLOSER. <https://discovery.closer.ac.uk/>). A small proportion of Non-partner OHFs (those not currently in a relationship with the child's mother) could have been included, because mothers could pass on the questionnaires to whoever they felt appropriate (Northstone et al., 2023).

¹⁵² Only those 'Partner OHFs' who were reported by the 'household interview' respondent to be part-time resident in the cohort child's main household:-The interviewer instruction in the household grid stated *include in household "- person e.g. partner of parent who stays overnight for one or two days a week"*.

¹⁵⁴ In both the LSYPE studies, this was according to the mother, father or other adult completing the household section of the interview. The exception was LSYPE1 sweep 4, for which the sole/main parental participant was the parent (in the child's main household) whom the interviewer thought was more likely to take part.

¹⁵⁵ ALSPAC 'carer questionnaires' were primarily about the mother and her partner and family. The 'child-based questionnaires' were primarily about the child.

at each sweep¹⁵³ in the cohort studies		mother or 'the chief carer' ¹⁵⁶ (for 'child-based questionnaires')	previous sweep, who was nearly always the mother ¹⁵⁷			
Ages of adolescent children when fathers¹⁵⁸ were actively included (as participants) in data collection	Ages 13-14 and 14-15 ¹⁵⁹	Ages 10, 11, 12 and 12.5	At ages 11, 14 and 17	Age 13-14 ¹⁶⁰	Ages 12 and 14 ¹⁶¹	In every annual wave since 2009-10
Full span of CPFs included as research	Two out of the four younger adolescence sweeps which involved at least one	Four out of the twelve adolescence sweeps which	All adolescence sweeps	One out of the three younger adolescence sweeps which involved at least one	Two out of the three adolescence sweeps for which	In every annual wave

¹⁵³ Documented on the basis of technical reports and questionnaires because interviewer guidance was not available online for every study,

¹⁵⁶ This was most probably the mother's assessment, because the mother received all questionnaires (including the 'partner questionnaire') from the study team.

¹⁵⁷ . In the MCS and GUS, co-resident parents could over-ride the CAPI computer program's or interviewer's selection of the sole or main parental research participant. It is not known whether this also applied in the LSYPE studies because interviewer instructions (outside of the questionnaire) were not available for this review.

¹⁵⁸ In the cohort studies, this refers to the vast majority of fathers who were **not** the main parental research participant.

¹⁵⁹ CPFs could additionally be included in the LSYPE1 16-17 sweep if they were available to give data as part of the 'main parent' interview, but they were not actively recruited for fieldwork. CPFs could also do a joint 'main parent' interview (if the cohabiting parents were equally involved in the child's education), but this occurred in only a small proportion of cases (Goldman and Burgess 2017).

¹⁶⁰ CPFs could additionally be included in the LSYPE2 14-15 and 15-16 sweeps (the 'individual parent module') if they were at home during the 'main parent' interview, but they were not actively recruited for fieldwork. CPFs could also do a joint 'main parent' interview if the cohabiting parents were equally involved in the child's education.

¹⁶¹ GUS had a further adolescence sweep during 2021-23, at age 17. This is not included in *The kids are alright review of longitudinal studies* because questionnaires and technical documentation were not yet available online in 2023 at the time of writing this report.

participants in data collection	parent (<i>the later adolescence sweeps did not interview parent/s, only the young people</i>)	involved at least one parent ¹⁶²		parent (<i>the later adolescence sweeps did not interview parent/s, only the young people</i>)	documentation is available	
Mode of data collection for CPFs¹⁶³ included in a sweep or wave	In-person interview (CAPI)	Self-completion paper questionnaire:- Given to the mother's partner by the enrolled mother (to whom the questionnaire was posted)	Ages 11 and 14: in-person interview (CAPI) with self-completion (CASI) section Age 17: web questionnaire ideally completed during household visit (or emailed) and followed up with reminders	In-person interview (CAPI)	Self-completion paper questionnaire Posted to the child's sole/main household; and collected where possible by interviewer during 'main carer' and child data collections in the child's (main) home. Followed up by office reminders, and interviewer visit if needed	Mixed mode In-person interview, or (from wave 3) phone interview, or (from wave 7) web questionnaire
Name of research instrument for collecting data from	'Second parent interview'	'Partner questionnaire'	Ages 11 and 14 'Partner interview' Age 17: 'parent questionnaire' (parent 1 and parent 2)	'Second parent interview'	'Partner questionnaire'	N/A

¹⁶² Additionally there were five girls puberty questionnaires to be completed by "mother or daughter" and five boys puberty questionnaires to be completed by "parent or son" (gender of completing parent not collected).

¹⁶³ In the cohort studies, this refers to the vast majority of fathers who were **not** the main parental research participant.

CPFs¹⁶⁴ in the cohort studies						
Average interview completion time and/or questionnaire length for 'second parent' or 'partner'¹⁶⁵ data collections	Time taken not available	'Partner questionnaires' ranged from 15-54 pages ¹⁶⁶ across the sweeps	Ages 11 and 14 approx. 20 mins Age 17 parent questionnaire – approx. 15 mins ¹⁶⁷	7 mins	Approx 15 mins ¹⁶⁸ Age 12: 14 pages Age 14: 11 pages	N/A
Response rate for 'second parent' or 'partner' data collections	Age 13-14: at least 85% in calculations by the Fatherhood Institute using different assumptions based on information	Age 10: 34% Age 11: 30% Age 12: 27% (Note – not based on issued questionnaires, cf	Age 11: 87% of eligible 'partners' Age 14: 82% of eligible 'partners' Age 17: 64% of eligible 'Parent 2s' (completing the	Age 13-14: 88% of eligible 'second parents'	Age 12: 80% of eligible 'partners' for main longitudinal sample Age 14: 77% of eligible 'partners' for main longitudinal sample	N/A

¹⁶⁴ In the cohort studies, this refers to the vast majority of fathers who were **not** the main parental research participant.

¹⁶⁵ In all the studies, but more so in the LSYPE studies, 'second parent' and 'partner' interviews included a small minority of mothers and non-parents, in particular where the main parental research participant was a father. Timings and response rates specific to fathers were not available in technical documentation.

¹⁶⁶ The number of pages for ALSPAC and GUS questionnaires (in Table 1) refers to the number of pages **of questions**, i.e. excluding introductory pages.

¹⁶⁷ This timing is for the parent questionnaire only (averaged across Parent 1 and Parent 2), so excluding the 'household interview'.

¹⁶⁸ Bradshaw, P. (personal communication, 31 May 2023).

	in the LSYPE1 User Guide ¹⁶⁹	response rates for other studies ¹⁷⁰)	'parent questionnaire')			
Achieved sample size¹⁷¹ for 'second parent' or 'partner'¹⁷² [and parent 2 in MCS] participating in cohort study data collection	<p>Age 13-14¹⁷³ Approx 11,300 'second parent' interviews (approx 8,800 with a birth father or 'stepfather')</p> <p>Age 14-15 Approx 9,900 'second parent' interviews (approx. 7,800 with a birth father or 'stepfather')</p>	<p>Age 10 Approx 4,000 'partner questionnaires'</p> <p>Age 11 Approx 3,500 'partner questionnaires'</p> <p>Age 12 Approx 3,000 'partner questionnaires'</p>	<p>Age 11¹⁷⁴ Approx 8,800 'partner interviews' (approx 8,400 with a birth father, 'stepfather' adoptive father or foster father)</p> <p>Age 14 Approx 7,300 'partner interviews' (approx.6,800 with a birth father, 'stepfather' adoptive</p>	Age 13-14 Approx 7,900 'second parent' interviews	<p>Ages 12¹⁷⁵ Approx 1,900 'partner questionnaires'</p> <p>Age 14 Approx 1,600 'partner questionnaires'</p>	N/A

¹⁶⁹ [SN 5545 – Longitudinal Study of Young People in England – User Guide \(ukdataservice.ac.uk\)](https://ukdataservice.ac.uk)

¹⁷⁰ These ALSPAC response rates (Northstone et al, 2023) are based on the 12,113 mothers' partners who have given data to the study (almost all are fathers), and not on how many questionnaires were issued to eligible 'partners' at each sweep (Northstone, K. – personal communication, 24 Sept 2023). This is because mothers' partners were not enrolled directly in the study until 2010. Instead questionnaires were sent to mothers to pass on if she wanted to.

¹⁷¹ This is the number of interviews conducted or questionnaires received; and may not be the same as the sample size (unweighted) in datasets created for analysis, for example those deposited in the UK Data Archive.

¹⁷² In all the studies, but more so in the LSYPE studies, 'second parent' and 'partner' interviews included a small minority of mothers and non-parents, in particular where the main parental research participant was a father. Sample sizes specific to fathers were not available in technical documentation.

¹⁷³ Sample sizes for LSYPE1 were calculated by the Fatherhood Institute based on unweighted descriptive data tables provided by Wu, A. F. (personal communication, 15 June 2023), excluding cases with missing data on 'second parent' gender and/or relationship to the child.

¹⁷⁴ Sample sizes for MCS were calculated by the Fatherhood Institute based on unweighted MCS data, excluding cases with missing data on 'partner' gender and/or relationship to the child.

¹⁷⁵ These sample sizes are for the main longitudinal samples at each sweep, excluding the boost sample.

			<i>father or foster father)</i> Age 17 Approx 5,000 Parent 2 questionnaires (approx.4,800 with a birth father, 'stepfather') adoptive father or foster father)			
% of sole/main parental research participants (completing an interview or questionnaire) who were fathers	Age 13-14 Approx 18% ¹⁷⁶ Subsequent sweeps – 16% to 17%	Age 10 'child based' questionnaire – Approx 3% ¹⁷⁷	Age 11 – Approx 4% ¹⁷⁸ Age 14 – Approx 6% Age 17 – 4% of Parent 1 questionnaires were completed by fathers.	Data not available	Age 10 Approx 3% ¹⁷⁹ Ages 12 and 14 – 4%	N/A

¹⁷⁶ These %s for LSYPE1 were calculated by the Fatherhood Institute based on unweighted descriptive data tables provided by Wu, A. F. (personal communication, 15 June 2023), excluding cases with missing data on 'main parent' gender and/or relationship to the child.

¹⁷⁷ Calculations by the Fatherhood Institute from data tables available on CLOSER Discovery (CLOSER Discovery, August 2023, London, UK: CLOSER. <https://discovery.closer.ac.uk/>).

¹⁷⁸ These %s for MCS were calculated by the Fatherhood Institute based on unweighted MCS data, excluding cases with missing data on 'main respondent' or 'Parent 1' gender and/or relationship to the child.

¹⁷⁹ These %s for GUS were calculated by the Fatherhood Institute based on weighted descriptive data tables provided by Bradshaw, P. (personal communication, 31 May 2023), excluding a small number of cases with missing data on 'main carer' gender and/or relationship to the child.

<p>% of 'second parents' or 'partners' (completing an interview or questionnaire) who were fathers</p>	<p>Approx 78%¹⁸⁰ (a birth father or a 'stepfather')</p>	<p>Approx 95% of parents completing 'partner questionnaires' were biological fathers at ages 10, 11 and 12; and at age 11, an additional 6% were 'father figures'¹⁸¹</p>	<p>Ages 11 – 95%¹⁸² of 'partners' interviewed Age 14 – 93% of 'partners' interviewed At age 17, around 95% of Parent 2 questionnaires were completed by fathers.</p>	<p>Data not available</p>	<p>Ages 12 and 14 Approx 95%¹⁸³</p>	<p>N/A</p>
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¹⁸⁰ Calculated by the Fatherhood Institute from unweighted descriptive data tables provided by Wu, A. F. (personal communication, 15 June 2023), excluding cases with missing data on 'second parent' gender and/or relationship to the child.

¹⁸¹ Calculated by the Fatherhood Institute from data tables available on CLOSER Discovery (CLOSER Discovery, August 2023, London, UK: CLOSER. <https://discovery.closer.ac.uk/>).

¹⁸² These %s for MCS were calculated by the Fatherhood Institute based on unweighted MCS data, excluding cases with missing data on 'partner' or 'Parent 2' gender and/or relationship to the child.

¹⁸³ Calculated by the Fatherhood Institute based on weighted descriptive data tables provided by Bradshaw, P. (personal communication, 31 May 2023), excluding a small number of cases with missing data on 'partner' gender or relationship to the child.

Appendix A Table 2: Father characteristics collected across the six longitudinal studies
Cohabiting Partner Father characteristics collected in all six studies – in at least one sweep
<p>Age (<i>or known from previous sweep for fathers who lived in household at previous sweep of the study</i>)</p> <p>Ethnicity (<i>or known from previous sweep for fathers who lived in household at previous sweep of the study</i>)</p> <p>Whether parental couple in child’s main household are married/in Civil Partnership with one another</p> <p>Educational qualifications</p> <p>Global health rating (by father or mother)</p> <p>Has chronic health conditions/disability</p> <p>Current economic activity</p> <p>Occupation / Socio-economic status</p> <p>Employee or self-employed</p> <p>Full-time or part-time work, and work hours</p> <p>Earnings from employment/self-employment; and father work income relative to mother work income (<i>only age 18 in ALSPAC</i>)</p> <p>Father is economically inactive ‘home-dad’</p>
Cohabiting Partner Father characteristics collected in five studies – in at least one sweep
<p>Religion</p> <p>Legal marital status</p> <p>Age left continuous childhood education</p> <p>Disability-linked economic inactivity</p>

Cohabiting Partner Father characteristics collected in at least two studies – in at least one sweep			
Demographics	Health, and mental and social wellbeing	Health behaviours	Other characteristics or behaviours including risk factors
Whether born in UK Religiosity	Weight (self-reported) Mental health problems / psychological distress / mental wellbeing Sleep and exhaustion or energy levels Life satisfaction Optimism about future Social / emotional connectedness to others Social / emotional support / friendships Views of neighbourhood Problems / life events during their child’s adolescence	Diet / nutrition Physical / sedentary activity Smoking / e-cigarettes Alcohol use / alcohol problem Drug use	Language/s other than English spoken by father (at home) Personality Risk taking or attitudes to risk Cognitive skills Literacy + numeracy skills or problems / cannot read in English Reading for pleasure Use of social media / mobile phones / electronic games / TV, film & video (<i>varied between studies</i>) Social / political attitudes Antisocial / criminal behaviour (current / recent as well as ever) Father away in prison (currently)

Appendix A Table 3: The breadth of questions asked in relation to Cohabiting Partner Fathers ¹⁸⁴ of adolescent children in the six longitudinal studies						
KEY	Dark orange box: Collected data on this topic with particular breadth or depth		Light orange box: Collected data on this topic		Yellow box: Collected minimal or much less data on this topic, or (in Understanding Society ¹⁸⁵) not specific to adolescent children	White box: No data collected on this topic
Name of study	ALSPAC G1/G0 cohorts ¹⁸⁶	MCS	GUS Birth cohort 1	LSYPE1 Next Steps	LSYPE2 Our Future	Understanding Society
FATHER CHARACTERISTICS (from whom collected)						
Demographics	Father Mother	Father Mother Household interview respondent ¹⁸⁷ (usually mother ¹⁸⁸)	Mother	Father Mother Household interview respondent (usually mother ¹⁸⁹)	Father Household interview respondent ¹⁹⁰	Father Household interview respondent

¹⁸⁴ Or collected about “fathers” (not differentiating CPFs and OHFs) and could be analysed for adolescents with a CPF and no OHF.

¹⁸⁵ This *Understanding Society* data was collected in relation to all co-resident dependent children; and could be analysed where the CPF has **only** co-resident **adolescent** children i.e. no younger co-resident children.

¹⁸⁶ The fathers of these G1 adolescents are the ALSPAC ‘G0 Partners cohort’.

¹⁸⁷ The ‘household interview’ collected data about the household and its members, which only needed to be asked of one parent or adult at the child’s main address. Sometimes called the “household module” of the questionnaire, or similar.

¹⁸⁸ In the MCS, 89% of ‘household interview’ respondents at age 11 and 87% at age 14 were mothers. Almost all the remainder were fathers (around 1% non-parental). Calculated by the Fatherhood Institute, excluding cases with missing data on respondent’s gender and/or relationship to the child.

¹⁸⁹ In the first sweep of LSYPE1, 19% of ‘household interview’ respondents were co-resident fathers (Goldman and Burgess, 2017).

¹⁹⁰ No data was available about the relationship (to the cohort child) and gender of LSYPE2 ‘household interview’ respondents.

Health/wellbeing, health behaviours, personality and other attitudes/behaviours <i>(not directly about parenting/child)</i>	Father Mother	Father Mother	Father Mother	Father Mother	Father	Father
Economic activity, socio-economic status and income	Father Mother	Father Mother Household interview respondent	Mother	Father Mother Household interview respondent Child	Father Mother ¹⁹¹	Father Household interview respondent

¹⁹¹ The child may also have been asked questions about their father’s economic activity and occupational status (as in LSYPE1) but questionnaires were not available for the later LSYPE2 sweeps (which did not include parental interview/s).

Name of study	ALSPAC G1/G0 cohorts	MCS	GUS Birth cohort 1	LSYPE1 Next Steps	LSYPE2 Our Future	Understanding Society
CONTEXTUAL FACTORS for father involvement (three types)/fathering/father-child relationship, involving the father or the parental couple¹⁹² (from whom collected)						
How father/father-figure is related to child ¹⁹³	Father Mother	Household interview respondent	Mother	Household interview respondent	Household interview respondent	Household interview respondent
Features of employment ¹⁹⁴ (<i>beyond economic activity / occupational status</i>)	Father Mother	Father	Mother	Father Household interview respondent	Father	Father
Gender role attitudes						Father
Division of household jobs and overall childcare within cohabiting parental couple ¹⁹⁵	Father Mother					Father Mother
Dependent children living elsewhere ¹⁹⁶	Mother		Mother			Father

¹⁹² Other contextual factors (for father involvement, fathering and the father-child relationship) are about mothers, the adolescent child, their siblings, the family system as a whole and broader influences; but are outside the remit of this review of longitudinal studies, and therefore not included in Tables 3 and 4.

¹⁹³ Birth, adoptive, 'step'/parent's partner, foster, other male parental carer/guardian.

¹⁹⁴ Including work hours; work satisfaction, job security, work stresses, and work flexibility.

¹⁹⁵ Overall parental childcare in the adolescent child's main/sole household, including care of younger children where that applies. The term 'childcare' may not be seen as relevant for older adolescent children.

¹⁹⁶ Dependent children living elsewhere with whom the father has contact or for whom the father pays child maintenance.

Caring for adults inside or outside household	Father	Father		Father		Father
Quality of couple relationship (in the child's main household)	Father Mother	Father Mother	Mother			Father Mother
Partner violence (in the child's main household)	Father Mother	Father Mother				

Name of study	ALSPAC G1/G0 cohorts	MCS	GUS Birth cohort 1	LSYPE1 Next Steps	LSYPE2 Our Future	Understanding Society
FATHER INVOLVEMENT – Accessibility (from whom collected)						
Extent of co-residence of father and child in household ¹⁹⁷		Household interview respondent Mother Child	Mother	Father Household interview respondent	Household interview respondent Child	Household interview respondent Mother Child
Emotional accessibility ¹⁹⁸	Mother	Father	Father Child	Child	Child	Father Child
Father transports child						Father Mother
Father stays at home when child is ill						Father Mother

¹⁹⁷ Full-time, part-time/second address, temporary absence from household, ‘stepfather’ recently moved in.

¹⁹⁸ This means that the father meets the child’s needs for engagement time, attention, emotional support or conversation, especially when that is child-initiated.

Name of study	ALSPAC G1/G0 cohorts	MCS	GUS Birth cohort 1	LSYPE1 Next Steps	LSYPE2 Our Future	Understanding Society
FATHER INVOLVEMENT – Direct engagement¹⁹⁹ (from whom collected)						
Frequency or amount of father-child in-person time together		Child in time use diaries ²⁰⁰				
Looks after child/ren without mother present; (including when mother working)		Father Child in time use diaries				Mother
Leisure activities/outings with the child		Father Child in time use diaries	Father			Father Mother
Routine activities/outings with the child		Mother Child in time use diaries	Father	Mother Child	Mother Child	Father Mother Child
'Virtual' time together (including video-calls, messaging and social media)						
Father involvement with homework			Father			Father

¹⁹⁹ This includes the frequency, amount of time and types of direct father-child engagement. The quality of time together is covered in the Father-Child Relationship broad category.

²⁰⁰ The "father" code in the MCS time use diary does not differentiate OHFs and resident 'stepfathers' where the cohort child has both fathers. Analyses could be carried out for children with a CPF and no OHF.

						Mother Child
Conversations with child about school, schoolwork or educational /vocational options		Child				
Conversations with child about other specific issues						
Father's, mother's or child's perception of amount of time that father spends with adolescent child/ren	Father	Father	Father			

Name of study	ALSPAC G1/G0 cohorts	MCS	GUS Birth cohort 1	LSYPE1 Next Steps	LSYPE2 Our Future	Understanding Society
FATHER INVOLVEMENT – Responsibility (from whom collected)						
Division of responsibility for adolescent child in the parental couple		Household interview respondent		Household interview respondent	Household interview respondent	
Knows of child’s whereabouts and activities when not engaging with them		Father	Father			
Worry/emotional/cognitive labour			Father			Father
Organising what the child needs ²⁰¹			Father			
Attending parents evening and other meetings with teachers about their individual child		Mother	Father	Mother	Mother	
Other father involvement with school/child’s education		Father	Father			Father

²⁰¹ For example, shopping, appointments, activities, child-related paperwork.

Name of study	ALSPAC G1/G0 cohorts	MCS	GUS Birth cohort 1	LSYPE1 Next Steps	LSYPE2 Our Future	Understanding Society
THE FATHER-CHILD RELATIONSHIP including quality of time together (from whom collected)						
Overall quality of father-child relationship ²⁰²	Mother Child	Father Child	Father	Child	Child	Father Child
Emotional support/conversation	Mother	Father	Father Child	Child	Child	Child Father
Parenting style ²⁰³	Mother	Father	Father Child	Child	Child	Father
Physical punishment / Abuse of child (by father)	Father Mother					Father
Co-parenting (in child's main household)			Father Mother			

²⁰² Including perceived closeness, attachment and conflict.

²⁰³ Including control/autonomy and discipline.

Name of study	ALSPAC G1/G0 cohorts	MCS	GUS Birth cohort 1	LSYPE1 Next Steps	LSYPE2 Our Future	Understanding Society
FATHERS' BELIEFS, FEELINGS AND ATTITUDES IN RELATION TO THE PARENTAL ROLE OR THE CHILD (from whom collected)						
Father's perception/rating of child's behaviour		Father	Father			
Feelings and confidence about parental role, or towards child ²⁰⁴	Mother		Father Child			Father
Father's beliefs about adolescents' behaviour (not specific to their child)		Father				
Father's interest in child's education		Teacher				
Educational/vocational expectations/aspirations for child		Father	Father			Father

²⁰⁴ See Father-Child Relationship (broad category) for the father's perceptions of father-child closeness/attachment/ conflict, emotional support given to the child, and his parenting style.

Name of study	ALSPAC G1/G0 cohorts	MCS	GUS 1 Birth cohort 1	LSYPE1 Next Steps	LSYPE2 Our Future	Understanding Society
FATHER INVOLVEMENT IN CHILD'S EDUCATION, SCHOOL AND SCHOOLWORK²⁰⁵ (from whom collected)						
Father's interest in child's education		Teacher				
Father involvement with homework			Father			Father Mother Child
Attending parents evening and other meetings with teachers about their individual child		Mother	Father	Mother	Mother	
Other father involvement with school / child's education		Father	Father			Father
Conversations with child about school, schoolwork, or educational/vocational options		Child				
Educational/vocational expectations/aspirations for child		Father	Father			Father

²⁰⁵ This section of Tables 3 and 4 collates father involvement topics and father beliefs/attitudes which are connected with their child's education, school and schoolwork. These topics are also covered in previous sections of Tables 3 and 4 where they apply e.g. father involvement with homework is also covered above as part of the Father Involvement-Direct Engagement broad category.

Appendix A Table 4: The breadth of questions asked in relation to Own Household Fathers ²⁰⁶ (OHFs) of adolescent children in the six longitudinal studies						
KEY	Dark orange box: Collected data on this topic with particular breadth or depth	Light orange box: Collected data on this topic	Yellow box: Collected minimal or much less data on this topic, or (in <i>Understanding Society</i>) not specific to adolescent children ²⁰⁷	White box: No data collected on this topic		
Name of study	ALSPAC G1/G0 cohorts ²⁰⁸	MCS	GUS Birth cohort 1	LSYPE1 Next Steps	LSYPE2 Our Future	Understanding Society
FATHER CHARACTERISTICS ²⁰⁹ (from whom collected)						
Demographics		Mother				Father ²¹⁰ Mother
Health/wellbeing, physical characteristics, health behaviours, personality and other attitudes / behaviours	Mother					Father

²⁰⁶ Those OHFs who were **not** currently in a relationship with the child’s other birth/adoptive parent (usually the mother). Or collected about “fathers” (not differentiating CPFs and OHFs) and could be analysed for adolescents with an OHF and no CPF.

²⁰⁷ This *Understanding Society* data was collected in relation to all dependent children living elsewhere; and could be analysed where the OHF only has **adolescent** children living elsewhere (i.e. no younger children).

²⁰⁸ The fathers of these G1 adolescents are the ALSPAC ‘G0 Partners cohort’.

²⁰⁹ Limited to the data collected in adolescent sweeps. Stable characteristics of OHFs such as age, ethnicity and ‘age left continuous education’ may be known from earlier sweeps, especially if the OHF lived with the child at the time of a previous sweep and completed ‘partner’ or ‘second parent’ data collection.

²¹⁰ Some of these OHFs have adolescent birth child/ren living elsewhere who are **not** sample members. Others have adolescent birth child/ren living elsewhere who are sample members, and with whom they previously lived during the study. However, the study retention rate for OHFs following a relationship separation is relatively low.

(not directly about parenting / child)						
Economic activity, socio-economic status and income						Father Mother

Name of study	ALSPAC G1/G0 cohorts	MCS	GUS Birth cohort 1	LSYPE1 Next Steps	LSYPE2 Our Future	Understanding Society
CONTEXTUAL FACTORS (from whom collected)						
How father/father-figure is related to child	Mother	Mother	Child			Father Mother
Whether ever lived with child ²¹¹	Mother	Mother	Mother	Mother	Mother	Mother
Quality of relationship between the birth/adoptive parents living separately		Mother				Mother
Why relationship ended with mother ²¹² (where they had an ongoing relationship)		Mother				Mother
Features of employment (<i>beyond economic activity/ occupational status</i>)						Father
Gender role attitudes						Father
Lives with partner (i.e. not the other birth/adoptive)						Father Mother

²¹¹ Limited to the data collected in adolescent sweeps. Whether the OHF ever lived with the child may be known or derived from data collected in earlier sweeps/waves.

²¹² including existence of alcohol and drug issues and/or partner violence.

parent of the adolescent child)						Child
Lives with other dependent children for all/most of the time; and/or has other dependent children in a separate household ²¹³						Father Mother
Quality of couple relationship (in OHF's household where relevant)						
Division of household jobs and overall childcare <i>{in OHF household where relevant}</i>						
Caring for adults inside or outside his household						

²¹³ i.e. not his household or the adolescent child's household.

Name of study	ALSPAC G1/G0 cohorts	MCS	GUS Birth cohort 1	LSYPE1 Next Steps	LSYPE2 Our Future	Understanding Society
FATHER INVOLVEMENT – Accessibility (from whom collected)						
Whether any current contact (of any type)		Mother Child	Mother			Father
When last had contact			Mother			
Geographic distance or time taken to travel between OHF and mother’s households						Father
Regular overnight stays of child with OHF/Part-time co-residence		Mother Child	Mother		Child	Mother Father Child
Emotional accessibility	Mother		Child	Child		Child
Father transports child						

Name of study	ALSPAC G1/G0 cohorts	MCS	GUS Birth cohort 1	LSYPE1 Next Steps	LSYPE2 Our Future	Understanding Society
FATHER INVOLVEMENT – Direct Engagement (from whom collected)						
Frequency or amount of father-child in-person time together	Mother	Mother Child	Mother Child			Mother Father
Looks after child/ren without mother present; including when mother working		Mother	Mother			Mother
Regular overnight stays of child with OHF		Mother Child	Mother		Child	Mother Father Child
Specific activities and outings with child		Child in time use diaries ²¹⁴	Mother			
'Virtual' time together (including video-calls, messaging and social media)		Child	Mother Child			Father

²¹⁴ The "father" code in the time diary does not explicitly differentiate OHFs and resident 'stepfathers' where both apply. Analyses could be carried out for children with an OHF and no CPF. The limitation is that the diary is completed on one weekend day and one weekday and so is likely to capture only a relatively small proportion of OHF-child time together in some families.

Father involvement with homework						Mother Child
Conversations with child about school, schoolwork, or educational / vocational options		Child				
Conversations with child about other specific issues						
Father's, child's or mother's perception of amount of time that father spends with adolescent child/ren			Child			

Name of study	ALSPAC G1/G0 cohorts	MCS	GUS Birth cohort 1	LSYPE1 Next Steps	LSYPE2 Our Future	Understanding Society
FATHER INVOLVEMENT – Responsibility (from whom collected)						
Payment of child maintenance	Mother	Mother	Mother			Mother Father
Other financial and non-financial support from OHF for child/birth mother		Mother				Mother Father
Knows of child’s whereabouts and activities when not engaging with them						
Worry/emotional/cognitive labour						
Organising what the child needs						
Attending parents evening and other meetings with teachers about their individual child		Mother		Mother	Mother	
Other father involvement with school/child’s education						

Name of study	ALSPAC G1/G0 cohorts	MCS	GUS Birth cohort 1	LSYPE1 Next Steps	LSYPE2 Our Future	Understanding Society
THE FATHER-CHILD RELATIONSHIP (from whom collected)						
Overall quality of father-child relationship <i>(including emotional support and conversation)</i>	Mother	Mother Child	Child	Child		Father Child
Parenting style						
Physical punishment/ Abuse of child (by father)						
Co-parenting (between the birth/adoptive parents living apart)		Mother				Mother

Name of study	ALSPAC G1/G0 cohorts	MCS	GUS Birth cohort 1	LSYPE1 Next Steps	LSYPE2 Our Future	Understanding Society
BELIEFS, FEELINGS AND ATTITUDES ABOUT PARENTAL ROLE OR THE ADOLESCENT CHILD (from whom collected)						
Father's perception/rating of child's behaviour						
Feelings about parental role, or towards child						
Father's beliefs about adolescents' behaviour (<i>not specific to their child</i>)						
Father's overall interest in child's education		Teacher				
Educational/vocational expectations/aspirations for child						

Name of study	ALSPAC G1/G0 cohorts	MCS	GUS Birth cohort 1	LSYPE1 Next Steps	LSYPE2 Our Future	Understanding Society
FATHER INVOLVEMENT IN CHILD'S EDUCATION AND SCHOOLWORK²¹⁵ (from whom collected)						
Father's overall interest in child's education		Teacher				
Father involvement with homework						Mother Child
Attending parents evening and other meetings with teachers about their individual child		Mother		Mother	Mother	
Other father involvement with school/child's education						
Conversations with child about school, schoolwork, or educational/vocational options		Child				
Educational/vocational expectations/aspirations for child						

²¹⁵ These topics are also covered in previous sections of Table 4 where they apply e.g. father involvement with homework is also covered above as part of the Father Involvement-Direct Engagement broad category.

Appendix A Table 5: The topic content of published analyses of data (from the six longitudinal studies) about father involvement ²¹⁶ (three types), the father-child relationship, co-parenting and fathering beliefs and attitudes during adolescence						
KEY	Dark orange box: Includes at least one longitudinal analysis ²¹⁷	Light orange box: Cross-sectional analysis only ²¹⁸	Yellow box: No analysis found even though the study collected variable/s ²¹⁹ on this topic about fathers (CPFs/ OHFs/ "fathers" ²²⁰) specifically during their children's adolescence			White box: The study did not collect ²²¹ variables for this topic about fathers specifically during their children's adolescence
Name of study	ALSPAC G1/G0 cohorts ²²²	MCS	GUS Birth cohort 1	LSYPE1 Next Steps	LSYPE2 Our Future	Understanding Society
Cohabiting Partner Fathers (CPFs): analysis about CPFs ²²³ or about 'fathers' without differentiation of CPFs and OHFs						
Father involvement – accessibility		Emotional accessibility (1)	Emotional accessibility (3)	Emotional accessibility (2)	Emotional accessibility (1)	Emotional accessibility (11)
Father involvement – direct engagement (quantity and types)		Looks after child/ren without mother present ('solo childcare') (2)				Involvement with homework (1)

²¹⁶ Table 5 excludes where publications used variables on whole-family activities (e.g.meals) without any father-specific variables.

²¹⁷ The adolescence father-factors analysed in relation to 'outcome' variables at a later sweep/wave; and/or 'predictor' variables from an earlier sweep/wave.

²¹⁸ The adolescence father-factors reported descriptively, or used in an analytical analysis (usually multivariate) of data collected solely at one sweep or wave of the study.

²¹⁹ This excludes where a topic was covered only minimally (see Tables 3 and 4 above).

²²⁰ Some questions were asked about the adolescent's "father" without specifying whether to be answered about their CPF or their OHF where they had both fathers.

²²¹ This includes where a topic was covered only minimally (see Tables 3 and 3 above).

²²² The fathers of these G1 adolescents are the ALSPAC 'G0 Partners cohort'.

²²³ Table 5 excludes where publications have analysed father-variables only for the minority of fathers who were main or sole parental research participants.

		Engagement in specific activities (2)				
Father involvement – responsibility				-	-	
Father-child relationship (excluding abuse)		Overall quality of father-child relationship (10) Emotional support/ conversation (1)	Emotional support/ conversation (3)	Overall quality of father-child relationship (3) Emotional support/ conversation (2) Parenting style (1)	Overall quality of father-child relationship (1) Emotional support/ conversation (1) Parenting style (1)	Overall quality of father-child relationship (9) Emotional support / conversation (10) Parenting style (1)
Co-parenting						
Father’s beliefs, feelings and attitudes about parental role or the adolescent child		Father’s overall interest in child’s education (2)				Educational/ vocational expectations/ aspirations for child (1)
Father involvement in child’s education and schoolwork		Overall interest in child’s education (2)				Educational/vocational expectations/ aspirations for child (1) Involvement with homework (1)

Own Household Fathers (OHFs): analysis using data about OHFs						
Name of study	ALSPAC G1/G0 cohorts	MCS	GUS Birth cohort 1	LSYPE1 (Next Steps)	LSYPE2 (Our Future)	Understanding Society
Father involvement – <i>accessibility</i>		Whether any current contact (of any type) (1) Regular overnight stays of child with OHF (4)	Whether any current contact (of any type) (2) Emotional Accessibility (1)			
Father involvement – <i>direct engagement (quantity and types)</i>	Frequency of father-child in-person time together (1)	Frequency of father-child in-person time together (4) Regular overnight stays of child with OHF (4)	Frequency of father-child in-person time together (2) Virtual' time together including video-calls, messaging and social media (2) Whether the child would like more or less time with their OHF (1)			
Father involvement – <i>responsibility (includes child maintenance)</i>		Child maintenance and/or other payments/purchases (2)				

Father-child relationship (excluding abuse)		Quality of father-child relationship (2)	Emotional support (1)			
Co-parenting						
Father's beliefs, feelings and attitudes about parental role or the adolescent child						
Father involvement in child's education and schoolwork						

APPENDIX B

Appendix B: The kids are alright father-factor framework of data collected about father involvement (three types), the father-child relationship, co-parenting, and fathering beliefs and attitudes (See Section 1.5)						
Broad categories of data collected						
Contextual factors ²²⁴ for father involvement, fathering, the father-child relationship and co-parenting	Father involvement: Accessibility ('on call')	Father involvement: Direct engagement *quantity (frequency and time) *types of activities	Father involvement: Responsibility ²²⁵	The Father-Child Relationship	Co-parenting	Fathers' beliefs, feelings and attitudes in relation to their parental role or the child ²²⁶
Topics (sub-categories) of data collected						
For both Cohabiting Partner Fathers (CPFs) and involved Own Household Fathers (OHFs)						
How father/ 'father-figure' is related to child ²²⁷	Emotional availability ²³² Father transports child	Frequency or amount of father-child in-person time together	Division of 'responsibility' for adolescent child within parental	Overall quality of father-child relationship ²³⁴	Co-parental decisions about and with the child (involving parents)	Father's perception /rating of child's behaviour Feelings and confidence about

²²⁴ Contextual factors which involve the father, the parental couple or parents living apart. See also the 'father characteristics' covered in Section 3.2.

²²⁵ Excluding breadwinning – See Section 1.5.

²²⁶ Excluding the father's perceptions of the father-adolescent relationship/interactions, covered in the Father-Child Relationship broad category.

²²⁷ Birth, adoptive, 'step'/parent's partner, foster, other male parental carer/guardian.

²³² This means that the father meets the child's needs for engagement time, attention, emotional support or conversation, especially when that is child-initiated.

²³⁴ Including perceived closeness, attachment and conflict.

<p>Employment features²²⁸</p> <p>Gender role attitudes</p> <p>Division of household jobs and overall childcare²²⁹ within cohabiting parental couple</p> <p>Caring for adults inside or outside household</p> <p>Quality of couple relationship²³⁰</p> <p>Partner violence²³¹</p>		<p>Looks after child/ren without mother present, including when mother working</p> <p>Father involvement in specific activities and outings with child – leisure and routine</p> <p>Virtual' time together including video-calls, messaging and social media</p> <p>Father involvement with homework</p> <p>Conversations with child about school, schoolwork or</p>	<p>couple or between parents living apart</p> <p>Knows of child's whereabouts and activities when not engaging with them</p> <p>Worry/emotional/co gnitive labour</p> <p>Organising what the child needs²³³</p> <p>Attending parents evening and other meetings with teachers about their individual child</p> <p>Other father involvement with school/child's education</p>	<p>Emotional support / conversation²³⁵</p> <p>Parenting style²³⁶</p> <p>Physical punishment/ abuse of child (by father)</p>	<p>living together or apart)</p> <p>Beliefs about and valuing the other parent's parenting capacity or skills (involving parents living together or apart)</p> <p>Triadic (father-mother-child) interactions (involving parents living together or apart)</p>	<p>parental role, or towards child</p> <p>Father's beliefs about adolescents' behaviour (not specific to their child)</p> <p>Father's interest in child's education</p> <p>Educational / vocational expectations / aspirations for child</p>
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²²⁸ Including work hours; work satisfaction, job security, work stresses; and work flexibility.

²²⁹ Overall parental childcare in the adolescent child's main/sole household, including younger children where that applies. The term 'childcare' may not be seen as relevant for older adolescent children.

²³⁰ The couple relationship of cohabiting parents (birth, 'step', adoptive, foster) in the child's main/sole household or in the OHF's household.

²³¹ Partner violence in the child's main/sole household or in the OHF's household, or between parents who live separately.

²³³ For example, shopping, appointments, activities, child-related paperwork.

²³⁵ Including the quality of father-child interactions.

²³⁶ Including control/autonomy and discipline; and overlapping with Responsibility (Knows of child's whereabouts and activities).

		<p>educational / vocational options</p> <p>Conversations with child about other specific issues</p> <p>Father's, child's or mother's perception of amount of time that father spends with adolescent child/ren</p>				
For Cohabiting Partner Fathers only						
Dependent children living elsewhere ²³⁷	<p>Extent of co-residence of father and child in household²³⁸</p> <p>Father stays at home when child is ill</p>					
For Own Household Fathers only						
Whether ever lived with child	Whether any current contact (of any type)	Regular overnight stays of child with OHF	Payment of child maintenance			

²³⁷ Dependent children living elsewhere with whom then father has contact or for whom the father pays child maintenance.

²³⁸ Full-time, part-time/second address, temporary absence from household, 'stepfather' recently moved in.

<p>Quality of relationship between the birth/adoptive parents living separately</p> <p>Why relationship ended with mother²³⁹ (where they had an ongoing relationship)</p> <p>Lives with partner (i.e. not the other birth/adoptive mother of the adolescent child)</p> <p>Lives with other dependent children for all/most of the time; and/or has other dependent children in a separate household²⁴⁰</p>	<p>When last had contact</p> <p>Geographic distance or time taken to travel between OHF's and mother's households</p> <p>Regular overnight stays of child with OHF/Part-time co-residence</p>		<p>Other financial and non-financial support from OHF for child/ birth mother</p>			
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²³⁹ Including existence of alcohol and drug issues and/or partner violence.

²⁴⁰ Not his household or the adolescent child's household.

APPENDIX C

Data collection gaps	
<p>The topics below are relative or absolute²⁴¹ questionnaire gaps across the six large-scale UK longitudinal studies, for Cohabiting Partner Fathers (CPFs) and/or Own Household Fathers (OHFs).</p>	
Broad category	Questionnaire gaps
Contextual factors	<p>Father’s gender role attitudes</p> <p>For CPFs – Division of household jobs and overall childcare</p> <p>For CPFs – Financial responsibilities (e.g. child maintenance or education-related) for and contact with children living elsewhere</p> <p>For OHFs – Features of employment</p> <p>For OHFs – The quality of the current relationship between birth/adoptive parents living separately (e.g. friendliness, degree of direct contact); why the relationship ended; and any court or mediation involvement (then/ongoing)</p> <p>For OHFs Where a child spends substantial time in two parental households, co-residence of the OHF with a partner and/or children for all or most of the time</p> <p>For involved OHFs with a cohabiting partner where the child spends substantial time in their household– Characteristics of and parenting by the partner; the quality of the partner-child relationship; the quality of the OHF-partner couple relationship (and any partner violence); and the division of household jobs and childcare between the OHF and their cohabiting partner</p> <p>Partner violence / Violence between parents living apart</p>
Father involvement: <i>accessibility</i>	<p>Questions which incorporate the notion of the father being ‘on call’ i.e. available to respond to the child’s needs and requests for conversation, time together or practical or emotional support</p>

²⁴¹ Data on some of these sub-topics have not been collected in any of the set of six studies; whereas others have been collected in a minority of the studies.

	<p>How frequently the father is at home with the child when not directly interacting, so that he can be 'on call' – for example the frequency with which he is co-present with the child after school or during the evening, or the amount of time (using time use diaries)</p> <p>Whether the father responds to²⁴² the child's needs for emotional support and conversation, including 'virtually' (by phone and messaging) – <i>Not relying on 'significant adult' questions which capture only one adult providing support</i></p> <p>Being 'on call' for transport – and (more relevant for CPFs) when the child is unwell</p> <p>For OHFs – Geographic distance or travel time between the two parental households</p> <p>For OHFs – When the father and child were last in contact (if not currently)</p> <p>Children's time use diaries which can record 'in-person accessibility' (e.g. the father and child at home at the same time) as well as direct father-child engagement</p>
<p>Father involvement: <i>direct engagement</i></p>	<p>Pattern/timing and total time (c.f. frequency) of engagement together, including 'solo parenting' by the father (without the mother also present), for CPFs as well as for OHFs</p> <p>Types of routine and leisure activities and outings together</p> <p>Engagement by phone and through messaging when physically not together, for CPFs as well as OHFs</p> <p>Conversations with the child about specific issues such as schoolwork, friendships and risk behaviours</p> <p>Father's, child's or mother's perception of amount of time that father spends with child, for OHFs as well as CPFs</p>
<p>Father involvement: <i>responsibility²⁴³</i></p>	<p>Whether one parent takes a dominant 'responsibility' role; or instead this role is shared between the parents – Questions which do not assume that one of the two parents is a 'primary caregiver' or has 'main responsibility'</p> <p>Organising what the child needs (not with the child) which may include supporting and advising the child to get what they need</p>

²⁴² Questions about the child seeking out the father for emotional support feature across the studies, but less so whether the father meets this need.

²⁴³ Data collected on 'breadwinning', economic activity and income were not included in the Responsibility broad category in *The kids are alright* framework, unless they were specifically in relation to the adolescent child.

	<p>Father monitoring of the child’s whereabouts and activities</p> <p>Cognitive and emotional labour and the ‘mental load’ including for less involved OHFs</p>
<p>The Father-Child relationship and co-parenting</p>	<p>Questions about the father-child relationship and emotional support/conversation which are asked symmetrically of fathers (including OHFs) and children</p> <p>Equivalent and relevant questions for OHFs who are research participants, potentially with different questions for involved OHFs and for less involved OHFs</p> <p>Whether one parent takes a dominant ‘supervision’ or ‘disciplinary’ role; or instead this role is shared between the parents</p> <p>Co-parenting between parents living together and/or apart</p> <p>Parenting style questions for involved OHFs as well as for CPFs, and which go beyond parental monitoring and knowledge of the child’s activities (<i>including giving praise and physical affection; and shouting and negative or harsh parenting behaviours</i>)</p> <p>Physical punishment and abuse by the father</p>
<p>Fathers’ beliefs, feelings and attitudes in relation to the parental role or child</p>	<p>Feelings of competence and confidence as a father including for less involved OHFs</p> <p>Fathers’ beliefs about adolescent development and behaviours; and the parental role during this life stage of their child/ren; (including their values and aspirations in parenting an adolescent child)</p> <p>Children’s perceptions of their father’s feelings and attitudes in relation to them</p>
<p>Fathers’ reports of their child’s personality and behaviours</p>	<p>Fathers’ perceptions and ratings of their child’s personality and behaviours</p> <ul style="list-style-type: none"> · The child may behave differently with each parent (including with the OHF in a different household), and each parent may have a different perception of or response to the same child behaviour · Collecting at least some ‘child – outcome’ data from fathers/‘partners’ as well as from mothers/‘main respondents’ would reduce shared methods variance in analyses
<p>Fathers’ involvement in their child’s education, school and schoolwork</p>	<p>Day to day (or week to week) conversations between the father and child about schoolwork and ‘school life’; as well as more infrequent discussions, for example about post-16 educational and vocational options.</p> <p>Help with homework</p> <p>Involvement/contact with the child’s school</p>

	<p>Aspirations and expectations for child's educational and vocational progress and outcomes</p> <p>All of above for OHFs as well as for CPFs</p> <p>For OHFs – Payments/purchases (e.g. education-related) for child outside of regular child maintenance</p>
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APPENDIX D

Data analysis gaps ('under-studied data')	
Cohabiting Partner Father (CPF) variables collected but little (or not at all) used in the published analyses in the Fatherhood Institute's Literature Library	
Variable	Comments
Extent of co-residence of CPF and child in household	The most extensive set of variables has been collected in the MCS, including part-time co-residence/second addresses of CPFs
Father involvement – <i>direct engagement</i>	No analyses found of GUS variables on types of father-child leisure and routine activities No analyses found of fathers' perception of the amount of time together (collected in ALSPAC, MCS and GUS) The MCS time use diaries may offer analytic potential for children with no OHF who have coded time spent with their 'father' (assumed to be their CPF) in their diary for specific activities
Father involvement – <i>responsibility</i>	No analyses found of: MCS and GUS questions about parental monitoring by fathers GUS and <i>Understanding Society</i> items relating to father cognitive or emotional load
Parenting style	No analyses found of GUS data on father autonomy/control ²⁴⁴ Only one analysis found of the rich <i>Understanding Society</i> 'parenting style' module data for fathers of 10-year-olds
Beliefs, feelings and attitudes about the parental role or the adolescent child	No analyses found of GUS variables collected about fathers' confidence about their parenting ²⁴⁵ ; nor of GUS variables (age 10) about children's perceptions of their father's feelings towards them

²⁴⁴ This has been recently analysed for mothers ('main carers') but not for fathers ('partners') (Scottish Government, 2022).

²⁴⁵ This has been recently analysed for mothers ('main carers') but not for fathers ('partners') (Scottish Government, 2022).

	No analyses found of MCS questions on fathers beliefs about adolescent anti-social behaviour
Involvement in the child’s education or schoolwork	<p>No analyses found of MCS variable on advice from fathers to their child about educational options</p> <p>No analysis found of GUS variable on fathers’ help with homework; and only one descriptive analysis of a similar <i>Understanding Society</i> variable</p> <p>No analysis found of fathers’ attendance at parents evenings (collected in several studies)</p> <p>No analysis found of MCS and GUS variables about fathers’ involvement in school or the child’s ‘school/college life’</p> <p>Only one analysis found of fathers’ aspirations or expectations for their child’s educational or vocational outcomes (collected in MCS, GUS and <i>Understanding Society</i>)</p>
Co-parenting in relation to CPFs/co-resident mothers	No analyses found of GUS data on co-parenting between parents living together with the child (using the Feinberg scale)
Own Household Fathers (OHF) variables collected but little (or not at all) used in the published analyses in the Fatherhood Institute’s Literature Library – <i>N.B. there are particularly substantial gaps in published analyses of variables collected about OHFs</i>	
Variable	Comments
Father involvement – <i>accessibility</i> (including the extent of co-residence)	<p>Analyses found of MCS variables on overnight stays with OHFs – but no analyses found of more recent GUS and LSYPE2 data about overnight stays, or <i>Understanding Society</i> data on whether the child considers that they live in two homes</p> <p>Only one descriptive analysis found of the GUS ‘<i>People in My Life</i>’²⁴⁶ (PIML) variable on OHF emotional accessibility (child-reported)</p>
Father involvement – <i>engagement</i> (quantity and types)	<p>No analyses found of questions about OHFs looking after young adolescents when their birth mother was working, or as a form of ‘childcare’ (collected in MCS, GUS and <i>Understanding Society</i>)</p> <p>Little analysis found of GUS and MCS variables about ‘virtual’ forms of OHF-child contact</p>

²⁴⁶ Ridenour et al., 2006.

	<p>Only one descriptive analysis of the GUS variable about whether the child would like more or less time with their OHF</p> <p>The MCS time use diaries may offer analytic potential for children with no CPF who have coded time spent with their 'father' (assumed to be their OHF) in their diary for specific activities</p>
Father involvement – <i>responsibility</i>	<p>Only a couple of analyses of MCS data on purchases and payments (including child maintenance) by OHFs for their child; similar data were collected in other studies</p>
The quality of the father-adolescent relationship	<p>No published analyses of:-</p> <ul style="list-style-type: none"> · the set²⁴⁷ of 'People in My Life' questions (child-reported) about OHF-child relationships that has uniquely been collected in GUS · MCS and <i>Understanding Society</i> questions²⁴⁸ relating to father-child relationships
Involvement in the child's education or schoolwork	<p>No published analyses found of:-</p> <p>MCS questions about fathers' interest in their child's education (teacher-reported²⁴⁹);</p> <p>MCS data on fathers' conversations with their child about educational options²⁵⁰</p> <p><i>Understanding Society</i> question on 'father' and 'stepfather' help with homework (both mother- and child-reported)</p> <p>OHFs' attendance at parents evenings (collected in several studies)</p>
Co-parenting in relation to OHFs/co-resident birth mothers	<p>No analyses found of MCS and <i>Understanding Society</i> data on co-parenting between birth parents living apart</p>

²⁴⁷ Only one descriptive analysis was found – this included only one question in the *People in My Life* set of six items.

²⁴⁸ Asked in relation to 'father' but could be analysed for children with an OHF who do not have a CPF.

²⁴⁹ Asked in relation to 'father' but could be analysed for children with an OHF who do not have a CPF.

²⁵⁰ Asked in relation to 'father' but could be analysed for children with an OHF who do not have a CPF.